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THE "PULL" OF GACHA GAMES: EXPLORING PLAYER EXPERIENCES OF
GACHA GAME CHARACTERS

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Abstract

The "Pull" of Gacha Games: Exploring Player Experiences of Gacha Game

Characters

Angeleen Tan

Gacha games are a broad genre of games that feature monetized Random Reward Mechanisms (RRMs) as a core mechanic—known as the gacha. Gacha games have become increasingly prevalent and popular all across the world. However, controversy regarding the chance-based monetization of gacha games has led to a widespread impression that gacha game players are a monolith of victimized problem gamblers. This assumption flattens the experiences and motivations of millions of players, and ignores the cultural context and impact of gacha games.

Several studies have examined reasons other than gambling, such as agentic play or emotional connections, however, these works primarily focus on specific game subcommunities or have a smaller sample size. Thus, it is difficult to discern which findings may be generalizable to larger player communities. A broader overview of player experiences can provide a basis for more nuanced and in-depth future research and discussion. In most modern gacha games, the gacha reward is a character that the player can use during gameplay or collect, which are complex and multi-faceted because of the sociocultural context within which they are produced and consumed.

This dissertation presents two studies. First, a comparative analysis focused on 4 popular gacha games in different genres. This provided context for an online qualitative survey, which examines gacha game players' perspectives on gacha

game characters and player interactions with them. The survey's 563 responses were analyzed using iterative thematic analysis. The findings highlight the depth of factors that players consider regarding gacha characters, as well as the wide variety of their experiences desiring, consuming, and interacting with characters.

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1 Introduction

Gacha games are a broad genre of games, usually released on mobile platforms and usually free-to-play, that feature monetized Random Reward Mechanisms (RRMs) as a core mechanic—known as the gacha. Gacha games have become increasingly prevalent and popular all across the world. For example, over 50 million monthly players are active on *Genshin Impact*, the popular gacha game, nearly 5 years after its release in 2020 (Thompson-Powell, 2022). Unlike "loot boxes" that provide random cosmetic rewards that do not affect gameplay, such as in *Apex Legends* or *Counter-Strike: Global Offensive*, gacha rewards are gameplay advantages, and in many cases it is expected that the player will engage with the gacha mechanic in order to progress. Controversy regarding the chance-based monetization of gacha games such as *Genshin Impact* has led to a widespread impression that all of their millions of players, and players of any other gacha game, are a monolith of victimized problem gamblers. This assumption not only unfairly flattens the varied experiences and motivations of millions of different people, but also ignores the cultural context and impact of gacha games.

Prior research primarily focuses on the comparisons between RRM, loot boxes, and gambling, whether mechanically (e.g., (Denoo et al., 2024; Nielsen & Grabarczyk, 2019)), or psychologically and physiologically (e.g., (Larche et al., 2021; Zendle et al., 2019)). Other studies have examined reasons other than gambling, such as agentic play (Huang, 2023; Woods, 2022) or emotional connections (Cao & Xu, 2024; Huang, 2023; Y. Wang & Hao, 2022; Woods, 2024), that may cause players to engage with gacha games. However, these latter qualitative works primarily focus

on specific game subcommunities or have a smaller sample size, and thus it is difficult to discern which findings may be generalizable to larger player communities.

A broad overview to understand which behaviors are associated with gacha mechanics, and which arise from other systems or the combination of systems, would aid in the further study of gacha games and their players. Further, understanding the breadth of player experiences across communities and in the contexts of the games they each play can provide a basis for more nuanced and in-depth future research and discussion.

A central component of gacha game design is what form the gacha reward takes. In most modern gacha games this reward is a character that the player can use during gameplay or collect. However, characters in gacha games are more complex and multi-faceted, and they can be considered and understood beyond their aesthetics and gameplay features, because of the sociocultural context within which they are produced and consumed. To explore this in greater detail, this thesis focuses specifically on the player's relationship with characters in gacha games, and aims to answer the following research questions:

RQ1: How do gacha game players understand their relationships/attachments to gacha game characters?

RQ2: How does the gacha and related systems impact these relationships?

First, a comparative analysis explores the different features of gacha games and their potential implementations, focusing on 4 popular gacha games in different genres. This analysis provided context for an online qualitative survey, which

examines gacha game players' perspectives on gacha game characters and player interactions with them. The survey had 563 responses, which were analyzed using iterative thematic analysis. The findings highlight the depth of factors that players consider regarding gacha characters, as well as the wide variety of their experiences desiring, consuming, and interacting with characters.

2 Related Work

2.1 Defining Gacha Games

2.1.1 Usage of "Gacha Game"

The term "gacha" originates from Japanese *gachapon*, toy capsule machines that dispense a random toy from a certain pool (Huang, 2023). In the early 2010s, Japanese social network and mobile games which prominently featured collecting monster cards through gacha, such as *Dragon Collection* followed by *Puzzles & Dragons*, became popular and financially successful (Huang, 2023). A near decade later, *Genshin Impact*, a recent high-profile gacha game, released in 2020 to worldwide success.

However, in both the literature and common parlance, usage of the term "gacha" and "gacha game" is inconsistent, and thus it is difficult to find a precise definition.

Huang (2023) describes gacha as "a specific lottery-like mechanism to trade random items based on a probability distribution of rarity and values [... and generally,] a chance to gacha can be purchased with virtual currencies" (p. 8), whereas Sato et al. (2020) in their taxonomy define gacha as "a broad range of elaborate audio-visual implementations of RRM that do not fit into the [other categories]" (p. 10). Rentia

and Karaseva (2022) focus on the role of gacha in the game as a whole, describing a gacha game as "a video game that is developed around the gacha mechanic, despite the fact it is not necessarily the game's core mechanic" (p. 1).

Koeder et al. (2018) focus on the Japanese free-to-play (F2P) origins of gacha, contrasting it with "typical Western F2P games, where virtual items can be purchased directly through in-game currency with a fixed price" (p. 1). Similarly, Woods (2024) emphasizes the "integration with anime and manga cultures" (p. 824) of gacha games, in addition to the lottery element. At the same time, the Forbrukerrådet (Norwegian Consumer Council) (2022) describes *Raid: Shadow Legends* as a gacha game, despite its lack of connection to anime culture with a realistic artstyle and medieval fantasy theme, and its developer is not from East Asia, but instead Israel/Occupied Palestine; the same paper describes *FIFA Ultimate Team* card packs without using the phrase "gacha", and provides no clear explanation differentiating their definitions of loot boxes and gacha games.

These conflicting examples of the phrase "gacha game" showcase the lack of clarity in its definition, and the term may largely be used for the sake of marketing, fearmongering, or both. However, these definitions do consistently maintain a connection with the monetized random reward. As gacha and loot boxes are often compared, prior research on loot boxes provides a good starting point to expand upon.

2.1.2 Random Reward Mechanisms

Finding the term "loot box" haphazard and overly broad, Nielsen and Grabarczyk (2019) created the term Random Reward Mechanisms (RRMs), consisting of 3

components: "Eligibility condition → Random procedure → Reward" (p. 2). RRM s encompass all forms of random rewards, from drops earned from killing enemies to collectible cards to loot boxes. The authors then split RRM s into 4 categories, based on whether the required resources and/or the reward were embedded in real currencies (i.e., requires or provides real money) or isolated from them. Most gacha games fall under their third category alongside many loot box implementations: embedded resources (can be purchased with real currency) and isolated rewards (cannot be sold for real currency).

Following this, Brückner et al. (2019), Sato et al. (2020), Ballou et al. (2022), and Denoo et al. (2024) made various taxonomies of RRM and monetized RRM features. Of these, only Sato et al. (2020) attempts to distinguish gacha from loot boxes, as described earlier as an audiovisual implementation. The games studied by these papers included games that are commonly referred to as gacha games, such as *Fire Emblem Heroes*, *Genshin Impact*, and *Fate/Grand Order*, however also included games that would rarely be referred to as gacha games (yet still contain monetized RRM s), such as *Counter-Strike: Global Offensive*, *Hearthstone*, and *Clash Royale*. It is clear that limiting a definition of what does or not does make a gacha game to the RRM alone is difficult with such a wide range of implementations and shared features between different RRM systems.

2.1.3 The Key Factor

To solve this issue, this paper draws from Huang (2023), who offers a useful differentiation between a "gacha game" and a "game with gacha":

"[Gacha games] shares the gacha system with the first group (games of gacha) but they are distinct in the fact that the rewards “dropped” from the gacha system are no longer items such as powerful weapons or collectible monster cards. Instead, they are virtual characters. [...] character gacha is what gacha games usually means discursively" (p. 16)

Similarly, Lax and Mackenzie (2019) emphasize the importance of characters in gacha games: "[...] gacha offers characters, their in-game function dependent on a game's genre but their appeal universally based on the player's desire for them as fictional people" (p. 1)

Thus, the most important part of a gacha game, in addition to the gacha mechanic itself, is the focus on **characters** as the core of the gacha and overall game.

Notably, this does *not necessarily* have to refer to anime characters or culture, though many gacha games historically fit this description due to genre history, and fan and developer interests. Under this definition, *FIFA Ultimate Team* can be described as a gacha game, under the assumption that the characters are greatly desired by players partially due to players being fans of the real life sports stars represented in game.

2.2 Components of a Gacha Game

Even with the constraint of focusing on characters, the exact properties of a gacha game are hard to pin down, due to the high amount of variance within the genre.

Some games are consistently considered gacha games and appear frequently as examples of the genre, such as *Genshin Impact* and *Fate/Grand Order*. Yet these 2 games have different gameplay entirely: *Genshin Impact* is a 3D open world, 3rd

person real-time action game, whereas *Fate/Grand Order* is a 2D turn-based strategy game/Japanese role-playing game (JRPG). A direct comparison of moment-to-moment gameplay would not necessarily illuminate their similarities.

Huang (2023) describes gacha games as "simultaneously diverse and monotonous" (p. 28)—although the primary game genre and gameplay loop of each game differs, in each game "the player meets new characters, obtains currencies in multiple ways, pays special attention to time-limited characters, pulls these characters from the gacha system in the limited time period, and interacts with these characters in the game-type specific way" (p. 28).

In this way, a gacha game is similar to a roguelite/roguelike, where both "genres" are defined by a core set of mechanics and meta strategies that form another layer, that interacts with but is not a direct part of the core game loop. For roguelite/roguelike games, these mechanics are procedural generation, permadeath, and (sometimes) progression through death, no matter if that game is a dungeon crawler, a turn-based strategy game, or a deckbuilding card game.

In this paper, we propose and assume the following 3 properties are present in gacha games:

1 - A core gameplay loop exists beyond collection

As stated prior by Rentia and Karaseva (2022), the gacha mechanic is "not necessarily the game's core mechanic". In order to be a "gacha game", as opposed to a "gacha collecting activity", some form of interactive gameplay loop should be included. Koeder et al. (2018) explain that one of the key points of gacha is that

"[Gacha] is a key game element and not the game itself". Although the gameplay may not be the main draw of the game, with some games prioritizing narrative, shallow gameplay is still distinct from a complete lack of gameplay.

2 - Characters perform some kind of role in gameplay

Although cosmetic i.e., non-gameplay rewards may be considered a more acceptable form of monetization by players when compared to items that provide a gameplay advantage (Alha et al., 2018), cosmetic items without gameplay integration primarily serve as collectibles. Therefore, in order to be part of the core game loop, the characters themselves must perform some kind of role, no matter how large or small. The role each character may play is largely dependent on the game's genre, as noted by Lax and Mackenzie (2019), and as the comparative analysis (Section 3) will explore. Generally, the player must construct a party of characters who either perform a variety of roles or have specific traits that provide advantages in gameplay.

Due to the importance of characters in gameplay, the player will likely also have to progress their characters through levels and builds (Huang, 2023). The different strength levels of characters may additionally be dependent on their rarity, which incentivizes the player to continue pulling for rare characters, even if they already have a large roster of common characters: "Higher-value virtual items [including characters] can enhance the performance of the player and enable faster progression in the game, whereas lower-value items can have negligible (perceived) benefit" (Woods, 2022, p. 1077).

3 - Pulling characters is a core part of gameplay

As emphasized by many definitions, a gacha game is "developed around the gacha mechanic" (Rentia & Karaseva, 2022, p. 1), "[gacha] is a key game element" (Koeder et al., 2018, p. 17), "the [gacha] RRM is a central mechanic of the game" (Sato et al., 2020, p. 13), etc., thus the gacha is an essential part of a gacha game. Due to the gacha's prominence in the game, other systems, such as gameplay and narrative, eventually direct the player back towards the gacha, whether by incentivizing interaction with the gacha mechanic, or providing gacha pulls as rewards. Stated plainly by Huang (2023), "Risking oversimplification, playing gacha games means pulling characters" (p. 29).

Once again, characters are an important focus of gacha games. Many gacha games market themselves as or share traits with role-playing games (RPGs) "since interacting and playing with characters are the essential gameplay for gacha games" (Huang, 2023, p. 34). Though their gameplay value may be most important to a certain player, the design, personality, and narrative of an abstract "person" or fictional "being" is still central to the character's desirability overall.

2.2.1 Not Gacha Games

To help illustrate what *is* a gacha game, the following section explores other collectibles and games that are compared to gacha games, and then evaluates them using the above definition.

Blind boxes, also known as surprise toys or mystery bags, function similarly to gachapon and are purchased by consumers for the thrill, surprise, and potential cost

savings (China Daily, 2021, as cited in Mvondo et al., 2023). However, they are physical collectibles, not video games.

Freemium games with pay-to-skip features, namely monetization that is primarily focused around removing wait timers (Lundy et al., 2024), are not gacha games as they are monetized deterministically and not through randomness (Wu & Singh, 2023). There can be parallels drawn between paying to skip the "grind" of a wait timer and the "grind" of weeks or months of collecting gacha currency, and in both cases, "as achievements become scarcer in the player population, their value increases" (Lundy et al., 2024, p. 9858). However, there is a non-trivial difference between waiting out a timer and engaging in gameplay, even simplistic or repetitive gameplay, for the same amount of time.

Social casino games, though they do primarily feature randomness through gambling and casino games, do not have a character gacha as a core part of gameplay.

Games with only cosmetic loot boxes, though they share monetized RRM, are not gacha games as the reward contents of the RRM are not tied to gameplay and usually are also not characters.

Collectible card games (CCGs), especially in a digital format, are the closest in structure to gacha games. This is partially due to the history of gacha games stemming from collectible monster cards (some gacha games and players continue to refer to their characters as "cards" (for example, in Cao & Xu, 2024, p. 148), even though gameplay does not resemble a tabletop card game), and partially due to the emphasis in both genres of collecting gameplay-mandatory items through RRM. In a digital implementation of a CCG, the player is exposed to more audiovisual

simulation than a physical pack opening, and the rewards cannot be sold through a secondhand market (Mattinen et al., 2023), similar to gacha games. It is also more possible to integrate pack openings into other game systems through the use of virtual currencies and free rewards.

The main difference between CCGs and gacha games is in the gameplay itself, and the resulting importance of characters. In CCGs, the player builds a *deck*, usually consisting of dozens of cards, some of which may be characters, and others may be buildings, items, or spells. Cards have a binary state of existence: they are in the deck, or they are not in the deck; though the quantity of a given card in a given deck may vary, there is generally no meta-progression such as leveling up of a card to increase its stats. The core game loop is of a card game, where the player must draw and play cards using some kind of resource, and the player must adapt to the randomness of not knowing what order in which they will draw their cards—or if they will draw the card at all before the game ends.

In most gacha games, which as previously mentioned can be categorized as or similar to RPGs (Huang, 2023), the player builds a *party*, usually consisting of a small number of characters, who can additionally be strengthened through leveling or equipment upgrades. The player can also use characters more deterministically than they could play cards randomly drawn into a hand, such as by switching characters or setting a party order. The gameplay and emotional weight of an individual character in a party is therefore generally higher than of a card in a deck.

2.3 Engagement in Gacha Games

The primary engagement and motivation behind gacha gaming is widely assumed to be "gambling", i.e., the excitement of receiving random rewards with large amounts of audiovisual effects accompanying them. However, while this excitement does exist, players can get annoyed of these animations after many pulls, rather than excited (M. Yin & Xiao, 2022b), and there are factors other than gambling psychology that drives engagement with gacha games.

2.3.1 Randomness

Whether monetized or not, randomness is frequently used in games in order to provide uncertainty. Costikyan (2013) describes uncertainty as key to games, and play in general: if the progression and outcome of play becomes predictable, the game is no longer enjoyable. Costikyan (2013) additionally lists forms of uncertainty in games, and among them, alongside player performance, unpredictability of other players, and hidden information, is of course randomness. The strengths of randomness are that "it adds drama, it breaks symmetry, it provides simulation value, and it can be used to foster strategy through statistical analysis" (Costikyan, 2013, p. 69).

Yin and Xiao (2022b) interviewed players about how different forms of RRM's affected the player experience, including both monetized and unmonetized RRM's. From their interviews, the authors noted that "random rewards added a sense of freshness and uniqueness to gameplay" (p. 6) in genres such as RPGs, battle royales, and roguelikes. When the RRM's are non-cosmetic i.e., affect gameplay directly, luck can affect the outcome of the game, depending on the strength of

rewards different players receive. Yin and Xiao (2022b) describe "the ability to optimally adjust playstyles and decision-making processes based on the received random reward" (p. 6) as "adaptability", a type of skill that is necessary for players of games with heavy use of RRM. In gacha games, each player's account can function as a single run of a battle royale or roguelike—although the element of replayability is lacking, the player is still encouraged to adapt to the roster of characters they have received at random, at least for the early parts of the game.

The psychological effects of random rewards has been well established, primarily through comparison between loot boxes and gambling. An intermittent reward schedule, as opposed to a fixed one, is "known to lead to continued engagement in a behaviour" (Eysenck, 2004, as cited in Zendle, 2019, p. 2). The development of superstitions, "in which responses are maintained through accidental correlation with reinforcement", can also be related to an illusion of control over an intermittent reward (Rudski, 2001, p. 68). Due to the wide range of possible rewards, RRM can also evoke a large variety of emotional responses, such as hope, anticipation, elation, or disappointment (M. Yin & Xiao, 2022b). These strong emotions, however, can lead a player to spend more than they originally intended (e.g., in Cao & Xu, 2024; Koeder et al., 2018).

While randomness is a central part of gacha games, there are obviously other factors that contribute to player engagement with the genre. After all, if randomness and gambling-related excitement were the only reasons to play a gacha game, then social casino games, bingo, slot machines, or RRM-focused genres that do not require microtransactions (such as looter shooters) would be equally or more

appealing in that regard. While gacha game players can of course also be slot machine players, gacha games would be redundant if they perfectly overlapped with the same forms of fulfillment that other kinds of games can provide.

2.3.2 The Game and Metagame

Although gacha games undeniably use manipulative or exploitative tactics and mechanics in order to entice the player into spending money (as many things do in our current media environment), it would also be a mistake to assume that players are all naive, ignorant, and passive victims. As Huang (2023) explains, "A gacha gamer will be able to calculate the time and money for obtaining a character, even if s/he knows crystal clear what dark design and manipulation are involved in the gacha system—the player gachas nonetheless" (p. 86).

Previous literature has shown several different player motivations that are distinct from the sole act of pulling or gambling psychology. While the gacha mechanic is enjoyable per se, it is also not a primary, let alone singular, point of attraction for players (Rentia & Karaseva, 2022). Tan (2023), using self-determination theory, found that gacha games as a whole satisfy the basic needs of autonomy, competence, and relatedness for players. As for the gacha mechanic on its own, the author found that players were "motivated by the game itself, rather than the feeling of competence through rolling" (p. 28). The mastery curve of these games, in both the short-term gameplay loop and long-term strategic planning, can require heavy time investment and deep understanding of game systems (Jiang, 2022). The act of rolling can therefore create a sense of accomplishment, such as in one's game knowledge knowing which characters are valuable, or in the culmination of a long-

term plan gathering resources to get this character. Players are thus able to set and fulfill personal goals, defining what "winning" is for themselves (Tan, 2023).

Woods (2022) also describes a key difference between players and slot machine gamblers through their relationship with time: citing Schüll (2005), slot machine gamblers spend money in order to enter a "zone" to "withdraw from time"; in contrast, gacha game players are "acutely aware of [time's] *value*" (p. 1081, original emphasis) as an alternative to spending money on in-game transactions.

In order to pull the gacha at all, a large proportion of the player's time in gacha games may be spent grinding. Although the act of grinding sounds inherently negative, it "can be both a desirable and undesirable act, all at once", such as being a form of reprieve, feeling productive without imposition, or providing an ideal challenge through gameplay (Bojin, 2013). However, players may also quit the game due to events in the player's real life interfering with the amount of time they are able to spend on the game (Y. Wang & Hao, 2022).

Woods (2022) asserts that players enjoy the ability to "game-the-game" and circumvent the need to pay for gacha with real currency, through strategic "investment" of the resource of time over months of grinding interwoven with the player's daily life. In this time-based economy, players are "gambling with time" rather than with money, "and monetary investment is actually the security that the sunk cost of grinding can be recouped" (Woods, 2022, p. 1088). While Woods' work focuses on Singaporean players, it is not difficult to imagine that the sentiments interviewees conveyed are shared across regions and cultures (especially in an Internet-connected globalized economy that values metrics such as GDP), including:

valuing investing in one's own future; enjoying the feeling of productivity while grinding, yet simultaneously feeling guilt for not being truly "productive"; valuing efficient allocation of resources; and/or being more willing to spend time over money.

2.3.3 Characters

As defined in Section 2.1.3, characters are a core facet of gacha games. Pulling new characters allows players to use them in gameplay, potentially allowing them to learn and master the character's unique strengths or playstyle (Rentia & Karaseva, 2022).

In terms of basic needs, Tan (2023) found that the need for relatedness was satisfied through both furthering friendships/community with other players and through developing parasocial relationships with in-game characters. These parasocial relationships can have a great effect on a player and their experience, as "spending money for a virtual character is often motivated by a player's substantial emotional connection with that character, revealing the logic behind the affection economy" (Cao & Xu, 2024, p. 154).

Woods (2024) uses Damasio's (1995) concept of "affective embedding" to describe motivations for player to gacha. The affective embeddings of gacha games simultaneously cause players to "see them as more-than-games" and embed the player into the game, creating a new understanding of "value" that can seem irrational. One of the core aspects of this value system stems from the player's relationships with their characters, which "shapes their attitudes towards, and engagements with, the gacha mechanic, thus triggering gambling-like playing

behaviours". The player seeks to "win" an "emotional payoff that satisfies their need for social interaction and self-realisation" by drawing the character they desire.

2.3.4 Character Attachment

2.3.4.1 Identification and Parasocial Relationship

Two main ways people can connect with fictional characters are identification and parasocial relationships (Bopp et al., 2019; Ferchaud, 2024). Both are applicable to gacha game characters.

Playable characters in games, unlike characters in other forms of media, are directly controlled by the player to some extent. In mobile RPGs, including gacha games, identification is reinforced by game playability, as well as the game story (Li, 2024). Lewis et al. (2008) go beyond identification to the concept of character attachment: "what separates RPGs from other character-driven entertainment media is this internalization and psychological merging of a player's and a character's mind—a phenomenon we call character attachment" (p. 515). Identification can also extend beyond the active control of the player's avatar to the player's life outside of the game, such as on social media or in the real world, potentially implying a "conflation of self with the avatar" (Adams, 2022, p. 196).

Although the main player character may afford some kind of customization, most of the characters that the player controls in a gacha game are predefined characters, and the player has no control over the character's narrative actions. When a player is controlling a predefined character as an avatar, an avatar-character, "the avatar is both the player's embodiment in the gameworld and a distinct character", creating an

ambiguous relationship where the player "both is and is not them" (Vella, 2013, p. 8).

In some games, the character may additionally exert their own autonomy through gameplay by restricting player agency in a way that communicates their complexity (Willumsen, 2018). Character attachment can be connected to the player-avatar relationship through the mapping created by Banks and Bowman (2013).

The other primary form of connection a player can form with a character is a parasocial relationship. Parasocial relationships with characters develop similarly to social relationships with other people, and both positive and negative relationships are possible (Ferchaud, 2024). While the player is embodying an avatar, the relationships between characters can become mapped onto the player's relationship with the other character (Adams, 2022). Exploring the different types of relationship that players can have towards characters they "really like", Bopp et al. (2019) found 7 forms of emotional attachments combining player emotions and character attributes.

2.3.4.2 Possession

The player's interactions with the character through the gacha and related systems can also cause players to form deep attachments/relationships with a character.

First, the player acquires the character through gacha. Pulling the character requires luck, therefore whether or not the player successfully pulled the character, as well as whether they perceived the amount of pulls required as high or low, can affect their emotional experiences and connections (Rentia & Karaseva, 2022). The power of luck can affect player behavior and emotions in other unique ways, such as one participant who "admitted that she occasionally used another account with better

luck" (Y. Wang & Hao, 2022, p. 499). The uncertainty of the outcome of gacha pulls is reminiscent of the idea of "destiny" and "fate"—if the player is successful, it means the character was *meant* to "come home", as the community calls it (Huang, 2023).

However, "coming home" is not an end, but the beginning of the player's interactions with the character in their account (Huang, 2023). Upgrading the character can be a task just as if not more arduous than acquiring them. In games such as *Onmyoji*, equipment makes up a large portion of a character's strength, but each piece of equipment has randomized stats, and it may take the player many hours of grinding drops to optimize stats for a character (Cao & Xu, 2024). The player can additionally interact with the character by playing as them, unlocking cosmetics, experiencing narrative or voice lines, and so on; as Huang (2023) describes, the time and labor the player invests into the character through upgrading and playing as them "may generate a series of psychological effects that one may experience when raising a real animal or a human kid: as the embodiment of the player's labor, the entity gains life."

Players describe the desire for a feeling of "completeness" with the character, such as through collecting all of their skins, to show their commitment to and love for the character (Woods, 2024). Woods (2024) explains this as evidence of the player's investment of themselves into the game, that "It is only once the collection is complete that players like Jocelyn can be satisfied, as the aesthetic assemblage has been realised" (p. 835). Huang (2023) builds upon this concept through coining the term "over-possession" to describe player desires, elaborating, "the character is possessed by the player as property, playable character, avatar, [...], and the means

to self-realization; on the other hand, the player is also possessed by the character the way in which one is possessed by a fictional or fantastique being, a ghost or a specter". Huang (2023) additionally describes exclusive ownership as one dimension of over-possession. Although different players are all pulling for and developing a relationship with the same character, each player's memories and experiences with that character are unique to them alone. Thousands, likely millions, of *Genshin Impact* players might have a copy of Keqing, but this one—is *mine*.

2.3.4.3 Character Elements

In terms of character elements, players may engage with a character's visual design, personality, character development, voice performance, gameplay design, representation through gender and/or sexuality, relationships with other characters, etc. (Nguyen et al., 2023; Välisalo, 2023). Välisalo (2023) also points to character creation, and how an audience might engage with the character through appreciation of the technical skills required to create the character. Wang and Hao (2022) found 3 factors that influenced participants' emotional attachments to characters, one of which included the individual player's preferences and expectations.

Among their participants, Rentia and Karaseva (2022) found that "narrative was the most popular aspect of gacha games," referring to both the main storyline and side character-focused stories, as the narrative "gives players an opportunity to get familiar with characters and become emotionally attached". Additionally, Mallon and Lynch (2014) propose that "responsiveness of the characters and stimulating deep and meaningful relations" (p. 523), through both gameplay and narrative, help players engage more with the character. At the same time, Wang (2023) found that

players were more willing to use and purchase skins for characters who were rated as either high power or high appearance. Thus, the player would likely be willing to engage with a character if it fulfills at least one of these three aspects of narrative, gameplay strength, and visual design.

As the culture of gacha games broadly stems from anime and otaku culture, research on these Japanese subcultures also provides relevant background information. Huang (2023) discusses gacha game characters in the context of Hiroki Azuma's concept of database consumption. In short, without a "grand narrative" to draw from, database media in "the nonnarrative of postmodernity" constantly rearranges and recycles the fragments of multitudes of "small narratives", and individual works are valued for their connection to the database of narrative fragments (Azuma, 2007, as cited in Huang, 2023, pp. 46–47). One prominent example is the creation of characters through "moe elements", which are re-combined into genre conventions/characters that exist independently of the narrative they are a part of, such as the "glasses girl": a shy, intelligent girl whose glasses, hairstyle, voice performance, and posing convey these personality traits and thus convey participation in the archetype, regardless of which anime, manga, or game she appears in (Azuma, 2009, as cited in Bruno, 2019; Galbraith, 2017). The audience's literacy in the subculture is what allows them to both understand the arrangement of elements, and also build their expectations for how they should engage with this character (Bruno, 2019). Due to these conventions and expectations, the character precedes narrative, sometimes forcing specific narrative events into the plot in order for the character to become fully realized as an instance of the archetype (Bruno, 2019).

Huang (2023) uses the term "character economy", which he describes is "the direct result of the database consumption", as "the conditions for the mass production of characters rather than merely the environment for the popularity and transmediaticity of single characters" (p. 56). Huang (2023) explains that the character economy functions on individual fragments of characters, the entries in the database that are rearranged into infinite individual characters, rather than the characters as wholes. Each of these fragments, such as the visual design, voice actor (see Poitras, 2001, p. 90), personality, or the combination of the whole trope, can potentially attract a player or entice them to pull for the character. Both Huang (2023) and Bruno (2019) similarly describe characters and the audience's consumption of them as having multiple levels or dimensions: the consumer reads the character's a specific story within its own world, they learn more of how different characters and media relate to each other, they gain literacy of various design elements that inform their expectations of characters, and the consumer also participates in the creation of fan content. In relation to gacha games, Huang (2023) describes, "gacha is a series of play(s) engaging with the character economy, a unique way to invest and participate into the virtual economy of character database."

While other elements such as art styles and narrative structures also form a part of the database, Huang (2023) points out the importance of characters, as "A character naturally has the capacity to transcend the borders between different media and travel across different material mediatic vehicles without losing its recognizability and consumability." In the same way that a convention such as the "glasses girl" is independently recognizable of any work she would appear in, individual characters remain themselves when experiencing a different set of events (Bruno, 2019), moved

into another narrative context, or removed from narrative completely. As Gough (2020) explains, the anime *Puella Magi Madoka Magica* has a dark narrative filled with pain, trauma, and death, yet its characters have been re-imagined in joyful settings and used to merchandise various goods and pachinko machines after the anime's airing. Despite these tonal incongruities, the narrative-less core of the character is constant and recognizable: "Whether she is facing an apocalyptic struggle, serving drinks in a magical girl cafe, or promoting the variety of goods available at your local Lawson convenience store, Madoka remains Madoka" (Gough, 2020, p. 74). Additionally, as a transmedia property itself, the *Madoka Magica* universe includes 2 gacha games, *Magia Record* and *Magia Exedra*, where pivotal plot moments depicted in the original anime as emotional scenes of sacrifice, loss, and hope, are re-configured into an ability spammed repeatedly to farm materials off waves of enemies.

As gacha games may employ transmedia storytelling or are part of transmedia universes, transmedia characters are further discussed in Section 2.4.2.

2.3.5 Fandom

Most players do not experience media in isolation, and thus their opinions and experiences are affected by the experiences of others, whether through real-life friends or online connections. Wang and Hao (2022) describe the importance of these "human-human interactions", as people may start playing a game at a friend's recommendation, or quit a game once their friends have also moved on from the game.

In addition to these more direct interactions, the wider community also contributes to the experiences of the individual. At a more gameplay-focused level, community tools, wikis, and strategy guides can help a player progress through the game more smoothly and efficiently (Jiang, 2022). At a fandom level, the derivative works of other community members, such as fan art and fan fiction, can affect a player's perception of a character, causing them feel more connected to the character (Cao & Xu, 2024). Fandom interactions can include fanwork, analysis, projection, shipping, or controversy (Nguyen et al., 2023). When dealing with transmedia characters, fan works add the individual fan's own interpretation of the character to the wide range of different representations that are all considered the "same character", with Välisalo (2023) calling these fan works "essentially new transmedia extensions" (p. 74). The time-limited content of gacha game events further "structure the shared experience and so [is] a foundation of community cybernisis" (Adams, 2022, p. 197); as this shared experience extends into fandom, waves of fanwork and analysis follow recent story events and character appearances as everyone experiences them within the same period of time.

In the age of digital fandom, lines between fandoms are blurred, and thus the norms of what "being a fan" means in any given community can be influenced by what fans bring from other fandoms (Y. Yin, 2021). The "monotonous" (see Section 2.2) nature of gacha games through the shared gacha experience encourages players to travel between fandoms as they try new gacha games, bringing with them their history of previous fandoms, gacha games or otherwise. At the same time, interpersonal relations between fans also affects individual behaviors, and fans who are part of multiple fandoms "position themselves in different communities, negotiating the most

“proper” way to perform their identities in the specific fan network” for each different fandom they are part of (Y. Yin, 2021).

Fandoms contain multitudes of sub-communities that fans will be a part of and interact with. Character-focused communities, especially those of marginalized characters, can additionally form safe spaces for players to have discussions that they would not have the opportunity for in the mainstream communities (Välisalo, 2023). These communities can also focus on the parasocial relationships that players have with characters, such as through "kinning" (identification) and "shipping" (putting two or more characters into a romantic relationship) (Nguyen et al., 2023).

A subsection of shippers focusing on homoerotic male relationships (referred to in anime-adjacent communities as BL or "Boys' Love") are referred to as *fujoshi* and *fudanshi* in Japanese fandom (Tanaka & Ishida, 2018), and this terminology has gained traction even among non-Japanese fandom. Shipping, especially that of homoromantic male relationships, is a space for fans to play with characters and fantasy, create their own secondary works, as well as form communities with similar fans (Galbraith, 2011; Parry, 2019; Thomas, 2006). Alternatively, some people may "self-ship" or ship a character with themselves (Nguyen et al., 2023), referred to as *yumejoshi* in Japanese fandom (Giard, 2024). Many, though not all, *yumejoshi* and self-shippers are able to form community with each other over the shared love of a character, despite the impression that they would be competitors for the character's love, and some of this is attributed to the idea of exclusivity stated earlier (see Section 2.3.4.2) by Huang (2023): "To a certain extent, the character serves as a

connection between us. [...] At least, that's how they put it: "The ○○ I love is not like yours. Even if the character is the same, with the same name and look"" (Giard, 2024, pp. 16–17).

Yin (2021) discusses the role of emotions in digital fandom through the lens of Illouz's (2007) emotional capitalism, explaining that fans of virtual characters love the characters with the same "logic" that fans of celebrities and idols treat their target of adoration. For example, fans will support their favorites culturally, but also financially, purchasing merchandise of the celebrity in order to support them and their career; virtual characters will never personally receive the money that fans spend on them, yet fans purchase products "to prove the popularity of the character" and "to compete with fans of other characters" (Y. Yin, 2021, p. 467). While fans are aware that the characters are not real people, allowing them to switch to supporting different characters quickly without feeling guilt, fans may also act as if the character has real emotions, such as defending them from mischaracterization or quarreling over ships, due to "the possibility that the character might be hurt or lose anything" (Y. Yin, 2021, pp. 467–468).

Another motive a fan may have to purchase or collect merchandise is related to the concept of a "character shrine" or "altar". As the name would suggest, the shrine is dedicated to the character through a display of collected character goods, giving physical form to a virtual being (Giard, 2021). Additionally, an *itabag*, which contains the character's merch on display in a handbag or backpack with a clear window, is a way for the fan to wear the altar and physically carry the character with them (Giard, 2021). Giard (2021) explains how character fans within the otome game (female-

targeted romance game) fandom are willing to spend large amounts on both blind bags and digital gacha, and fans describe the act of purchasing goods as expressing love and gratitude for the character. In some sense, this is similar to the concept of over-possession (see Section 2.3.4.2) raised by Huang (2023), with physical character goods instead of digital gacha providing the "means for the consumer to develop a feeling of realness and materiality" (p. 66) of their desires for the character.

2.3.6 Sociocultural Background

As stated in Section 2.3.2, players find pleasure in circumventing the monetization of gacha games through grinding and investment of time (Woods, 2022). Woods (2022) describes grinding in gacha games as a form of Kücklich's "playbor" (a portmanteau of "play" and "labor"), where rather than selling items on the secondary market for profits, the value of the player's labor is given value by the fact that it offsets monetary spending in the gacha. Huang (2023) further describes gacha games as "the abstraction of capitalism", where "time is resource, currency, and crystallized into labor" (pp. 80-82) quantified through stamina systems and limited-time banner periods. According to Huang (2023), "the temporality of a gacha player is exactly the temporality of a neoliberal worker who manages one's time according to productivity and profitability, and a gacha player is a *neoliberal subject* at its purest" (p. 82, original emphasis).

In regards to time in the age of neoliberal capitalism, Sugarman and Thrift (2020) state plainly, "We feel pressed to accomplish more in less time. Efficiency has become an individual virtue as we attempt to do more simultaneously". Jiang (2022)

mentions how gacha game players value min-maxing—getting the maximum reward for the minimum required time or effort—to the point of creating entire spreadsheets or calculators and memorizing game information in order to optimize their efficiency.

Sugarman and Thrift (2020) also note, "Three components common among contemporary time management strategies are worthy of note for their alignment with neoliberalism: goal setting, monitoring one's time, and the "multiplier" strategy" (p. 821). These components can also be seen in gacha gameplay. As mentioned in Section 2.3.2, players gain a sense of accomplishment from setting and achieving goals (Tan, 2023). Players are aware of the value of time and how much of it has been spent (Woods, 2022), and this is especially true when engaging with stamina systems or tracking which days of the week one needs to be doing specific tasks (Jiang, 2022). Lastly, the "multiplier" strategy refers to choosing tasks that fulfill multiple goals at once (Sugarman & Thrift, 2020), and many activities in gacha games complete this by, for example, increasing the trust level of the characters used in the party, gaining gacha currency, and farming materials to level up characters, all through clearing a single level.

Several of the Japanese mobile game developers interviewed by Koeder et al. (2018) shared the sentiment that players wanted the gacha element, and would become bored without it. However, this viewpoint appears to not be limited to just Japan. According to Denoo et al. (2024), "Over the past decade, however, particular videogames have become increasingly gambling-like in their design" (p. 696), including games of many different genres and origins. Some might blame this on the influence of the Japanese mobile games that popularized gacha, the popularity of

anime culture directly affecting video game market trends, but this line of thought seems unfounded. As an example, American culture and its focus on "materialism and competition", even in games targeted towards youth and adolescents, "may actually predispose americans to gambling behavior" (Smith & Abt, 1984, p. 124). This is not to somehow blame Americans for being susceptible to gacha games, or for proliferating gambling-like mechanics; rather, it is to raise the possibility that despite cultural specificities in the anime media mix, gacha games have not only widespread appeal but also could potentially have come into existence from a different country of origin (e.g., such as through baseball cards), as games of chance and risk exist in many cultures.

2.4 Market Incentives for Gacha Games

2.4.1 Monetization and Engagement Drivers

The expansion of industry and market trends arises, of course, from the potential of monetary profits. Professionals interviewed by Koeder et al. (2018) stressed that the primary motive for including gacha systems is to drive monetization. Depending on the content available in any given time period, the top earning gacha games continue to make tens, if not hundreds of millions of dollars¹ per month worldwide. Zendle's (2019) findings imply that the removal of loot boxes from a game reduces the amount of spending by problem gamblers. Companies further drive monetization through encouraging connections with characters, such as advertising a product with a character's signature, as if they were a real celebrity (Y. Yin, 2021).

¹ See <https://www.google.com/url?q=https://ensigame.com/news/gaming/top-earning-gacha-games-of-april-2025-honkai-star-rail-triples-revenue-while-genshin-impact-sees-decline>

Psychological manipulation tactics intended to capitalize on the player's time and money are present in most (if not all) free-to-play games. Several of Zagal et al.'s (2013) dark patterns can be seen employed in gacha games outside of the gacha mechanic itself, for example: the usage of virtual currencies, which obscure the true cost of items and leave remaining denominations that cannot afford another item, yet also cannot be refunded (Forbrukerradet, 2022); a heavy emphasis on grinding—spending large amounts of time on repetitive tasks for progression (Huang, 2023; Woods, 2022); playing by appointment through rewards given by daily quests (Frommel & Mandryk, 2022; Woods, 2022). Evans (2016) additionally points out the importance of branding in media marketing, and similarly to freemium games, gacha games may employ transmedia (e.g., games that are spinoffs of other series, such as *Fire Emblem Heroes*) or developer branding (e.g., games made by MiHoYo/HoYoverse, the developers of *Genshin Impact*).

An example of dark patterns not directly part of the gacha mechanic or grinding can be seen in the following example. During the second anniversary celebration of *Honkai: Star Rail*, a limited-time pack was available for purchase, pictured below.

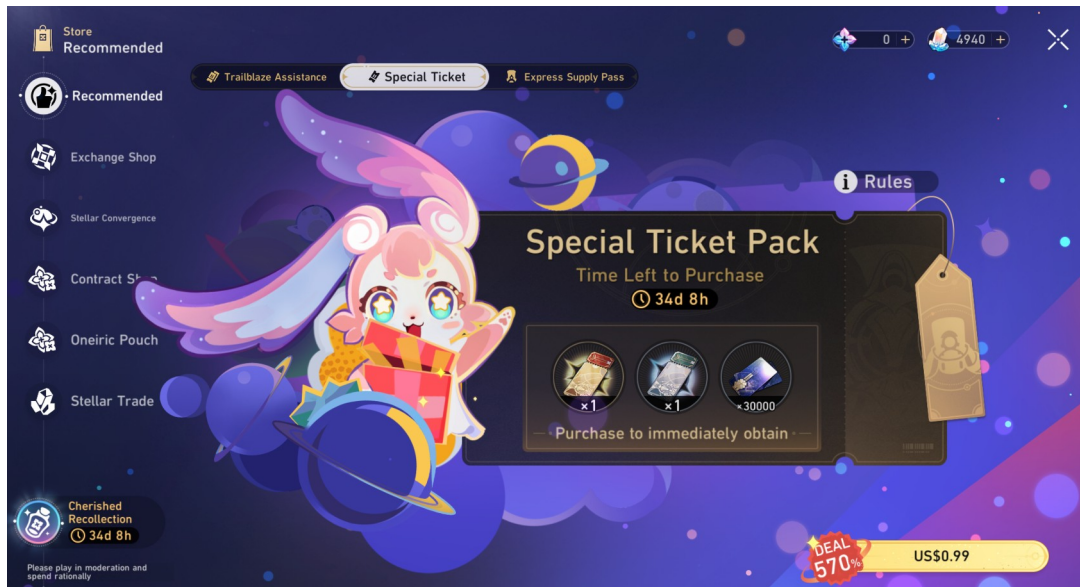


Figure 1. *Honkai: Star Rail*'s 2nd Anniversary Special Ticket Pack in the in-game store. Screenshot taken by author, April 2025.

Visual elements such as the prominent timer in the center of the UI, and the red "DEAL 570%" positioned next to the purchase button intend to create a feeling of urgency in the player. Additionally, the 570% value is misleading, as the items available in the pack are not usually available for direct purchase. Normally, the player purchases Oneiric Shards, a premium currency which converts directly to the gacha currency, Stellar Jades. The red and green tickets above can be used in the gacha and each cost 160 Stellar Jades, for a total of 320 Stellar Jades.

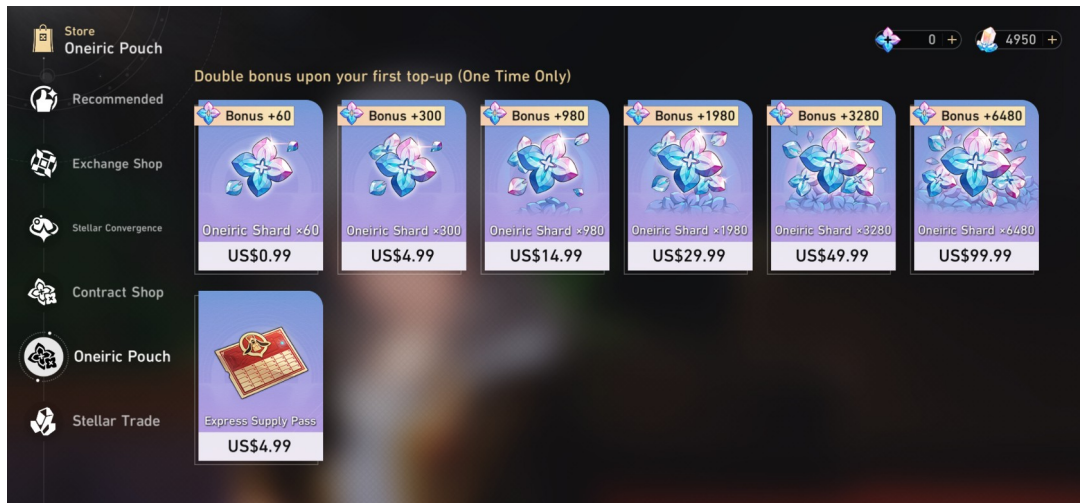


Figure 2. *Honkai: Star Rail*'s Oneiric Shard purchase page in the in-game shop. Screenshot taken by author, April 2025.

When looking at the cost of Oneiric Shards, the cost of 320 Oneiric Shards (to convert into Stellar Jades) is indeed more than 5 times the cost of the limited time pack. However, unlike the items in the pack, Oneiric Shards can be used to purchase other items, such as cosmetics and materials. Additionally, the red and green tickets are each limited to specific banners, whereas the Stellar Jades a player would receive through currency conversion can be used on either banner.

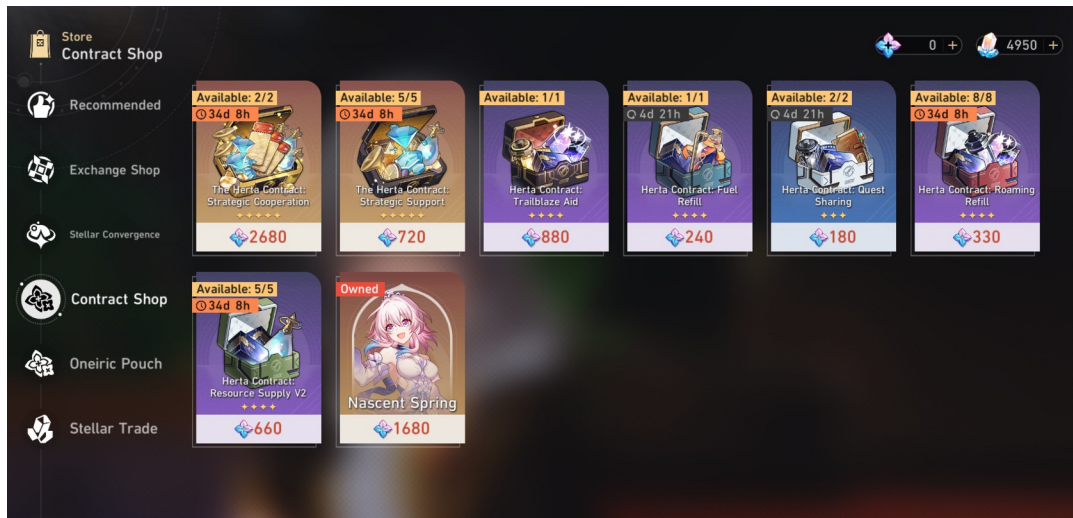


Figure 3. *Honkai: Star Rail's* shop, featuring multiple items that can be purchased using Oneiric Shards, such as material packs and a character cosmetic. Screenshot taken by author, April 2025.

While this example interacts with the gacha mechanic through the purchase of gacha pulls, the marketing strategies here do not focus on random rewards, and instead employ more general tactics of misleading value through virtual currencies.

Developers also want to maintain engagement once a player has started the game. Due to their free-to-play nature, the barrier to entry is lower for players to start playing gacha games; however, it is also easier for players to quit, as they have not invested any money to start playing (Alha et al., 2018). Reasons for player to quit the game include failing to get a desired or strong character (Y. Wang & Hao, 2022), addition of irrelevant or uninteresting content (Rentia & Karaseva, 2022), burnout (as defined in Cook's (2007) skill chain theory, by Rentia & Karaseva, 2022), and real-world factors such as time or phone storage space (Rentia & Karaseva, 2022; Y. Wang & Hao, 2022). Daily quests are important in providing content that keeps the player playing the game (Alha et al., 2018), and are thus employed by many gacha

games. However, if the player feels obligated to log on for the sole reason of completing daily quests for rewards, rather than organically gaining the rewards through play, the act becomes "tedious" and "like a chore" (Frommel & Mandryk, 2022). Gacha games may also include battle pass systems, which similarly functions to encourage player engagement, and may also tie in to daily rewards. The addition of new characters or content or the player having more free time again in their real life can both bring a player back to a gacha game they stopped quitting (Rentia & Karaseva, 2022; Y. Wang & Hao, 2022). In some cases, a player may quit or take a break from a game and come back multiple times (Y. Wang & Hao, 2022), so gacha games are incentivized to constantly release new content in order to entice both new and returning players to the game.

Though not an explicit dark pattern, gacha and other monetization systems also exploit the player's sunk cost bias. Nowadays, most gacha games include a "pity" system, which guarantees a rare item after a specific number of pulls, and players may refuse to play a game that does not have this system (M. Yin & Xiao, 2022b). Yin and Xiao (2022b) explain how this mechanic, while seeming player-friendly as it guarantees the item within a certain limit, can also lead to entrapment and sunk cost behavior. Similarly, Woods (2022) describes how a player, after anticipating getting the character for months, fails to get the character they wanted for free; he decides to purchase premium currency, rationalizing that "'since I already spent that intangible capital [time] on it, I might as well just top it up [with cash] and get what I actually wanted'" (p. 1088). Therefore, the developers are incentivized to give *some* things away for free, leading a percentage of players to spend more money than they otherwise would have out of sunk cost behavior.

2.4.2 Transmedia Characters

As explained in Section 2.3.4.3, database consumption of characters creates the character economy, and thus the conditions for the mass production of characters. As Huang (2023) explains, the capability for the mass production of characters is vital for gacha games to have a constant supply of characters to sell, and these characters are also easily made transmedia for further brand expansion. Lamerichs and Rosendo (2022) describe how modern media is increasingly character-driven, and "Arguably, audiences do not even need to consume the texts to know these iconic characters" (p. 198). Modern large-scale media projects tend towards transmedia, as "[transmedia storytelling] is an excellent way for corporations to extend their base and target different groups" (Scolari, 2009, p. 590), allowing corporations to both introduce new audiences to the series, and existing consumers to different forms of media. Scolari (2009) describes a "transmedia consumer" as fans who "will move from one media to another, applying a different set of skills to interpret each media text while reconstructing the entire fictional world" (p. 597). Gacha games, if they are not already an extension of an existing transmedia universe (such as *Madoka Magica*'s gacha game, *Magia Record*), may also employ transmedia storytelling through animated shorts, comics, or full web games that relate to the same narrative world and characters, but depicting events outside the scope of the game itself.

Brinker (2017) describes the Marvel Cinematic Universe (MCU) as "a prime example of transmedia storytelling" (p. 209), reaching across most forms of media including film, television, comics, and games, including games that fit into this paper's

previously stated definition of gacha game—with a slight catch. To briefly reiterate the definition from Section 2.2, a gacha game must have a gameplay loop that incorporates characters who are pulled from a gacha, and the gacha is a core part of gameplay. The slight catch is related to Huang's (2023) definition of the character economy, which relies on the concept of database consumption. Although the MCU is a transmedia franchise with a large number of storylines, adaptations, and importantly characters, Brienza (2012) argues that Marvel and similarly DC narrative universes fit more into the definition of a "grand narrative", rather than the "nonnarrative" database consumption defined by Azuma (2009).

Despite this, Marvel's gacha games are able to maintain a respectable pace of character releases. For example, *Marvel: Contest of Champions* has slightly over 300 playable characters (as of writing) since its release in 2014—though not quite the 400+ that *Fate/Grand Order* has released in roughly the same amount of time, *Contest of Champions* still releases at a pace of roughly 2 characters per month. This is primarily possible due to the large backlog of Marvel characters, including different adaptations of the same character, stretching back decades of comics, films and television. Furthermore, many of these characters are loved for their overall designs, values, or personalities, or their specific representation in a given work, imbuing them with a similar affect and desire that would lead a player to save and pull for them. Thus, despite the lack of direct link to anime or "otaku" culture, or to database consumption and the character economy, the experiences of these games as "gacha games" and these players as "gacha game players" can still provide valuable insight into the player experience of gacha games. As an aside regarding the term "otaku", Huang (2023) posits that "the term "otaku" gradually lost its

liveness, accuracy, and practicality, [...] the postmodern media environment is turning everyone who has contact with the information culture into otaku, or, in Saito's words, consumers who have a high affinity with virtual contexts and virtuality" (p.76).

		Captain America	December 10, 2014	Science 
		Captain America (Infinity War)	May 10, 2018	Science 
		Captain America (Sam Wilson)	February 18, 2022	Tech 
		Captain America (WWII)	July 2, 2015	Science 

Figure 4. The 4 different versions of Captain America available in *Marvel: Contest of Champions*. Screenshot taken by author from the *Marvel: Contest of Champions* wiki, hosted on Fandom, May 2025.

Database consumption is also not confined to Japanese media, though it may function or be perceived differently outside of the anime media mix. Kim and Jin (2020), studying *World of Warcraft*, *League of Legends*, and *Overwatch*, found that "changes in popular genre in the domestic online-game market proceed from consumers' verging toward database consumption" (p. 665). In these American-made character-heavy games, and more broadly genres such as MOBAs (multiplayer online battle arenas) and hero shooters overall, characters must be quickly understandable and identifiable in gameplay. This leads to a wide usage of archetypes drawn from popular culture and mythology, as well as "transmedia character types" described by Thon (2019), such as "the mummy", "the ninja", or "the

pirate" (*MOBA Character Theme Archetypes*, n.d.)². Similar to Huang's (2023) description of the use of various mythologies in anime and manga, such as "Dáinsleif, Gungnir, and Valkyrie, neither for their cultural nor their religious nuances, but for these elements' value in being recognized, archived, recycled, resembled, and reassembled in the database for consumption" (p. 48), tropes drawn from mythology including the "Monkey King" character (referencing the Chinese figure Sun Wukong) or the "Minotaur" character (referencing the Greek figure) (*MOBA Character Theme Archetypes*, n.d.) also appear frequently in these games, though sometimes with a twist. Although these games are outside the scope of this paper, due to the movement of players between fandoms and the widespread influence of these games, it is highly likely that players who have minimal exposure to anime or gacha games are still familiar with characters created through the character database.

3 Comparative Analysis

The purpose of this section is to showcase the depth and variety of the gacha game genre. As mentioned in Section 2.3.2, gacha games are diverse in terms of gameplay, yet the presence of gacha drives similar metagame behaviors. In most contexts, it would be difficult to justify comparing a tower defense game, a 3D action game, and a rhythm game through the same lens—but these are all gacha games. This diversity is still a factor in the player experience, as a player's preferences will lead them towards specific gacha games that most fit their interests, which then

² Among online communities, there is a running joke that every game has a character, usually a woman, named Ash or Ashe, see https://www.reddit.com/r/Overwatch/comments/qyfuii/how_many_times_someone_name_ash_eash_is_used_in/.

define the subcommunities they are a part of and build the player's history with the genre.

Gacha games can differ in their implementations in every aspect from gameplay to gacha systems to patch frequency. In order to contextualize the vast range of experiences and attitudes a player can have towards a gacha game, and thus gacha games as a whole, it is important to understand how the experience of a single game might affect a player's expectations towards the genre as a whole. For example, a player who primarily plays narrative-heavy, gacha-generous games will have a different perspective from a player who focuses on competitive challenges in games with extremely low rates on the rarest characters.

Additionally, some terms that may appear in the results are partially defined here in context. A full Glossary of terms is available in Appendix A.

3.1 Game Features

Below is a non-exhaustive list of various gacha game features and how they may vary between games. Following this section is a brief analysis of 4 specific gacha games to showcase some different implementations of these features.

3.1.1 Gameplay

Genre and gameplay loop (e.g., 3D action, 2D bullet hell, turn-based strategy, rhythm game)

The core gameplay, where the player uses the characters they have acquired. The player will likely spend most of their time in this gameplay loop, or a variation of it.

Depending on the genre, characters may have variation in their usage or gameplay styles (e.g., a fast vs slow character in an action game). There may also be variations on the gameplay, such as through additional game modes.

Some games allow for "autoplay", where the game automatically completes stages or gathers materials for the player without requiring input. Games may have different prerequisites or restrictions on autoplay.

Roster type

There are 2 primary kinds of rosters, named here as Expanding Roster and Limited Roster. The kind of roster depends on whether the game primarily adds new characters to its cast, or maintains a consistent cast of characters.

Expanding Roster: new characters are added frequently, which may sometimes include "alter" versions of older characters (e.g., after a large narrative change, or for a seasonal event).

Limited Roster: a few characters recur frequently (such as with different outfits or narratives), and new roster additions are rare, if any.

Although the roster type may at first glance appear to be unrelated to gameplay, the roster type tends to set player expectations for the game's gameplay, narrative, and gacha system, as these all interact with characters.

Progression

How the player progresses through the game, unlocking more stages or advancing further into the story. Additionally, some forms of content (such as challenge stages) may become available only when the player nears the late-game.

Routine

What tasks an active player is expecting to complete, and how much time and attention they require. These may include a daily, weekly, and/or monthly cycle, and tasks may or may not overlap between these cycles.

This also includes energy or stamina systems, which may reach their capacity after a certain number of hours. The capacity and regeneration rate of energy systems determines how often a player who wants to maximize efficiency must log on. However, some games may also include tasks that do not require energy.

A form of "yearly routine" also exists for games that celebrate the player's and/or characters' birthdays.

Character progression and equipment

How characters are "built" and the time or labor investment that may be required per character. The resources to level up characters are frequently time-gated, such as through requiring energy, having a limit that can be gathered per week/day, or being locked behind a shop that refreshes after a certain interval. While some of these time-gates can be refilled through premium currency or items, others cannot.

At the most basic level, characters usually have a numeric level that can be upgraded, increasing the character's stats. However, characters may have other forms of levelling (e.g., upgrading each of a character's 3 skills individually), which require additional materials to be gathered.

Characters may sometimes have equipment, which must also be upgraded. These may require the same or different materials used to upgrade characters.

Additionally, there may be an element of randomness in character builds, such as equipment with semi-randomized stats. In this case, the same character at the same level may be vastly more powerful with optimized equipment stats, requiring the player to repeatedly grind for ideal drops.

Lastly, characters may also have a bond or trust level, earned through using the character, which may provide additional stats or rewards.

3.1.2 Gacha

Rarity tiers

The different rarity tiers of characters and items, as well as the percentage rates for each of them. In some games, characters may be available at all rarities, while in other games they may be restricted to higher rarities only.

Banner format

The duration, reward pool, and currency requirement of the banner. Many games will have multiple banners running concurrently, such as a permanent banner, and multiple limited-time banners that each feature a different rate-up character (i.e., a

character whose drop percentage is increased). Certain characters may also be limited (i.e., only available on specific banner durations). The reward pool may consist of only characters, or it may include other rewards such as equipment or materials.

Banners may also offer rewards for pulling on a banner, such as a guaranteed rare when pulling 10 items at once, additional rewards after a set number of pulls, or a currency that allows the player to "spark" (exchange) one of the featured characters.

Pity

When there is "pity", also known as a "guarantee", the player is guaranteed the rare reward after a certain number of pulls. If the rare item is reached before this number, the count is reset or nullified. Unlike the previously mentioned 10-pull bonus, these pulls do not have to be done at one time.

In some games, the pity threshold is reset with each new time-limited banner; in other games, it conditionally carries over. Pity may also take more forms than a binary threshold, such as with a probability that slowly scales until it reaches 100%.

Players will calculate the average rate of accumulation of gacha currency and combine that information with the pity threshold in order to determine whether or not they are guaranteed to get a specific character.

Duplicate treatment

What happens when a player pulls a character they already own. In some games, pulling multiple copies of the same character upgrades them, up to a certain point,

therefore incentivizing players to collect multiples of characters. Characters may be converted into character-specific currency, upgrading that character and no other.

This currency may or may not also be obtainable from means outside of the gacha.

However, in other games, any more than one copy of the same character is moot.

Characters may be converted into a general currency that can be used to upgrade any character.

3.1.3 Content locked behind ownership

In most gacha games, acquiring the character is more than getting a new gameplay tool. In addition to the intrinsic rewards of owning and using the character, having the character may also unlock additional content.

Narrative

Narrative content can include character information, such as a profile or biography.

It can also include voice lines that can be played at will by the player, where the character may talk about themselves or their opinion of other characters. In some games, a full visual novel dialogue segment can also be unlocked after acquiring the character.

Special missions

Stages that are unlocked through owning the character, and possibly additional prerequisites. These stages are the same as or similar to other stages in the game, utilizing the game's core gameplay loop. The stage may additionally include narrative content, such as beginning or ending with a visual novel dialogue section.

Extrinsic rewards

The player may be able to earn extrinsic rewards, such as gacha currency, that require ownership of the character. For example, levelling a character to a certain threshold may reward a pull's worth of gacha currency.

3.1.4 Patch and event format

Time

The duration of the patch and/or event, the frequency of events, and the amount of rewards that can be earned in the event. There may be multiple events of different kinds running simultaneously in the same game. Some events may also have more narrative weight than others. Some events may also be recurring, such as a Valentine's Day themed event.

Gameplay

How the event changes or complements gameplay. Events may include a number of normal stages, give additional rewards without adding new stages, or feature entirely new game modes or challenges that modify or replace the normal gameplay loop.

3.1.5 Multiplayer

Player-versus-Player (PvP) (if any)

Competition between players, which may be a direct competition between player parties, or an indirect competition through score rankings. PvP may provide extrinsic rewards to players based on performance, such as gacha currency or levelling

materials. A heavy emphasis on PvP may cause a player to spend more on obtaining characters in order to remain competitive.

Support and friends (if any)

Asynchronous cooperation between players through the use of "support" units (i.e., using another player's character in your party). Support units may be optional or mandatory, depending on the game. Support units owned by players on the character's friend list may be stronger.

Synchronous play (if any)

Some games may allow for players to play synchronously, either against or supporting each other depending on the game and gamemode.

3.1.6 Monetization (aside from gacha)

In-game purchases for items other than gacha pulls are possible in most gacha games. This can include personalization options such as character skins and profile banners, subscriptions/monthly passes, and bundles of items or materials.

Direct purchase

Some purchases can only be done with a direct purchase i.e., using real currency instead of virtual currency. While this displays the true cost to the consumer, it also prevents them from using leftover currency from other purchases towards these items.

Currencies

Some purchases can only be done with a virtual currency, requiring an extra layer of transaction if that currency can only be acquired through payment.

Paid currencies can be obtained using real currency, and most times are *only* obtained using real currency.

Additionally, some currencies can be earned for free, such as through progression or shop exchanges. Sometimes, free currency can be bought using paid currency, though may not be true for every currency within a single game.

3.1.7 Personalization

Visible to others

Personalization options that are public or semi-public (e.g., viewable by the player's friends). This usually includes profile information, but can include character skins if the character is one of the player's support characters.

Visible to self only

Personalization options that are only viewable by the player. This includes the character that is set on the player's home page, if any, voiceover language, or organizational information such as party names.

3.1.8 Narrative

Narrative delivery method

How the narrative is usually presented to the player, such as visual novel style dialogue sequences, animated and voiced dialogue sequences, battle dialogue, and/or pre-rendered cutscenes.

Point-of-view (POV) character

The POV character for the narrative. If a player character (i.e., a character using the name the player sets for the account) exists, the POV character is usually the player character. However, the POV may switch to focus on a playable character, non-playable character (NPC), or switch between multiple characters, during different parts of the narrative.

If a player character exists, they may be a pre-defined character with a set backstory and personality, or they may be a more generic blank slate character.

Archival of event content

How much time-limited content, if any, is available to players after its original runtime has ended. Depending on the narrative importance of events and the infrastructure of the game, they may be available to all players, available to players who played the event originally, or not available at all.

3.1.9 Server Desynchronization

Different servers of the same game may be at different points in time along the game's story and event schedule, depending on when the servers were released.

For example, the English server may be months or years behind due to both localization requirements and a late entry into the English market. More recent gacha games have released simultaneously across all servers, leading to no server desynchronization (except for time zones).

3.2 Game Comparison

This section describes 4 different gacha games to provide an overview of the variety between them. The author is familiar with and has played each game for multiple years.

3.2.1 Game Overviews

Fate/Grand Order (FGO) - An expanding roster turn-based strategy game/JRPG.

Each character has a Class, 3 Skills, and a Noble Phantasm (ultimate ability that can only be used when charged), as well as 5 Command Cards. Every turn, the player uses Skills, Noble Phantasms, and/or Command Cards to deal damage to enemies. The character's Class determines whether they do extra, lessened, or neutral damage to enemies, as classes are a complicated rock-paper-scissors counter system consisting of over 10 classes.

There are hundreds of characters with many different traits, damage types, strengths, and skills, yet only 6 characters in a party (3 on the field at one time, and 3 in reserve). Thus, party-building is a core of the game's strategy. Generalist characters that deal large amounts of damage or provide consistent damage buffs are most sought after, however characters with niche strengths can still find their time to shine in difficult late-game situations.

Arknights (AK) - An expanding roster real-time tower defense game.

Characters can be deployed on a 2D tile-based map by spending Deployment Points. Characters attack enemies in range, and will also block a number of enemies from walking towards the objective. Each character has a Class and up to 3 Skills (dependent on rarity and level, only 1 can be equipped at a time). Unlike *Fate/Grand Order* above, the class in Arknights determines where characters can be placed and their role on the team (e.g., Snipers deal ranged damage, Defenders block large numbers of units, Medics heal ally units).

Although the party can contain up to 12 characters (13 when using a support character), the limit on how many characters can be deployed on the field at once is lower, forcing players to retreat and deploy different characters as the situation demands. Furthermore, defeated characters have a cooldown before they can be placed again. Each map has a different layout, enemy distribution, and enemy mechanics; the player is expected to learn the fundamentals of the game (such as character positioning), and adapt to different situations.

Once again, strong generalist characters are usually the most sought after. However, Arknights also has a large challenge-run community, nicknamed "Nicheknights", where players are restricted to using a certain group of characters within one "niche", such as characters who are from the same race, have a low rarity, or are designed by the same artist. Nicheknights players value pushing the limits of underutilized characters, and of their own game knowledge.

Genshin Impact (GI) - An expanding roster real-time 3rd person open world action game.

The player controls 1 character at a time, in a total party of 4. The player can switch between these characters at will during combat and exploration. Each character has 1 of 7 different Elements, which cause Elemental Reactions upon making contact with a different Element. For example, combining Pyro (fire) and Cryo (ice) causes a Melt reaction, dealing extra damage. Elements can also be used to traverse the environment, such as using Anemo (wind) to trigger an upwards wind current that can help the player reach high areas. Elements can be applied using the character's Elemental Skill or Elemental Burst (ultimate ability that can only be used when charged).

Each character additionally uses 1 of 5 weapon types. However, their role on the team is independent of their weapon and/or element (e.g., a Pyro character who uses a Sword can be a healer or a damage dealer), leaving many possibilities for character and party combinations. *Genshin Impact* has a more complex equipment system, called Artifacts. Each character can equip up to 5 Artifacts, which provide both stats and set bonuses, therefore making up a large portion of the character's power. However, the stats on these Artifacts is randomized, thus requiring the player to farm large amounts of Artifacts for the *specific set bonus* that a character needs.

Project Sekai: Colorful Stage (localized as *Hatsune Miku: Colorful Stage! feat. Hatsune Miku*) (referred to as *Project Sekai* for the rest of the paper) - A limited roster rhythm game that features the popular vocal synth Hatsune Miku.

The player selects 5 cards, each with 1 Skill, to take effect during rhythm gameplay. The ability of the card (such as increasing Score or increasing Life Points) will trigger at certain places in the song, and the stats of the card determines the Score that the

player can reach. For certain songs with 3D (realtime) animated performances, the characters within the player's party additionally determines who is shown in the animation.

As a limited roster game, the gacha features many different cards for the same few characters. Each card has 2 sides with different character art, and many cards come in sets that share artstyle and thematics (for example: a neon and futuristic cyberpunk-themed set, or a stylistically illustrated Tarot card-themed set). In addition to Hatsune Miku and the other Crypton/Piapro characters, the story focuses on 20 new original characters, split into 5 groups based on musical genre. Miku has a different "version" in each of the 5 groups, each with their own visual design and personality.

Virtual concerts or "Live Shows" depict characters performing a song, usually before and/or after a brief conversation. The performance is a 3D-animated choreography combined with the song performance by the characters (i.e., sung by their voice actors), and can additionally feature the characters in different outfits. These outfits are also unlockable and equipable by the player, and will appear in the previously mentioned 3D performances during gameplay.

3.2.2 Abridged Comparison Table

Several key features of the 4 chosen gacha games are compared in the table below. This table has been shortened for readability, and the full table is in Appendix B.

Game	Fate: Grand/Order (FGO)	Arknights (AK)	Genshin Impact (GI)	Project Sekai (PJSK)
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Main Gameplay points	Turn-based strategy game, with rock-paper-scissors style counter interactions between 14 classes.	Real-time strategy, tile-based tower defense game.	Real-time 3rd person action game with open world exploration. The player controls 1 character on the battlefield at a time.	Rhythm game. The player taps, holds, or swipes the notes as they reach the bar at the bottom of the screen.
Roster type	Expanding	Expanding	Expanding	Limited (26)
Building	Servant Levels/Ascension Servant Skills & Append Skills Craft Essences (Equipment) Palingenesis (Level Cap Increase)	Operator Levels/Promotion Operator Skills Modules (Passive Ability Upgrades)	Character Levels/Ascension Character Talents (Skills) Weapons (Equipment) Artifacts (Semi-random Equipment Sets)	Character Levels/Training Character Skills Character Mastery (Additional Stats Increase)
Narrative delivery	Visual novel, occasional narrative battles	Visual novel, occasional narrative battles	Voiced and animated character interactions, in-game cutscenes, pre-rendered cutscenes, occasional narrative battles	Voiced and animated visual novel, intro/outro speech sections of Live Shows (animated concert)
POV character	Player character is named by the player, and is generically amiable. Story occasionally shifts POV to other	Player character is pre-defined, named by the player, but has their own morally grey	Player character is pre-defined, named by the player, but has their own goals and backstory.	No player character, each story section focuses on the POV of a different playable

	characters.	goals and backstory. Story occasionally shifts POV to other characters.		character.
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Table 1. A heavily abridged comparison table showing key features of the 4 chosen gacha games. The full table is in Appendix B.

3.2.3 Additional Considerations

Types of PvP

The games selected do not have a wide variety of forms of ranked competitive PvP modes, however, there are several forms of PvP where meta and strength is more important.

In Attack/Defend style modes, such as in *Fire Emblem Heroes*, each player can set a Defend team that moves automatically when another player chooses to battle them. When Attacking, a player selects an opponent from a semi-randomized list, and fights against their Defending team, and the winner gains ranking points. The player gains additional points for winning battles against higher ranked players.

In Score Attack style modes, players are ranked on a points ladder based on their score. The score is based on how quickly the player can defeat an enemy or how much damage they can do in a specific timeframe, making it vital to have the strongest units at all times in the highest ranks. *Project Sekai* uses a variant of this mode, instead ranking players based on how many Event Points they have scored by playing songs during the event period.

Art Style & Consistency

Although not an explicit and comparable game mechanic, another aspect of the game that players heavily consider is the art style, and the consistency of the art style. Some games, such as *Genshin Impact*, have a cohesive artstyle with all game art done by in-house artists. However, other games such as *Arknights* and *Fate/Grand Order* employ external freelancer artists to both design and illustrate characters. While the combat sprites are made to the same style as the rest of the game, the character illustrations have a wider variation in style. Both methods have their positives and negatives, as players may pull a character because of the artist that drew them, or they might leave a game due to frustration with the inconsistency in art.

Fandom

The fandoms of these games are also different communities, although there is of course overlap and migration. These communities will have different norms, priorities, and in-jokes. A player who is part of multiple fandoms will bring the norms and perspectives of their previous or other communities (see Section 2.3.5). Thus, there may be a difference in perspective between, for example, a fan who *only* plays *Genshin Impact* and a fan who plays *both Arknights* and *Genshin Impact*, not only in their personal opinions about the game itself, but their interactions with and attitudes towards other players and their community in general.

Country of Origin

The games selected come from developers primarily based in Japan or China, but similarly to most large companies, these studios may have international offices.

Other popular gacha games, such as *Goddess of Victory: NIKKE*, *Cookie Run Kingdom*, or *Blue Archive* are developed by Korean companies, though they are not covered in more detail due to the scope of the paper and the author's relative lack of personal experience with these specific games. Additionally, although they may not be considered "gacha games" in common parlance due to their lack of connection to Japanese culture (see Section 2.1.1), Western games such as *Marvel: Contest of Champions* or game modes such as *FIFA Ultimate Team* can also be analyzed in a similar fashion.

Importance of Events

Limited-time events are prevalent in most gacha games, both to sustain regular engagement and to promote new characters as a live-service game. However, the prevalence, frequency, and importance of events can also vary between games, both in terms of gameplay and narrative. For example, *Project Sekai* runs events approximately weekly, and each event features new characters, a new story, and various rewards. In contrast, *Genshin Impact* has an average of 1 large event lasting for around 3 weeks, or a new main story release, as well as 3-4 smaller events per patch. While the larger event may include a longer, voice-acted narrative and different game modes, as well as more rewards, the smaller events may only include a variation on gameplay and a smaller quantity of rewards. Furthermore, due to the open-world map, *Genshin Impact* has more opportunities for players to gain rewards

outside of events through exploration, compared to *Project Sekai*. Therefore, a *Project Sekai* player may feel more pressure to complete each week's event for gacha currency and to remain narratively up-to-date.

Transmedia Stories

Many of these games and franchises incorporate transmedial characters and/or character adaptations in their stories/universes:

- Some characters featured in *Fate/Grand Order*, such as Altria Pendragon (aka Saber) and Gilgamesh are characters that appear in earlier entries in the *Fate* series, including visual novels, animation, and movies. Additionally, characters such as Gilgamesh are references to history, mythology (e.g., Medusa, Chiron, Heracles), or other fictional characters (e.g., Oberon, specifically referencing the version depicted in Shakespeare's *A Midsummer Night's Dream*).
- *Arknights* features original characters. A comic anthology of short stories adapting the world of *Arknights* into graphic novel form (though not adapting specific storylines from the game, instead showing different short stories). The game's main storyline has also been adapted into an animated series. *Arknights* has had several collaborations with other IPs, such as *Rainbow Six Siege*, *Monster Hunter*, and *Delicious in Dungeon (Dungeon Meshi)*, and implemented these collaborations as fully-playable characters.
- *Genshin Impact* features original characters who are showcased through character trailer videos uploaded to social media. The content of these

trailers can include character backstory or a scenario displaying their personality, in addition to gameplay footage. However, these videos are not accessible through the game and contain events not part of the game's playable story. *Genshin Impact* is also, similarly to *Fate/Grand Order*, connected to a larger series/universe created by the developer. In addition to a collaboration with *Horizon Zero Dawn* turning Aloy into a playable character, *Genshin Impact* frequently collaborates with real world brands, outfitting their characters into fast-food or bubble-tea-serving outfits and distributing those designs on merchandise. An anime adaptation of *Genshin Impact* is also in production as of the time of writing.

- *Project Sekai* has a transmedia character mascot in the form of Hatsune Miku, as well as the other Crypton/Piapro characters. The other (non-vocal synth) characters are similar to multimedia idol projects (that also have or had gacha games) such as *Love Live!* and *Ensemble Stars*. These characters additionally appear in external media such as comics, music videos, animated shorts and movies, and live stage performances, in addition to their game appearances. The movie, *Project SEKAI the Movie: The Broken SEKAI and the Miku Who Can't Sing*, depicts a series of events not present in the game story; the movie's collaboration event within the game features a set of limited-time voice lines that requires the player having purchased a movie ticket to access. *Project Sekai* has had collaborations with other IPs, such as Puyo Puyo and Sanrio, implemented through event-limited cards, voice-lines, and/or character skins.

Probabilistic Rates

Due to various regulations (see Koeder et al., 2018; Nielsen & Grabarczyk, 2019; Sato et al., 2020), gacha games must disclose the probability rates of each category of and/or individual item. (The rates of the analyzed games are in the expanded table, Table B-2 in Appendix B.) While players may not be able to truly understand what probabilities "mean" in the sense of their actual chances of winning (Koeder et al., 2018), players can easily compare and comprehend that 3% is higher than 0.5%. Thus, even if they have not done a full mathematical analysis, a player can compare the rate tables of 2 gacha games and instinctively understand that it may be "easier" or "harder" to get rare characters in one game or another, or that the pool of rare items is larger in one game compared to another.

With all of these factors to consider, different players, each with their own priorities and opinions, will engage with different gacha games, and each for different reasons. Hence, the remainder of the paper focuses on the user study detailed below.

4 Methodology

4.1 Data Collection

4.1.1 Recruitment

The study focused on English-speaking gacha game players. Participants were required to be 18 years or older to participate. All participants were anonymous. Any personal identifying pieces of information (such as account names and email addresses) were cleaned from the dataset before analysis.

Participants were recruited through snowball sampling via social media (e.g., Twitter and Discord servers) and gacha game subreddit communities on Reddit. Participants were encouraged to share the survey link with other players.

The survey received 1826 total responses, of which 563 remained after applying exclusion criteria and cleaning the data (see Section 4.1.3).

4.1.2 Survey

The survey was distributed through the Qualtrics survey platform. The survey consisted of primarily free-response questions focused around collecting participant's thoughts on gacha games and gacha game characters. Some examples of questions were:

- Have you had a special relationship (positive or negative) to a character specifically because of your experience with them relating to gacha, and not because of narrative, aesthetic, or gameplay? [If so, explain.]
- How do you think the medium (gacha game or not) affects how you feel about these characters [you like], if at all?
- How do you relate your identity to a specific gacha character? State which character and describe why you feel this way, and in what contexts (e.g., social media, friend groups, in-game groups, etc.) you connect this character to your own identity.

- How do you feel when you get a rare character from the gacha when you don't expect it? How does this feeling change depending on circumstance (e.g., how much you like the character you got)?
- Have you ever found yourself liking a character specifically because of their gameplay relation with a different character you do like? [If so, explain.]

Additional questions related to point-of-view (POV) characters were adapted from an ongoing work on other narrative character-driven games, from within the Interaction Dynamics lab.

4.1.3 Data Formatting and Exclusion Criteria

The survey received 1826 total responses. After applying the exclusion criteria, 1263 responses were removed. The criteria was as follows:

- Participants had to consent to participating, certify that they were 18 years or older, that they self-identified as gacha game players, and that they were able to provide answers in English.
 - 35 respondents declined to consent, and despite multiple statements requiring they be 18 years or older, 13 responses stated an age lower than 18 and were removed from the dataset before analysis.
- Responses that are incomplete i.e., submitted before completion of the survey.

- 1210 were considered incomplete if they were submitted before completion as defined by Qualtrics, or if they left 10 or more free-response questions blank (excluding demographic questions).
- Responses that were deemed to be submitted in bad faith and/or left aggressive or inflammatory comments
 - 5 responses were excluded for not engaging in the survey in good faith and leaving inflammatory comments in response boxes.

This resulted in a data set consisting of responses from 563 participants.

4.2 Data Analysis

The responses were analyzed through grounded theory (Charmaz, 2014) and iterative thematic analysis (Terry et al., 2017). The data was analyzed by a single researcher. For each survey question, a sample of 250 responses were selected, with additional answers included in additional analysis if saturation was not reached.

First, the researcher familiarized themselves with the data, followed by coding the data with preliminary codes using Taguette (Rampin & Rampin, 2021). The codes were then used for an iterative analysis process where they were grouped into larger themes. Each iteration involved generation of new themes and discussion with other researchers, until the themes were stable. The themes are discussed in detail in the Results section.

4.2.1 Positionality

The author identifies as a lifelong gamer, and has specifically played gacha games for over 10 years. They are a participant in English-speaking fandom of several games and a fanwork creator. The author is additionally fluent in Mandarin Chinese and proficient in Japanese, and observes but not does not participate in Chinese and Japanese fandoms.

5 Demographics

The age of survey respondents ranged from 18 to 53, with a median age of 25 and a mean age of 25.96 (sd = 5.61), and 60 respondents chose not to respond with their age. Most participants, 61.28% (n = 345), reported an age between 20 and 29. A majority, 68.21%, of respondents identified as male (n = 384), followed by 19.36% identifying as female (n = 109), 5.51% identifying as non-binary (n = 31), 1.95% providing their own identification (n = 11), and the remaining 4.97% choosing not to respond (n = 28).

Among survey respondents, 27.7% (n = 156) currently play a single gacha game at the time of response. 1 respondent responded 0 games, having just quit their most recent gacha game at the time of taking the survey. The remaining 72.1% of respondents (n = 406) reported playing at least 2 gacha games simultaneously, with an outlier maximum of 20. The median number of gacha games played was 2, and the mean was 2.67.

Although difficult to get an accurate count due to games having multiple acronyms, nicknames, and misspellings, the author has counted at least 70 total unique gacha

games among respondents. Some of the most popular games among respondents were *Genshin Impact*, *Honkai: Star Rail*, *Arknights*, *Azur Lane*, *Zenless Zone Zero*, *Fate Grand Order*, *Wuthering Waves*, *Blue Archive*, *Honkai Impact: 3rd*, *Fire Emblem Heroes*, *Reverse: 1999*, *Epic Seven*, *Limbus Company*, and *Goddess of Victory: NIKKE*. Other mentioned games of note include: *Twisted Wonderland*, the licensed game featuring a variety of male characters based off classic Disney villains; *Onmyoji*, a game whose players were previously studied in several related works; *Rage of Bahamut*, an early gacha game that dates back to the early 2010s; *Marvel: Contest of Champions* and *Star Wars: Galaxy of Heroes*, two Western games that feature Western IPs; *Nu: Carnival*, an R-18 gacha game focusing on Boys' Love (BL) relationships between the protagonist and NPCs, depicting fully voiced and animated explicit scenes available through pulling SSR cards; *Love and Deepspace*, an otome game featuring detailed 3D models of the love interest characters, that has significantly increased in popularity since the time of the survey's release.

6 Results

6.1 Overview

In general, a player can have a myriad of gameplay, design, and narrative reasons to pull for a character. As more characters come out, each with their own gameplay, design, and connections to other characters, the player is given reasons to pull new characters, thus repeating the cycle of desire and acquisition.

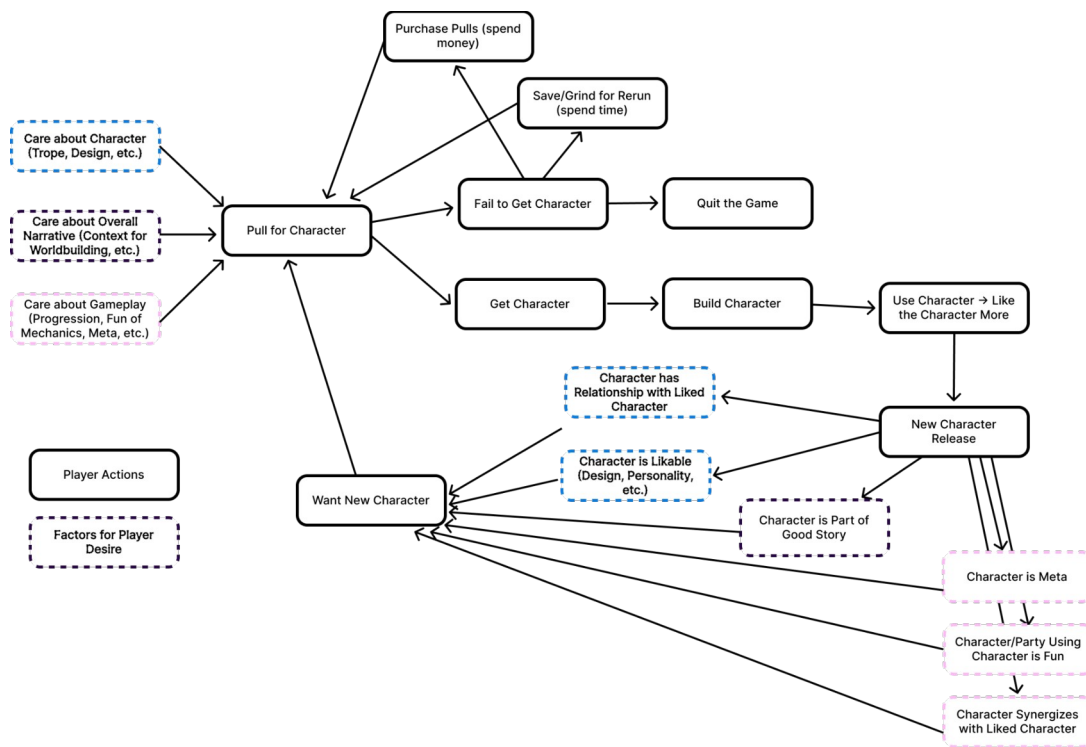


Figure 5. The gacha cycle, depicting the experience of the gacha system, and how different factors cause new characters to become desirable.

The majority of the results describe why players like characters, and how this affects their behavior and experience. Players liked characters in different "layers", with each layer consisting of different aspects of the character. These aspects include: character trope, character narrative, the character in the overall narrative, character relationships, fandom presence, gameplay, ownership & personalization, and gacha experience. These will each be explored in depth in the following results, throughout Section 6.3. Sections 6.4 and 6.5 explores the player's actions regarding and treatment towards characters. Lastly, Sections 6.6 and 6.7 describe the context of the player's experience of the game as a whole, and how it affects their relationship with characters.

However, this cycle can only continue if the player continues to play the game. As a live service genre, gacha games must balance monetization and engagement with quality. The player may stop playing the game for a large variety of reasons, detailed in Sections 6.6 and 6.7.3.

There are several different ways that a player can take between a liking to a character and acquiring them. The data showed 4 main pathways, each comprising of the same 4 steps. These pathways, and their internal variations, showcase the wide variety of experiences that a player can have with different characters, or multiple players with the same character. The specifics of each step and the time between them can differ, and the player can metaphorically step off the pathway at any time if they dislike the character or quit the game. These 4 pathways are:

Pathway 1: After starting the game, the player finds a character that they like, such as encountering them in-game in the story, or out-of-game through seeking fan art, then saves up to pull that character.

Pathway 2: After starting the game, the player randomly pulls a character. Upon pulling them, the player reads the character's information, then starts to like them.

Pathway 3: After starting the game, the player pulls a character to use them for gameplay purposes. They begin to appreciate the character after using them for a while, and then look further into the character's information.

Pathway 4: The player knows or finds out about a character and likes them before starting the game, then plays the game with the intention of pulling the character.

The 4 steps comprising these pathways, as well as their variations, include:

Start the game - Begin the game as a new player; return to the game from an extended break

Find out about the character - Out of game (marketing material, fandom); in game (story, character profile)

Pull for the character - Intended to get this character; did not intend to get this character

Like the character - Like the character's design elements; gameplay; story; relations with another character

These steps occur with each character, and the time between steps can be varied. For example, a player may start a game for a specific character (Pathway 4), then randomly get another character they end up liking (Pathway 2), while still farming for their original desired character.

More information on how players find out about characters is explained in Section 6.2. The player's gacha experience, and how that may affect their relationship with a character, is in Section 6.3.8. The different layers of reasons that players may like characters is detailed throughout Section 6.3.

All quotes are copied verbatim from the original responses, including errors, though sections may be shortened for brevity.

6.2 Player finds out about the character

Gacha game players find out about characters in a multitude of ways both outside and inside the game; knowing about a character is the first step to forming an opinion on, and therefore potentially liking or desiring them. While gacha games most prominently feature their current limited-time rate-up banners, which usually showcase the newest character, that is generally not the only way that the player finds out about the characters that they can get.

Each of these methods exposes the player to different pieces of knowledge about the character, and in different spheres of the player's life. As one participant puts it:

Gacha games, if nothing else, have a way of characters existing in your general sphere of knowledge, so it's easier to at least be aware of what characters you mesh with better before seeing them in context of the stories they're involved in. [P. 37]

6.2.1 Outside the game

In many cases, the player does not even have to open the game to learn about upcoming playable characters, such as through social media.

Game companies invest monetary and labor resources to produce marketing material for new upcoming characters (or character cards/variants for limited roster games). This includes, but is not limited to, social media advertisements, trailer

videos, livestream previews, in person events, etc. These are intended to build hype for a new release, inspiring old players to return and new players to start the game to acquire the character.

I have tried playing genshin a handful of times since it's release but not gotten very far. Most recently when they first teased arlecchino's release on social media I got the urge to play the game to try and get her, since I remember liking her first appearance³ a lot. [P. 141]

While not explicitly marketing material, other officially produced side content such as comics, animated shorts, and full animated series can serve a similar purpose. These productions similarly expose the audience to the game and various characters. Alternatively, the game in its entirety may be based off of characters from an existing property, such as *Pokemon Masters EX* or *Marvel: Contest of Champions*, turning these characters transmedia through their appearance in a spin-off title. For example, the following answer was for the question asking about the respondent's favorite gacha game character, and references *Star Trek: Fleet Command*, a gacha game based off the *Star Trek* IP:

Captain Christopher Pike. Star Trek universe. [P. 262]

Players may also know about a character because that character is from another IP entirely. Gacha games frequently collaborate with other properties, such as anime,

³ Though unspecified by the respondent, this likely refers to an animated narrative teaser released 2 years prior, that briefly features Arlecchino among the group she works with, the Fatui. <https://www.youtube.com/watch?v=TmaAOV4SJNQ>

games, and VTubers⁴, and add the character into the roster as a new member, or create a skin for an existing character.

I went back to Lord of Heroes for the Code Geass collaboration, and successfully pulled Lelouch, Suzaku, and C.C. Code Geass is my favorite anime. [P. 321]

An important note with many gacha games, especially of East Asian origin, is the time required for distribution and localization. This causes a delay between the main server (e.g., Japan) and the English or other later servers, and this delay usually remains for the entirety of the game's lifespan. When a new character is marketed and released in the main server, players of the English server who follow the updates closely will immediately know what will be available to them in several months or years.

Most of the games I play have a delay from their main server due to localization (ex. 6 months in Arknights, 2 years in FGO). I would have known about the characters prior to their English/Global release and it does not affect my enjoyment/interpretation otherwise. [P. 16]

Even if the player does not personally follow the official accounts for their or other servers, the news of new characters is quick to travel through the community.

The fandom and community is an important channel through which players learn about various characters in the game, whether through word of mouth between friends or dedicated social media groups. In addition to circulating official marketing,

⁴ VTuber, short for "virtual Youtuber", a digital entertainer that uses an animated character as an avatar, rather than showing their real face, (see generally Adams, 2022, Section 4). Some become popular enough to have live converts, collaborations with brands, appearances in games, etc.

fans also create their own derivative works and participate in discussions relating to the game.

Fan works such as fan art, fanfiction, video edits, cosplay, etc. can circulate through social media and draw someone's attention. Even if someone does not play the game or recognize the character, an attractive piece of fan art can inspire them to learn more about the character and game.

I started play Honkai: Star Rail because I saw this stupid edit of Acheron's character trailer with the song "Bury the Light". That piqued my interest just barely enough, and it bubbled up boiled over to where I caved in and downloaded the game specifically to grind out Stellar Jades and roll for Acheron. [P. 19]

Players and content creators with more expertise may also make gameplay guides and lore explainers for beginner or casual players. These guides, such as tier lists, usually recommend strong characters and optimal/meta ways to play. When in combination with server desynchronization, even beginner players will be generally aware of the strongest upcoming characters.

I play Fate Grand Order in the NA server. When Castoria (Artoria in Caster class) dropped in JP server, everyone and their mother said that she was the best unit ever, that she was an absolute must, that she redefines meta. And so when her banner comes in NA, every guide was urging for everyone to roll for her. [P. 406]

In addition to discussing content from other servers, leaks of characters who have not even been released yet may also be discussed by the community.

I'm active in the social media platforms discussing upcoming characters (in arknights, the Chinese server is 6 months ahead of the global one), including information from data mining and leaks. Therefore, I'm rarely surprised by a character and generally have information about them, including their story, before they release. [P. 64]

Further discussion of leaks continues in Section 8.5.2.

6.2.1 Within the game

Within the game, the player is most likely to learn about a character through their appearances in the story, and through character-focused events such as banners or holidays.

There are many different ways the player can be exposed to and find out about a character from the narrative. Most simply, the character might play a major or minor role in the main story.

The character may also have started as an NPC, before becoming playable some time later. This is slightly different from a playable character appearing in the story shortly before their release, as players are uncertain if the character will become playable at all, creating more anticipation and excitement when the character's release finally arrives.

The character is White Lily Cookie from Cookie Run: Kingdom. She was my first favorite character in the game when I first played, but she was an NPC and not attainable. I played actively for about a year and stopped for various reasons, but returned after another year and a half when her banner was announced. I caught up on various parts of the game I was behind on just to earn currency so I could get her. [P. 9]

In cases where the character does not directly appear in the story (or before their debut appearance), they may be mentioned by another character during a story section, or within another character's profile and voice lines.

The character may also be recognizable as an alternate form of a character: the player may have encountered the original form but not the alter, or vice versa, but is immediately aware that the alternate form must be related to the original somehow. Alternate forms tend to release with an event that highlights the new character form, whether a serious storyline or a summer swimsuit.

Texas the Omertosa from Arknights (aka Texas Alter). Texas was already a unit in the game (who I also had and loved since the start) at launch but she got an alt. unit 3-ish years down the line. Texas was a pretty mysterious character to begin with and with her alt. releasing, it would also answer lore about her character in an event. [P. 210]

Some games also feature specific characters on special days, most prominently character birthdays. These small character-focused events can come with a special gift, character-focused gacha banner, and/or short story.

I've been playing i7 for almost 9 years, so I've gone on breaks but every May I come back for Sougo's day card. [P. 10]

Lastly, the player may find out about the character when the character enters their account roster, whether by chance through the gacha or earned as a free reward. At the time of acquiring the character on the reward screen, the player might only know the character's visual design, or not even know of the character's existence beforehand. This is likely to happen with characters who do not appear in the story, or when a player pulls on the newest character banner before catching up in the story.

I acquired Hu Tao when I first started Genshin, had no idea who she was. As I leveled her up and unlocked her character story and voice lines from friendship, I liked her more. [P. 39]

Respondents reported that if they did not know the character, they were excited to meet them in the story, and they enjoyed the story more after having the character. One response explains their reason the story became more enjoyable after having the character:

Yes, and I thought it was really fun to incorporate them on my team while completing their section of the story! It made it feel more 'canon' if that makes sense [P. 68]

Additional effects of pulling a character before reading their story are described in Section 6.3.9.2.

At the same time, some people choose specifically to avoid pulling for a character until they know enough about the character in order to form an opinion on them. The player may first play the story to meet the character in order to avoid spending resources on someone they then come to dislike.

While there might not have been interactions with the character before I have pulled, usually there is in game lore about the character that gives me some idea of who they are as a character. If I pull for such a character, I will tend to really pay attention to their portion in story and read it in more than I would normally give a gacha story just because the story portion includes a character I like. I think there was only one time I pulled for a character and learned something after the fact that negatively affected my enjoyment. I previously stated that I play FGO JP, at the start I would read translations of the story but overtime gave up on that, so all I had to go off of for characters was pure visual design and gameplay value. I pulled for a character that I thought was cute/pretty only to learn it was an alt of a character I dislike and that did make me regret my pulls. [P. 58]

Once a player has learned about a character, they can begin to form an opinion and decide if they desire the character or not.

6.3 Player has an opinion of the character

Players have different layers upon which they judge gacha characters, as briefly described in Section 6.1. Individual players place different levels of importance on each layer: different players may like the same character for different reasons, or the same individual may prioritize different aspects of characters between different

games, etc.; players also have differing levels of expectations that would have to be fulfilled for them to like the character.

Below is a list of the 8 different layers found in the data, which are each elaborated in the following sections:

Trope, design & personality - the appearance and basic personality of the character.

Character narrative - how the character is portrayed and their growth, if any.

Overall narrative - whether or not, and how well, the character is integrated into the wider narrative of the game.

Character relations - the character's narrative and gameplay connections to other characters.

Fandom presence - how the character is seen by the community.

Gameplay - how the character is used in the core gameplay loop.

Ownership & personalization - how the player interacts with the character once they own a copy of them.

Gacha experience - the positive or negative experience the player had trying to acquire the character.

The section concludes with subsection 6.3.9, which describes how the gacha mechanic and related systems directly affect player's experiences and expectations of gacha game characters.

6.3.1 Trope, design & personality

The character's design consists of the character's visuals and audio (voice performance and SFX). In combination with other parts of the character, such as their personality, the character can become part of a trope or archetype.

Usually, the first impression that the player will have of the character is their appearance. Thus, a player enjoys a character more if the art style of the game and the design of the character appeal to them.

It usually starts with their design and then I learn more about their character and I start to like them and then I level them. [P. 8]

Similarly, if the character is voiced, then players also enjoy when the voice actor's performance fits their taste. The player might also be a pre-existing fan of the voice actor, and if the voice actor tends to be typecast, assume that the character is similar to another character they like due to the casting choice.

Siege in Arknights (when I first started playing), primarily because of her connection to Saber as I explained earlier. Saber was a character I enjoyed greatly when I played Fate Grand Order (FGO), so it felt natural to me to like Siege (motif similarities, same voice actor) when I moved on to Arknights after dropping FGO. [P. 197]

Characters may be designed with a specific trope or archetype in mind that encompasses both of the above aspects, as well as the character's personality. Players can have "types", and preferences towards specific tropes.

I'm the kind of person that likes "Mommies" and "Milfs" or strong woman in general, I'd say my favorite to this manner is Kafka from Honkai Star Rail [P. 76]

The character may also be heavily sexualized, such as having unrealistic proportions or revealing clothing, commonly referred to as "fanservice".

Fan service characters. The only reason I sometimes play gacha games. [P. 298]

This is dependent on player preference and perspective; most responses praising sexualized characters came from male respondents, and most responses criticizing them were from female respondents, however this may not be generalizable. Furthermore, it is also possible that some respondents were hesitant to comment on sexualized characters in a research setting.

6.3.2 Character narrative

Similar to characters in any other form of media, the player will like or dislike various characters based on both the execution of character writing, and the player's personal preferences or history. Although their expectations may be affected by the medium (see Section 6.3.9), players nevertheless expect gacha game writers to treat their characters with respect by writing them well.

The character's personality and backstory must be interesting or relatable for the player to be invested in them as a character, rather than see them as a loose set of tropes or hollow shell.

Any medium must treat characters with respect. Without having a proper background, perks, or interaction unique to the IP, they (the characters) might as well be faceless placeholders. Especially in gacha where characters are often "featured", I personally need a reason to care beyond gameplay and art. [P. 16]

Players also tend to like characters whose story arcs and personalities are relatable to their personal experiences.

When connecting with characters in this way, it is often sourced in a reflection of the self, feeling deep pangs of empathy as they experience struggles I am no stranger to. One example is Arturia from Arknights. [P. 149]

Some aspect of the character may also be representation for the marginalized player, such as ethnicity, sexuality, or gender, and this relatability may be rare for the player to find in a fictional character.

Lyney from Genshin Impact. I love some others, but he's my favorite. His aesthetic is very much my preference, and he's extremely gay, which I gravitate towards as a gay man. I will always prefer queer male characters because I relate to them. [P. 70]

Respondents positively described characters who had moments of depth and growth. As gacha games are live service narratives that take place over the course of years, characters have the chance to develop over multiple years. This is notably different from a character being inconsistent, as it is experienced as an intentional decision to develop more sides of a character, rather than a set of mistakes.

When done intentionally it typically shows a different side/perspective to a character than what we originally knew. Like if a typically serious or evil character is shown being kind to those close to them or strangers during a cutscene or story. [P. 23]

When the character is written inconsistently, it can cause a player to become disinterested and frustrated with both the character and the game as a whole.

One of my biggest complaints with Eula in Genshin Impact was that her writing was spotty and inconsistent, which I found irritating in a game that usually holds fairly high standards for its character writing. It made me feel like I struggled to get a grasp of what her character was actually supposed to be like, and while it didn't make me dislike her, she just felt distant and unknowable to me. Fake, rather than a believable character that I could grow attached to. [P. 6]

A notable case of a character suddenly changing personality appears to appeal towards a romantic self insert. This is usually described as "pandering", and if the player is not the target for this new personality, they may find it irritating especially if repeated with multiple characters.

Often times in FGO the character you initially meet in a series is literally a different person/version of them than the one you meet later, so because of the change in context their behavior and personality can differ vastly. And sometimes that "gap" can be charming, but sometimes I find it a bit too jarring. An example would be Melusine / Tam Lin Lancelot. When she was initially introduced in Lostbelt 6 she was a cool and fairly reserved character,

but when she eventually becomes summonable her personality becomes quite obsessive and "in-love" with the main character. At first I thought it was fine because this can be common, but eventually it felt like she lost all of her refined qualities which I enjoyed and became frankly a bit stupid and too obsessive for my taste. I still like her design and enjoy her in some contexts, but it was a bit disappointing to see a character change so much. Especially because characters who are obsessed with the main character in FGO are frankly a dime a dozen. [P. 270]

One way a character can receive more narrative is through the release of an alter, or alternate version of the character. This term is usually used in expanding roster games, as every character has many alternate cards in a limited roster game. Depending on the situation, the alter can be the same character in a swimsuit, an evil or alternate history version of the character, or the character after a significant narrative moment.

A player may like alters for giving the character more content, screentime, and characterization, especially if it brings an older character into the spotlight.

I like the idea of having altered versions of older characters because it'll potentially give me more content of a character that I love in a different way/version. I say that because in FGO, there's always a limited time event that is tied to the altered versions of older characters and usually I am one to participate in the event if there are characters that I want to read more about. [P. 19]

In addition the player's predisposition towards liking or disliking alters in general, and the type of alter may further affect their opinion. Alters that have more narrative weight or unique designs may be more interesting and thus more valuable to players.

I do like the "alter" characters in Arknights, which are depictions of old characters after making new experiences and important life choices.

However, I do not like "new" character releases that only depict the character in a different outfit, without any relevant story behind it (and "its easter so this character now wears a bunny costume" does not count...) [P. 64]

However, the player may also view alters as cash grabs, furthering powercreep and character obsolescence at the cost of the player experience.

I absolutely despise rereleasing old characters as new units. It means the older version is obsolete and so is all the resources you put into leveling them just to be told to pull them again with your limited gacha resources and character leveling resources. It's like rolling a boulder up a mountain and before you really get to sit down and relax someone pushes it so it rolls back down and tells you to go do it again. My name isn't Sisyphus. You can roll that boulder back up yourself, Olympus. [P. 177]

The character may sometimes represent a form of wish fulfillment or fantasy for the character, romantic or otherwise. Though this may overlap with writing described as pandering, enjoying interactions with a character does not require the existence of a self-insert.

I guess its a waifu thing? Its more that my goal is to find and fall in love with someone like Bismarck, so I guess I do truly love her. [P. 297]

As previously mentioned, characters from other IPs can be licensed into the game. This may draw fans of the IP into the game as new players, or be prioritized by existing players who recognize the character.

I recently started a new account on ProSekai EN for preparing to pull the Sanrio Collab Ena, because I missed it in JP. I also came back to play on the JP account regularly as they might have the gacha again (hopefully?). [P. 1]

But if I already recognize a character that has a crossover with a gacha game it usually makes me want to pull for them more. [P. 34]

Of course, not every fan will pick up a new game just for a collaboration character, especially if the character makes frequent collaboration appearances.

Re:Zero constantly collabs with different gacha games and that has not motivated me at all to play other gachas. [P. 155]

6.3.3 Overall narrative

In order for the character to feel connected to the narrative rather than an abstract character, they must interact with other characters and the world around them. They may reveal something about the world, or be affected by other characters' actions and other circumstances.

gacha game or not, I enjoy seeing them interact with their world and being more than just a character in a game/series. A character design only goes so far for me. I need it to be more than surface level visuals. [P. 14]

This may also affect how some players feel about the inclusion of collab characters, as they are from a different universe entirely.

The player will primarily experience these connections through the character's appearances during story quests. While the amount of screen time that the character has may not always correlate with how well they are fleshed out, a higher frequency of importance appearances gives more chances for these aspects to be explored.

I think that one being an immersive experience certainly helps in getting attached to the character, especially since Cyno is a major player in the Sumeru-arc of Genshin Impact's story and therefore had a lot of time devoted to fleshing him out in both the regular quests and in certain events. You are given plenty of time to get to know him and his relationships with the people around him, especially in his second story quest. He even appears in quests related to other characters he has connections to, which makes these relationships feel even more real. [P. 248]

However, the story that the character takes part in must also be cohesive and well-written. If the player feels that the character is forced into a story that they seem irrelevant in, or if their inclusion in the story seems to contradict the character's previous appearances, it instead has a negative effect.

Kazuha is my other main, and I feel like much of his backstory was retconned in late Inazuma/Sumeru to connect it with Wanderer's backstory and give his family more connections with the rest of the cast than initially existed- the sword arts weren't mentioned at all in his unlockable backstories, and even his characterization changed between the Inazuma prelude, which had him suggested beating a treasure hoarder to see if their desire to escape it would cause his friend's vision to awaken, and his post archon-quest depictions which made him a lot more concerned with his own family heritage than was ever discussed in his lines and archon quest and much calmer than that initial introduction. At least for me, the changes served the opposite effect they intended and made him feel like a bland and unexpressive attempt to make him more relevant to the main story's lore. [P. 68]

Even if a character is handled well in the main story, their appearances in side stories must maintain the same standard of writing. This is mostly relevant to expanding roster games, as the more characters are released, the less each character has a chance to appear, and the more likely the character's appearance will be lower in significance. This can result in character appearances in events and side stories that are jarring, short, or flat, and the impression that they are only featured in the story as a product advertisement.

I find that gacha characters are often characters during the main story, and products in subsequent side stories. Depending on the handling, it can make a character more likeable or less respectable. A jarring example was Raiden Shogun, who feared change and hid from public affairs, causing war,

persecution, and foreign intervention to test the nation apart, personally siccing her divine powers on those working in the nation's interest. After her intense main appearance, the next side story had you take her on a date. It was frustrating and awkward to read, and solidified my general dislike for her character. [P. 102]

I think in events the characters often end up falling back onto their more iconic personality trait, making them feel more cartoonish. This also could be a result of events having to feature more characters compared to say a character quest where that one particular character is the natural focus even if others are present. [P. 58]

As mentioned previously, an NPC may occasionally be released as a playable character further into the game's lifespan. The NPC has already had sufficient screen time with a relevant role in the story, the inverse of shoving a playable character haphazardly into the main story to ensure their relevance, and thus their release as playable feels like a promotion.

Love seeing new characters get added, but I'm a big fan of characters being promoted from NPC to playable! It's what happened with Degenbrecher, and I adore her. [P. 140]

6.3.4 Character relations

The relationships between characters is just as, if not more important, than the characters themselves. These relationships can refer to both narrative connections and gameplay synergies.

6.3.4.1 Narrative Connections

If a player's liked character is close to other characters, the player tends to naturally warm up to those other characters as well. The interactions between the characters in the story help raise the reputation of the other character, allowing the player to see them in a more positive light than they would have otherwise.

Happens a lot, but it's hard to explain. For the most part, if a character is connected to a character I like I'm interested in their content at the very least, so I get to think about it. There are also times where I'd be fully neutral or even slightly negative about a character but they're friends with X character I really appreciate so even if there isn't much content of that I can't dislike them because "they're a good presence for X". [P. 36]

The characters can be friends, siblings, parent-child, etc. One of the characters may also be the player stand-in character, or an NPC. Each character is usually connected to several other characters through different relationship types.

There are A LOT of examples, but to pick a very strong example Orologia from granblue fantasy was introduced in an anniversary event that focused a lot on the main characters youth. In the event Orologia had a strong "surrogate parent" relationship to the main character and also Six, another fan favorite character. When Orologia became finally playable last month pretty much the entire GBF community rolled for him/her. Orologia is just THAT liked because of the relationship with the main character. [P. 162]

One of the more common relationship types is romantic, whether confirmed in canon or proliferated by the fandom. If two or more characters share a lot of screentime and compelling moments together, they are likely to be paired by the fandom.

I'm a fujoshi (invested in male x male romantic shipping). So when someone is emotionally attached to another, I respect that even though I may not like the other character that much. It's like when you have a friend and their boring boyfriend. You only bother to care about the boyfriend because they're important to someone important in your life. Sometimes I get brainwashed into liking that guy. [P. 30]

Whether the pairing is intended by the developer or not, the fandom that ships this pairing will additionally create fan works depicting the characters together, further developing the positive bond between them.

Du Ruo from Path to Nowhere is a very interesting character by herself, but I would lie if I said that I didn't become heavily invested in her because of her heavy romantic undertones when interacting with Chief in her event and interrogation. Being a queer woman myself and reading lots of queer stories, their relationship was so full of a particular queer romantic tension that I simply could not help but be interested in Du Ruo. Similarly I suppose Rahu and Shalom pretty much always appear alongside each other (they also appear in a lot of fan art together), so I naturally became interested in Shalom after already being interested in Rahu. I'd generally consider these three (Du Ruo, Rahu, Shalom) to be my three favorite characters in Path to Nowhere. [P. 263]

In some cases, the player might not even like the characters individually, but enjoy the dynamic between the characters.

I sometimes not liking a character on their own, but like their dynamic with another character instead, as example Yukina and Lisa from Bang Dream where I do not like each of the character on their own but I like their bond and their share history and love for music. [P. 7]

Alternatively, the player may already like the individual characters, and enjoy them even more due to their narrative connections with each other.

Part of my favorite thing with fictional characters and their writing is in their inter-character relationships (this is a huge part of why Twisted Wonderland is my favorite gacha game at the moment). But the easiest example to raise here is from a pairing perspective, in particular, Xiao and Venti from Genshin Impact. Venti was already a very early favorite of mine after his first story quest, but when Xiao showed up and the game devs were clearly dropping a lot of vague hints as to the nature and history of their relationship, the intrigue and clue-following got me a lot more invested in Xiao as not just his own character, but in relation to Venti. I had already separately liked them, but together it was a whole other flavor. [P. 6]

When applicable, the POV character's actions in the story can also strengthen the bond between the player and the characters. The POV character can be a player stand-in character, or it can be another playable character or NPC.

This can be for a multitude of reasons: the character has a close relationship with the POV character; the character's response to the POV character reveals something about the character to the player, etc.

If Doctor cares for certain characters then I will start caring for them as well.

[P. 20]

As I like to character build the POV character it reflects a lot on how much I will like the character on how they respond, as if they don't respond as nice to me when I am to them will prob like them less and have them benched if I have them. [P. 18]

In some cases, the player is allowed a narrative choice that lets them favor a character in dialogue, which can give the player a sense of agency and strengthen their bond with that character. As mentioned previously, the relationship between a character and the POV character might also be trying to appeal to a romantic fantasy, especially in specific genres, making these choices feel impactful.

In gscha games i play, we get dialogue options as the main character in the story that provides a sense of personal decisions making in how a relationship will develop with characters I like. [P. 134]

However, the player may not always agree with the dialogue options available to them, reducing or altering this effect.

I consider them as their own character since a lot of dialogue choices don't reflect what I would do or how I would react. I don't really self-insert in any story in the first place so I leave them as is. It depends. Sometimes I would

avoid having a relationship at all while the POV character liked the other party and others I actually agree with their actions. It really depends. An example of differing actions I have is with the character Elizabeth Bartory in Fate/Grand Order. A lot of dialogue options include bullying her but since I actually don't mind her at all I find them overly mean for no reason. [P. 184]

6.3.4.2 Gameplay synergies

When a game has characters whose abilities vary from each other, characters can synergize with each other in a team. Similarly to the effect of narrative interactions, players appreciate characters with positive gameplay interactions with a player's liked character. Due to this synergy, they will tend to use the character more, and appreciate them for empowering their liked character.

Fu Xuan from Honkai Star Rail. After getting a certain character that I saved for months, I quit the game for a bit but when I saw she was good with him, I came back to get her for him. [P. 126]

Thus, characters with both gameplay synergy and narrative connection with each other are even further appreciated by the player. This effect of this combination is stronger than narrative or gameplay alone, and gives the impression that the characters were made for each other (or one made for the other).

I forgot to mention I love the relation of Chongyun and Shenhe in the story of Genshin, but the gameplay synergy is also so ridiculously good it adds so much more to them, literally *chef's kiss,* never cooked so hard. They are literally inseparable. [P. 32]

Gacha game developers will frequently write in pre-defined affiliations for various groups of characters, such as characters that work together in the same team.

Most games have different groups for their characters. So if they display an interesting group dynamic it can be enjoyable. (HSR: Stellaron Hunters, Astral Express Crew) [P. 145]

In games with more varied gameplay, these group affiliations can also provide a direct buff towards each other. Rather than the more generic scenario above where the characters' abilities synergize with each other, this refers to a mechanic that specifically checks for certain characters and character affiliations.

I really like playing with characters that are connected in some way. In Zenless Zone Zero, I always aim to keep teams mostly faction specific, and I really enjoy that the game rewards and encourages doing so. [P. 156]

6.3.5 Fandom presence

If a player is part of or interacts with the broader community and fandom, these interactions with community can also affect their opinion of characters.

Fan works produced by other fans, such as fan art, fan fiction, or fan videos, can explore and highlight different aspects of a character that might make the player like or dislike them more.

Fan works are a huge influence on my perception of a character. Beautiful fan art and well written, passionate character analyses have definitely turned my opinion of a character around for the better. [P. 25]

The community also discusses their opinions on characters, whether in terms of gameplay, narrative, or design. Even if a player chooses not to partake in these discussions and disagrees with the majority opinion, they may still consider their own opinion within the context of the community (e.g., "because the community _" and "despite the community _").

Firefly is a character who basically lies to us from the 1st moment on... there is no ill intention it seems and based on the lie we had some kind of date together? (that it was a lie gets revealed later on) since she was nice and the community shipped her with the MC i liked her too. [P. 213]

I got Raiden Shogun while being a noob (low AR, maybe 15?). I couldn't level her up past 40lvl due to her region being locked for me at that time. But I played with her for quite some time, which made me feel way friendlier to her story, despite the fact that most people in the community hated it. [P. 101]

The character's popularity in the fandom affects how frequently the above fan works and discussions may appear. While most players would want their favorite character to be at least a little popular, rather than overlooked and lacking any presence in the fandom, it is possible for a character to become *too* popular.

sometimes when my fav becomes too popular i easily get tired from the fandom where they belong [P. 171]

6.3.6 Gameplay

Gacha games are, of course, games, therefore the gameplay of the character is a core part of the character that affect the player's opinions of them.

Using the character in gameplay may give them some amount of control over the character, with the amount depending on the genre. This agency over the character increases the player's attachment to them.

i think gacha game characters, especially ones like genshin where i can control them and walk around, makes me feel more attached than i would to a character i see in a tv show or movie. [P. 253]

6.3.6.1 Strength & when strength matters

If character strength is relevant to the game, the player generally prefers the character to be strong, as it allows them to use the character with less friction and clear more content using them.

When an operator is strong and takes care of your problems it's hard to dislike them. Further, when they synergize well with operators you do enjoy it's better. [P. 97]

Their opinion of character strength might be affected by the community's opinions, whether or not they are accurate.

If I pull a strong character randomly, I am still very likely to use them if they are strong. I always keep a close eye on tier lists for these kinds of games. [P. 176]

Even with minimal powercreep, games may have shifting or cycling metas that favor the teams suited towards the newest released characters. As a result, a character

acquired by a player has a chance to become relevant again later, or perhaps even more obsolete, depending on what directions the meta takes.

With the cycle of changing end game content there was times in which the new character worked for and I built them just good enough to pass what I pulled them for then when similar content is upcoming again will build them up slightly more for that content again. [P. 18]

More than the character's relative strength, the player's attitude towards using strong characters (or not) determines how the player treats them. A player who cares about strength will prioritize using characters who have high strength, and thus are mathematically worth the material investment, over characters they may personally like more.

There are several reasons and situations where a player will care about character strength.

The player may want to get through content as quickly as possible to optimize their rate of gaining extrinsic rewards (e.g., gacha currency), want to clear content smoothly and quickly, or not have enough time to spend resources on characters with lower rates of return.

Since there is limited resources building characters for gameplay is a logical thing to do because it helps you do more challenges thus leading to more rewards. [P. 80]

I am broke. I will meta slave to ensure i can pull more characters [P. 12]

In games with a high amount of powercreep and/or competitive PvP metas, players are highly incentivized to have the strongest units possible at all time.

Strong characters are important for any game, i.e in a game with ranks stronger characters are important to get ahead of the curve, but not essential for ones own enjoyment. [P. 48]

I play pretty competitively, so I will try to incorporate all strong units into my strategies even if they are not characters I enjoy using. [P. 103]

Some games also have "event bonuses" that incentivize the use of certain characters during the event period. These vary in importance by game, ranging from a small bonus towards the character's bond level to a significant percentage increase in character effectiveness.

For games like ProSekai I consider the two most important thing in any cards are their visuals and character narratives. Building them unlocks new visuals and narratives. Sometimes I build characters so that I can spend less time in the events, where these characters usually have event bonuses. [P. 1]

There are also players who ignore or actively disdain the meta. If the player finds the game too easy for strength to be necessary, the game is relatively low on powercreep, or the player has personal priorities over pure efficiency, then strength is no longer a factor.

Players who value personal challenge and skill expression tend to de-prioritize strong characters. Skilled players may have more game knowledge, and thus do not feel the need to rely on pure strength/the most meta characters. Rather than

clearing missions with the least time or effort, these players prefer to challenge themselves and display their mastery of game mechanics.

Tryhard player, don't play with the highest rarity typically so I don't build any high rarity characters unless I like them for other reasons. In general prefer playing in a way that challenges me rather than being happy about strong units. [P. 36]

In Arknights, I play niches which are restrictions to team roster [...] The mission of a niche-knights player is to show off the level of depth you understand the game to use some of the "weaker" characters that never stood a chance in the meta and I enjoy that so much because it encourages discovery through challenge. [P. 32]

In certain games, the need for strong characters is inversely related to skill level; a skilled player can find a way to make anything work.

I'm not one to play games that demand top tier units as they come out, the freely available characters should be good enough to handle things with investment, player skill, and strategy. [P. 121]

Players may also actively dislike following the meta or using characters that are too strong, finding it boring when all of the challenge is removed.

Some things are so strong that they ruin the challenge and make things unfun and boring. For some people, the grind and being overly powerful is the fun, but I live for the struggle and only bring out the powerful characters when I have no other options. [P. 92]

There are also games where strength doesn't matter, due to the difficulty level and mechanics of the game.

in my gacha the content isn't hard enough to care about weak or strong characters. [P. 125]

Other people are between the two ends of the spectrum, prioritizing using other characters when possible, but switching to meta teams when the content is too difficult or time consuming for them to stick to their favorites.

Azur Lane characters' strength only matters in super endgame grinds, and I am not that kinda player, so I'm fine with just sticking with what I have and maxing out everyone [P. 93]

Since high rarity characters typically cost more resources to upgrade, it is not always worth it for the player to switch off their liked and built character. Even when the new character is stronger than the player's liked character, so long as the liked character can perform *well enough*, it fits the player's preference and time to continue to use a liked character.

I use Argenti over some of my stronger characters due to liking the character more and having built an entire team around him he performs well and is able to clear most content even if it is less effective than other characters. [P. 53]

In some games, it's possible to keep refining a character's build, sometimes without pulling for new characters or equipment, as it is partially reliant on randomness. This can allow a character's strength to also change based on how much the player

chooses to keep optimizing it, allowing weaker characters to become much stronger once built well.

In the Genshin at least, money doesn't get you super far in building your characters. It's expensive and still based off of pretty harsh rng. So if I wanted to improve my characters I'd rather save and pull dupes. I mostly invest vertically because I enjoy min maxing. As such, I don't have many build characters for how long I've been playing but the ones I do, are very well built. [P. 38]

Players who don't perfectly follow the meta instead care about character strength because they want to use the character. If the character does not perform well, the player understands that they are sacrificing efficiency and resources in order to continue to use the character.

the jing yuan banner rerun in star rail, hes a character whos design i love, unfortunately not a very viable character [P. 65]

6.3.6.2 Style & variety

In games where characters can have different skills or playstyles, certain characters may play differently than others. For example, an action game may feature both a quick, agile character and a slow, powerful character. The character's playstyle is independent of their strength, as a player may choose to use a character who they feel is more enjoyable than a character who is strictly numerically stronger.

Sometimes it isn't about strength as much as play style, and I'm quite particular when it comes to controls. So if a "weaker" character is easier for

me to control, even if it results in less efficient results, I'll choose the option that gives me less pain and more joy. [P. 6]

Unlike strength, preferences towards playstyle are more subjective. The player may find nothing wrong with the character per se, only that they don't personally enjoy using that character's abilities during gameplay.

I remember spending some money to pull Xiao in Genshin because so many of my friends on voice call were doing it, and I wanted to join the excitement. I had enjoyed his involvement in the game's story, after all. Pretty soon after, I realized he didn't suit my play style. While I still invested in him a decent amount, I rarely actually use him. I kind of regret spending actual money to get him on a whim, but I do like him as a character and what's done is done, so I'm not unhappy. [P. 25]

In addition to a character's playstyle, there may be teams or groups of characters that fit a specific kind of party. For example, a team that methodically sets up one character to do the majority of the damage, or a team with multiple damage dealers that chain combos off of each other. If a player enjoys a team's playstyle, they are more likely to use characters that suit that team.

I like Ruan Mei in a super break team specifically alongside Harmony Trailblazer. Even though she was universal support before that, she's now glued to break and superbreak teams now [P. 28]

Yes. I play gachas primarily for gameplay. If a character is required for a strategy I enjoy, I will try to obtain them without regarding my opinion on their design. [P. 103]

Through building parties, the player is also given the opportunity to put their various favorite characters next to each other (even if they have no narrative connections), and imagine them interacting during gameplay. Even if two characters do not perfectly synergize, the player may still put them together to use them at the same time.

Oh, the Xuanzang Sanzang thing also applies here. Waver's skillset helps her become even more of a crazy DPS giver, especially with his critical up skills, so it helps her become a huge Buster DPS. I often make them work together for challenges, so I like to think they're friends. [P. 21]

A character often joined my favourite during their attacks, so I came to associate them with one another and think about how they'd mesh in a narrative setting. [P. 188]

Players also appreciate when the character's gameplay style matches their personality, such as a character whose story is about friendship providing buffs to a party.

However, a gacha suffers when a character's kit misaligns with their portrayal in story so I look for lore-synergy often, Sei Shounagon works great because of her multitude of effects highlight the vibe of "bringing the party" though her various beneficial buffs of which a few will always find use, without

excessively skewed buff magnitudes that maintains her “lore accuracy”. [P. 99]

Hu Tao is cute, and she's on my waifu list, but not on my top 10. Because a huge portion of what I like about her is really just her playstyle that combos very well with her personality. [P. 77]

6.3.7 Ownership & personalization

After the player has possession of the character in their account, the player has the ability to express their own desires onto the character. They can level up the character, or not, and use the character, or not. By spending time with the character in various ways, the bond between the player and the character can become stronger. As a player uses the character, they become part of the player's story, not just the game's.

6.3.7.1 Building the character

Characters in gacha games are designed to be used as a core part of gameplay. However, unlike unlocking a cosmetic item from a lootbox, a player cannot simply unlock a character and then immediately use them. In most situations, the character must first be built up to a viable level before the player can use them. When the player gets a character, they must make the decision on whether or not to take these steps.

Choosing to build a character can be a meaningful decision in and of itself. Players, especially free-to-play players, may not have the resources to build every character they acquire, forcing them to prioritize.

I try to play F2P as much as possible, so I'm selective about what characters I invest in. I prefer it this way as it lets me feel like investing in the characters I do like is more meaningful because I have to work for it and choose who gets my resources. [P. 35]

Additional reasons for why someone may choose to not build a character are elaborated in Section 6.5.

However, not all players are free-to-play, as there are some players who do spend money on the game. Of all responses, 121 (21.5%) respondents do spend money on building characters, whether a lot or a little, and 5 (0.9%) more would, but their primary game does not allow it. 189 (33.6%) of respondents spend money only to acquire new characters, and do not spend money on building them, and 182 (32.3%) do not spend money on gacha games at all. 65 (11.5%) of respondents answered "Other", with some clarifying that they used to spend money but stopped, some describing how it is not possible and they would not spend money to level up characters, and some described situations in which they would spend money, such as:

Yes, but only when there are packs in the store that give SIGNIFICANT boosts to speed of leveling, and only if they are worth the price. [P. 225]

I only purchase the battle pass. This helps with pretty much the entire game, pulling, leveling, building, etc. [P. 181]

Respondents were also asked to rank factors that contributed to whether or not they chose to build a character. The following graph shows the distribution of rankings,

with 1 being Most Important, and 13 being Least Important. Overall, gameplay ranked highest, then character design, then narrative, and lastly miscellaneous factors such as recency of acquisition. Despite respondents describing in detail how much they enjoyed the narrative and personality of characters, gameplay ranked much higher in the end. Even though players may like characters for their narratives, building is a gameplay decision first and foremost, hence the preference for characters to be higher in strength (see Section 6.3.6.1).

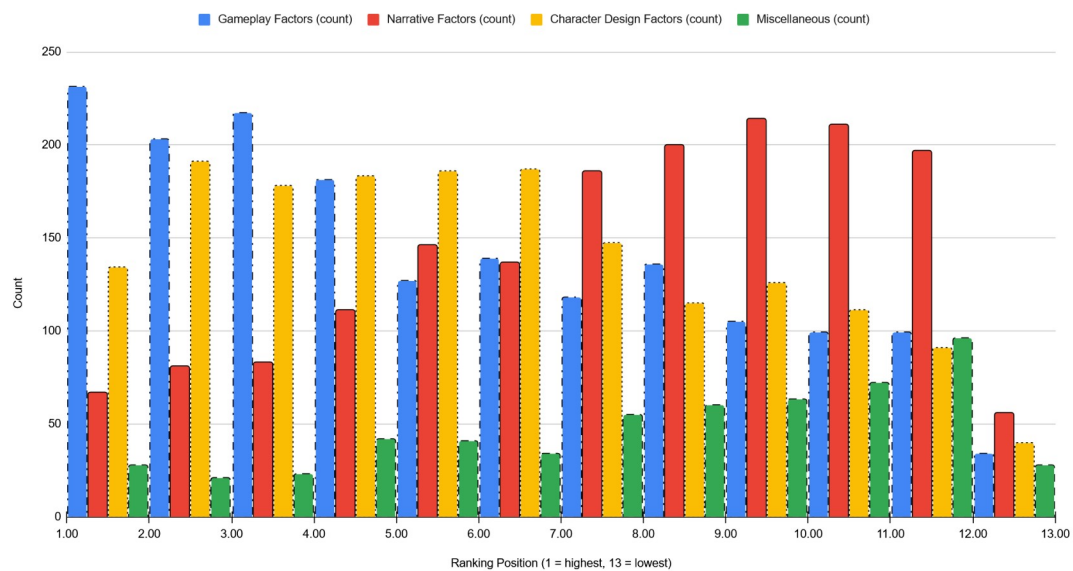


Figure 6. Histogram of the ranking of factors that contribute to building a character, with 1 as Most Important and 13 as Least Important. Factors are grouped by category, and the Other option is excluded.

Further, the table below breaks down the distribution for the ranking of each individual element. Some graphs were heavily skewed, such as Gameplay Enjoyment and Character/Card Visual Design, while others such as Character Narrative and/or Narrative Role were nearly flat.

	Mean	Median	Mode
Gameplay Factors			
Gameplay Enjoyment	3.696	3	1
Gameplay Requirements (e.g., a level requires a strong character of this type; this character fits well in your party)	5.242	5	1
Gameplay Incentives (e.g., a character provides bonus rewards during an event)	6.741	7	8
Narrative Factors			
Overall Narrative Congruence (i.e., using the characters that have recently or will soon appear in the story)	8.359	9	10
Character Narrative and/or Narrative Role (i.e., prior experiences with this character in a story in game)	5.600	5	5
Character/Card Profile (i.e., narrative text available through the character's acquisition and/or level)	7.801	8	9
Character Design Factors			
Character/Card Visual Design	4.021	3	1
Character Personality Archetype (e.g., "cute", "edgy", "workaholic", "trickster")	5.959	6	2
Character Voice Acting	6.908	7	6
Miscellaneous			
Recency of Acquisition	7.567	8	11
Pre-existing Emotional Connection to Character (from non-game official media, fan works, friends, IP crossover, etc.)	5.901	6	1

Table 2. Mean, Median, and Mode for the rankings of each factor (excluding Other), with 1 as Most Important and 13 as Least Important.

While respondents gave many different reasons for their rankings, one particular respondent's explanation for their ranking reflects some of the patterns shown in the overall trends, such as the prioritization of gameplay and deprioritization of narrative congruence:

I will always try to slot my favorites in (which I have usually invested in anyway), but if gameplay calls for it I will prioritize characters that synergize better or provide bonuses for a better gameplay experience. Beyond that, I pick the ones that I like because of looks or personality. Narrative is low in importance to me because it may be frustrating to play a character that may be narrative relevant (eg. story support, etc). usually it's more convenient to use an existing tried and true team [P. 35]

As described in Section 6.3.6.1, players will try to find a balance between using characters they like and being able to progress in the game.

I build characters I like and respect even if they are not “strong”, and I want to have fun playing the game and I appreciate characters with unique gameplay. However, I also make sure I have strong characters so I can get serious when I am actually facing trouble in game, and will build characters specifically for gameplay alone when necessary. I try to find a balance between these two things, and I also place value on having a support list that will help other players. [P. 31]

Limitations on party sizes and the level of building required to make a character viable also factor into how significant of a choice it is to build one character over another.

Depending on the gacha game, investing resources in characters depends on how the game is structured. If the character is in a team of 3 (FGO, Reverse 1999, etc.), they're far more important than a squad of 20 and require funneling. Then again, if resources are aplenty, this is not an issue. [P. 16]

The choice to build a character is meaningful because the character has chosen to "come home" to the player, and the player is "sacrificing" their resources to raise them in return. These resources were gained by the player through either time or money (also time, but spent laboring outside of the game). The player may also be motivated to learn more about a character as they build them.

If I get surprised with a character (or better yet, multiple copies of a character) that I really want, it generally motivates me to invest a lot of time and effort into building them and learning their kit, up to and including building full teams around them and challenging hard content with them. I also find that once I obtain a character I really wanted, I'll spend more time reading about them/following their story/looking at guides, fan art, etc. There's obviously an emotional bond. [P. 106]

The player's effort put into the character's build is their way of showing love and support for the character within the game's mechanics.

Building certain characters is my way of showing my "love" for them (since the games I play don't have a marriage/oath mechanic) [P. 117]

They might also view it as a sense of duty, that they are responsible for building a character that they pulled for.

I want to roll Black Swan (Honkai Star Rail) for Sampo because their gameplay works well, and Sampo is one of my favorite characters. But I didn't originally really care about her from the story. I will appreciate her though, it feels like my "duty" in a sense because she's "coming home". [P. 30]

The player's overall time investment in character deepens the bond with the character. This begins with the time required to earn the gacha currency required to obtain them, then continues as they get materials to build the character.

I think gacha games make me feel more invested emotionally in them and focus my attention more on them via time commitment to get and upgrade them. [P. 154]

The player's goals within the game are also framed around their treatment of the character and the personalization of their owned copy of the character, increasing the strength of their relationship towards the character.

Within a gacha game, I have a more personal reason for liking them as I can complete certain things such as bond level, pulling, farming gear etc that allow me to influence my relationship with the character and work towards a goal that involve them. On the other hand, while I like Lydgate I do not feel a very deep personal relationship with him. I appreciate his characters within the book, but from a more outsider perspective. [P. 333]

6.3.7.2 Accompanying the character

After the player has built the character, the character also accompanies the player through gameplay, allowing the player to spend more time with them.

Ayato is generally a good character meta wise which means I can play him a lot = like him more. Ferdinand did get added to the Fire Emblem gacha game (FEH) but he was not a particularly good unit so there wasn't much of an

opportunity to grow my interest for the character through his appearance in a gachagame [P. 35]

Most of these games are also mobile games, thus the character is also accompanying the player at a basic level: having the character within the game on the player's phone allows them to be physically with the player in the player's pocket.

If there's one thing that Arcueid being in a gacha game did is it enhanced my fondness of her in a way that makes me feel like she's always here with me (because she's in my phone, in my pocket, just a click away) [P. 406]

Some games allow for a character to be selected on the homepage, shown when the player loads the game or returns to the menu. They may play additionally special voicelines when tapped. This allows the player to interact regularly with the character, without even needing to build them.

With Mordred, even though she dies in Apocrypha and Fate/Apocrypha itself is over, in the world of FGO, which I can play every day she is there alive and physically with me whenever I want. I can also "talk" to her when I want by placing her in "My Room" and listening to voice lines. I've had times where I've been in a bad place and I put Mordred or other favorite characters in My Room and listen to them talk "to me" and it helps to make me feel better. [P. 270]

The live service aspects of gacha games also make the game, and in turn the character, part of the player's daily life. This interaction increases the overall time

spent with the character and keeps them in the player's recent memory, therefore increasing the player's attachment with the character.

I think more than anything the nature of it being an on-going game, a live service of some sort, has the effect of keeping my connection to characters strong throughout the duration of the gacha game's lifespan at the very least. And having the character means I'm engaging with them in some form even when they don't have story content at the moment due to using them in gameplay. So they remain in my active interest for a long time in a way a one and done game that I really love won't in the same way, even if I continue to recall those characters as well. I feel like I'd have to put more effort into or go out of my way to engage with non-gacha entertainment if it's been a while after I've been done with them [P. 37]

A player may also have a stronger connection to the earliest characters they pull. Not only has that character been with them the longest, but they also carried the player through the early part of the game, when resources and characters are most scarce.

Chongyun was my first character from the beginner banner in Genshin and played him the most my first 6 months. [P. 52]

Siege was one of my first 6 stars in Arknights and her faction the Glasgow Gang became one of my favourite groups. This led to my love for Dagda as she is a member of Siege's gang. [P. 384]

Overall, interacting with and "investing" time with the character gives the player more chances to like them. For example, a player may become interested in a character's story after hearing their voice lines, and spend time to read more into their character profile, then become invested in their story.

I wouldn't have like Silverash if I never got him as my first 6 star unit in the game. I use him for so long that I wonder what his lore is and decided to learn more about him. [P. 301]

Some of it however, is also just the player warming up to the character after multiple repeated exposures. In combination with other factors mentioned previously, such as supporting other liked characters or having strong gameplay, the exposure effect can slowly improve a player's opinion of a character.

In Honkai:Star Rail I innitially heavily disliked the character Ruan Mei. I found her to be thematically strange and I couldn't make heads or tails out of her personality. I was just utterly confused by her. Half a year later she is now the best support of Firefly, one of my favorite characters. Maybe it's because time has passed, maybe its because she's a really good support or maybe I'm just fooling myself into thinking she was a good investment, but somehow my opinion of her has improved a lot from those days. [P. 249]

As mentioned previously, players state that owning the character beforehand makes experiencing their section of the narrative more satisfying, as they're already familiar with the character. In addition, owning the character feels like participation in their narrative, especially when referring to an alternate version of a character that demonstrates their growth.

Kiana Kaslana (Herrscher of Flamescion) from Honkai Impact 3rd. This battlesuit represented a tipping point for the character. She went through a lot, and finally being able to fight against the forces that continue to push on her beliefs was truly a moment that I wanted to be a part of. [P. 193]

The combination of ownership and rarity builds a sense of exclusivity. However, beyond the difficulty of acquiring the character, the player's personal experiences with the character are exclusive to them and their version of the character.

If a character is easily obtainable by anyone, then your "bond" doesn't mean that much anymore, and gachas are good at building exclusivity. [P. 389]

Therefore, the combination of ownership and agency over the character through gameplay increases the attachment between the player and the character. As ownership is based on chance, and the player's usage of the character can depend on a myriad of factors, each player experiences a different combination of circumstances, and *the character becomes part of player's unique personal narrative*.

I also think that as characters are used outside of their story and to complete different stories that they have no place in, they tend to become perceived as more removed from their own narrative and part of the player's personal experience. [P. 102]

Musashi being a playable character makes it feel a little more personalized for me as a player. They have specific voicelines that 'talk' to you and being able to utilize their abilities and skills in the game's combat makes me feel

connected to them. Unfortunately, Musashi isn't a character that appears all the time in the game's main story... [P. 19]

6.3.8 Gacha experience

While some characters are not included in the gacha pool and are acquired through other means, most characters must be pulled for in the gacha. After all, the gacha is a central system in a gacha game. The results of the player's pulls and the emotions associated with those results can also affect how the player treats the character. In order to avoid negative emotions, many gacha players will instead save resources for a guaranteed chance to get the character.

6.3.8.1 Gacha results experienced as character's feelings

Whether they succeed or fail, players strongly remember their experiences pulling for characters. Responses for these questions were highly detailed, even when describing events that spanned multiple years or happened multiple years prior.

Though players are self-aware that they are finding patterns from random events, a player's luck is often associated with a character's compatibility with or feelings towards the player.

Sometimes I would blame a character if I keep getting them instead of my favorite ("Why do I always get X?? Why is he taking me away from Y??" I do tend to blame it more on my own luck than the character. I also do often say things like "I lost the 50/50 for [Character] 5 times in a row he hates me </3" when I don't actually think the character hates me, however I do associate my luck correlating with the character ("Oh this character's gacha is up again, he

hates me I'm unlucky with him so it's going to take forever to get him") [P. 9, square brackets in original response]

If a character "comes home" on a few pulls, the character likes the player, or the player and the character share some fated compatibility.

I have some characters who I got multiple copies of very quickly, so I say they "love me." Like Takasugi Shinsaku, who I was VERY excited to roll for because he was an NPC first, and who I was prepared to spend A LOT of money on, but I instead got NP3 in less than 30 pulls. I definitely consider him the servant who "loves me the most." [P. 270]

This feeling of affection can make a player warm up to a character that they were not so interested in.

I felt middlingly about Ruan Mei and pulled on her debut banner to try and get copies of Xueyi. But then I got 2 copies of her and 2 copies of her lightcone, and felt like she loved me. I've become a diehard fan and defender [P. 156]

Conversely, if the character takes many pulls—such as hitting pity—or does not come home at all, the character dislikes the player, is incompatible with the player, or is testing the player's resolve and commitment.

Raikou in FGO avoided me on every single one of her banners. After 5 years I gave up. In FGO it is lore explained that you can only summon servants you're compatible with, or if they're willing to be summoned. "Raikou just doesn't like me", I decided. [P. 186]

Similarly to the inverse situation, costing a lot of pulls can cause the player to resent a character they were otherwise excited for.

I used to love a servant from FGO named Muramasa. They were originally a npc character that everyone knew would eventually become a playable character and I was one of the ones excited for them to become a playable character. 3 years after i was introduced to them, they finally were 'summonable' and i rolled the FGO gacha (notorious for being really really stringent) and ended up needing to reach the pity system of 330 pulls to finally get *one* copy of Muramasa. The entire experience of rolling for them created so much hatred for that character that I unfortunately do not use them for anything gameplay related and I still to this day cannot forgive them for taking so long to 'come home'. [P. 19]

As mentioned in a previous section, acquiring the character is associated with proving the player's love for the character. Thus, the player may be willing to save for/roll for the character over multiple years and banner periods, no matter how long the character evades them, sometimes including alternate forms of the same character.

I have been playing Fate/Grand Order for 7 years (I play JP version) and there are only 2 characters that I say "hate" me. [...] They are Semiramis and Meltryllis. [...] I wanted to get [P. Semiramis]. I failed. Then when she got rate-up during the Apocrypha collaboration event I failed again. And during the rerun Valentine's banner... and so on... For at least 3 years I rolled on Semiramis on almost every banner she had and often bought premium

currency, but never succeeded. I have probably spent at least \$500 USD. I have since given up. She is not a very good unit and I don't need her on my team. I have also accepted she "hates" me which wasn't very "surprising" because she and Mordred did not get along in Apocrypha. At least that's how I explain it to myself. The other character Meltryllis is my fiance's favorite character. We have been together 6.5 years and [...] he has obtained 5 separate copies of her [...] but I have tried several times to roll on her over the years, and have failed every time. This includes the 4* (lower rarity) swimsuit version of her. Meanwhile my fiance has her maxed out for both versions. We joke that she hates me because she loves him. I haven't spent as much on trying to get her as Semiramis, so I hold less of a grudge, but it is funny and a bit sad. [P. 270]

6.3.8.2 Luck & saving

Players are well aware of the role luck plays in their gameplay experiences and relationship with characters.

I think having to chance obtaining Firefly made me immediately more invested since I had to be lucky to fully experience her gameplay and character. [P. 203]

Within the community, it is common to perform certain "rituals" in order to increase a player's luck towards pulling a specific character, even as players know it does not really affect the game's random number generator. In addition to individual superstitions, fandom interactions such as sharing one's summoning conditions (e.g., a screenshot of the player putting certain related characters in a party and

successfully getting the desired character) further perpetuate these rituals as a social activity.

In FGO, there's a lore-based reason as to why characters would not respond to summons regardless of gacha luck. That would either be the player themselves not having the proper summon catalyst (link to character), deemed unworthy, or the character themselves not wishing to save humanity (in-game plot points). This spawns several traditions within the gaming community, especially "gacha rituals" where players would perform certain tasks (ex. art shrine, summon at specific time/place/occasions) out of the belief that it may improve their luck. [P. 16]

Although the word "gambling" was not stated in the survey, the excitement and predatory monetization behind gacha was compared to gambling by respondents⁵.

Oh, huge dopamine rush, obviously. More than half of the rare characters I got were unexpected, especially since I was often gunning for something else, or budgeting how much resources I would use. It makes sense--gacha is gambling, and it always feels good to win big. [P. 211]

Despite, or perhaps because of, the lack of direct monetary rewards, one response also stated preferring gacha games to casinos:

I think more of myself being lucky and that it was destiny (though I totally know it's all a statistical anomaly) it's fun and I like it better than gambling in a casino. [P. 151]

⁵ The questionnaire did not use the word "gambling" or similar, and this phrase was brought up by respondents. This behavior is contrary to that of Woods' (2022) participants, which may have to do with sample size, personal differences, or methodology.

However, respondents also described that the act of planning and saving negated the feeling of gambling to them. With enough pulls, especially with a guarantee system, the player is not risking the chance of failure.

I am a plan/saver, so the gambling aspect isn't there. When I pull a character I know I will get them. It is nice to save gems by pulling early of course. When I get really early I contemplate going for a dupe or trying for a weapon. I usually don't go through with it though. [P. 220]

These long term strategies, such as saving to reach pity, and only pulling on banners where they can guarantee someone, help the player to avoid the negative emotions associated with failed gacha pulls, leaving only the chance for positive surprises along the way.

I usually only roll when I'm fairly confident I have enough resources to get at least one copy of my target character, and am prepared to spend everything. Since my goal is usually to just get one copy and stop, or go all in and just see what I get, anything else is just a bonus that popped up along the way. It's nice (even if I don't care for the unexpected card), but I won't lose my mind unless it's someone I really like – which is usually who I'm rolling for anyways. The most pleasant surprise is getting the target character with much fewer rolls than expected, or multiple copies. [P. 25]

Free-to-play players and/or low-spending players also enjoy the process of saving up for a character in order to get them, feeling a sense of accomplishment when they successfully get the character.

I definitely like Arlecchino more. The second question took me more time to think about. Maybe the saving resources and spending the primos to get Arlecchino make it seem like I 'earned' her. [P. 111]

This saving can take months of commitment and planning (see Section 6.7.1).

99% of the time i only pull on character banner when i know that i have enough to get them, and i have a very strict plan on what i get months ahead based on leaks, so usually there are no surprises for me. [P. 67]

For some players, not only is spending real money not necessary, it would actively detract from their enjoyment.

I prioritize my gameplay-related needs and allocate resources accordingly. Analysis and planning always bring better results than hasty emotional decisions. Spending real money would likely reduce the challenge and my overall satisfaction with the game. [P. 114]

6.3.8.3 Emotions & motivations for pulling

The emotions associated with getting a rare character, a reward that many would generally associate with a jackpot, are not always positive. Unlike an objective numerical monetary reward, characters are subjectively liked or disliked, and their rarity will also not always correlate to how desirable they are for the person pulling. The player's preferences determine which characters are "wins" and "losses", and this misalignment between desired characters and rare rewards can caused many mixed emotions.

If I don't expect [a rare character], it usually means they weren't on rate up, which means they're not the character I really wanted. So, there's a brief cycle of excitement (on seeing that I rolled a 4- or 5-star character) to disappointment (on realising it's not the one I wanted) and then a third emotion that varies depending on the character and the situation (usually happy or indifferent, sometimes frustrated if I've rolled the same one multiple times whilst trying to get someone else). [P. 239]

As mentioned in the previous quote, player's emotions can therefore vary greatly depending on not only which character they get, but also the situation and conditions in which they got the character.

When the character is both wanted and cost few resources, the player is elated, excited, etc.

I feel exited because I was lucky and happy I didn't have to spend as much resources. I don't think it varies that much, maybe I feel more exited when I get in fewer pulls, but that's about it. [P. 168]

When the character is wanted, but cost a large amount of resources or time, the player is relieved, but frustrated or resentful.

I feel good in that I no longer need to worry about hoping to get this character in the future. Feels like some weight is off me. [P. 20]

I tried getting a character through gacha and failed to get them. A few years later, I got them but don't really use them as the experience of not getting them the first time kinda soured me on them. [P. 66]

If the player is neutral to the character, neither liked nor disliked, the player may be disappointed, appreciative, or indifferent, depending on the player and the specific situation.

Very nice! Appreciative because it's statistically unlikely, but definitely happier if it's one I want. If it's one I didn't want, sure, won't say no. In the chance the rare character actually decreases my chances of getting one I want, it's annoying but not too serious. Then I just curse my luck. [P. 30]

I tend to feel kind of disappointed. If it's a character I don't like, I end up feeling pretty disappointed. If it's a character I feel vague positive feelings about, it's usually disappointing as well since the character I'm rolling for tends to be one I'm genuinely way more interested in. [P. 37]

When the character is disliked and unwanted entirely, the player is disappointed, and feels that the opportunity, resources, and luck were wasted.

Definitely matters if I like them. A surprise character who I am not fond of is often disappointing, as it COULD have been someone else, in my mind— and it wasn't. [P. 140]

When I planned on skipping them, [I feel] a bit salty because why couldn't this luck go to a character I actually wanted? Even worse when it's a dupe and I still have many characters I still don't have... [P. 252]

Some respondents described their emotions with wording that related more to resource efficiency rather than the act of winning a random reward. These

considerations heavily depend on the actual game gacha implementation, such as the pity threshold and banner structure.

Depends on the situation. For example, if I'm losing my pity % (increasing % of pulling high rarity after <x amount> pulls) because of it, I might not be thrilled if the surprise rare is something other than my target, regardless if I enjoy the character's art/personality/lore/etc. On the other hand, if I have barely any pity % built up and grab a surprise rare super early, then of course it's a much better scenario, even if it's for a character I am ambivalent toward. In the end, it's all about efficiency for me, since gacha pulls are primarily governed by currency that is slow to earn through free-to-play and can only be spammed by spending actual money (i.e., legal tender and not in-game currencies). [P. 197]

For example, Hoyoverse's *Genshin Impact* and *Honkai: Star Rail* use a pity counter that carries over to future banners. Getting a rare character resets the pity counter, thus removing the player's ability to guarantee a future rare character. If two desired characters are released in short succession, the player must essentially choose between guaranteeing one character or the other, leaving the rest up to luck.

Sometimes it feels bad getting the rare character I want- at least when playing Hoyoverse gachas- because it means giving up the opportunity to get another rare character I want later due to a lack of resources. It's bittersweet. [P. 177]

The balancing of live service games also introduces powercreep and/or a shifting meta, meaning a character's desirability can depend not just on the character, but when in the game's lifespan they are pulled.

When I started granblue fantasy in 2017 I got lucky and rolled Sara, that at that time was still the strongest tanker in the game. Since I was a beginner, having a strong tank helped me immensely. Nowadays all versions of Sara are kind of powercreeped to the point of being useless, but I still like the character and keep and keep a preset party with her Light version (overall the less sucky one in today meta) to use it occasionally. I probably wouldn't care about the character if I didn't get her in a lucky roll when I started playing. [P. 162]

Another factor in this thought process is whether an undesired character provides any kind of consolation prize. Owning and raising unwanted characters can still sometimes unlock additional content and currency rewards, which can recoup some of the resources spent on them. Though this can be interpreted as a case of "losing disguised as winning", characters that fail to even disguise their losses are further ignored.

if someone came home when I was pulling for someone else and raising them do not offer any rewards (like more pulls), that character sure will get bench-ed for the rest of my game time [P. 7]

Most responses described situations where the player was rolling for a specific character that they had saved up for. However, there are other motivations for pulling for a banner, such as a social situation, a celebration, or a casual pastime

akin to buying a cheap lottery ticket. These motivations can also affect the player's expectations, and thus their reaction to the results.

Depends on the gacha game and what I'm rolling for. If I'm rolling for the fun of rolling and I'm not expecting much it can be cool, but I'd im rolling to expect a certain character and I get something I'm not happy with I'm devastated. If I don't like the character, I'm upset but usually that means I have them already fully unlocked and I get my "pull" back with my luck. [P. 4]

As mentioned previously, a character's rarity is not always correlated with their desirability. In some cases, the player wants the character that is of a lower rarity (e.g., a 4-star over a 5-star). This can be more frustrating, as pity mechanics for lower rarities function differently, and they may be part of a banner that features a disliked high rarity character. In this case, the player actively does not want to see the highest rarity drop.

Tartaglia from Genshin : came every 10 pull I did for a 4 star character. I won't even try pulling on his banner now. I don't like the guy, even worse since he broke my pity. [P. 252]

The player's emotions are also affected by their individual experiences, such as whether they are a veteran player or a whale. A player who has more gacha experiences, either through years of playing, or through an inflated amount of pulls through spending real money, may be more desensitized to earning rare rewards in gacha systems. They may describe "good luck" not as getting a copy of a rare character, but as getting multiple rare characters in a short timespan.

It used to be standing heart rate into dopamine injection, straight-up heart attack, though that's if the unit is someone I want. If not it's kinda just disappointment. Nowadays, I feel close to nothing, mostly just relief that I got the character I want. The times I do feel something is if I get 2 or more SSRs in a single 10 pull or something like getting an SSR very early into the pulling session or getting the signature weapon/ light cone/ craft essence I want very early. [P. 210]

Furthermore, a player who has played the same game for a long time will have more characters already owned in their account, making it more likely that they receive another copy of a character they already own. This is generally less preferred to getting a new character that is unowned, as duplicate copies of a character provide less returns to the player than a first copy of an unowned character.

It also depends on how important are dupes and how old is my account. In general, the less max rarity characters I have the most excited I am to get any high rarity character. The more characters I already have the less interested I am with random spook, since I am probably rolling for some specific characters I need/want and getting something random usually will be a worse pick for me. [P. 162]

In the fandom, a (desired) character being earned by a player is referred to them "coming home". This phrasing reflects the emotional investment gacha game players can have in acquiring the character, as if the character was part of their family.

It's been 7 actual years where I've tried to pull Edmond Dantes from Fate/Grand Order every time he's available in limited gacha. Feeling like he hates me (in a funny way). One time I cried because a character didn't "come home", which is a common phrase that says a lot about how much people care about getting a gacha character, myself included. [P. 30]

As a result, the player may reward characters who they pull quickly and punish characters who "block" the characters they want by being pulled instead. "Rewarding" entails treating the character well by giving them leveling materials and using them.

When I first opened an account on Fate/Grand Order's Japanese server in April 2020, they had just released their Lostbelt 5: Olympus chapter and had promotional rewards and gacha banners. Having received a lot of saint quartz and needing to roll newer, stronger characters to more easily progress in the story, I dumped all of my resources into the LB5 banner. I got three copies of the 5* Dioscuri within probably 3-5 multi rolls, which is incredible luck. Because of that gacha experience and the fact that they were my first 5* character, I felt attached and continued to roll on their other rate ups (and always got them with relatively few rolls!) despite their status as a standard 5* that could show up on any banner. This led to me doing the same when the Dioscuri were released on the North American server two years later, and I've been similarly lucky with them. Despite FGO having many "meta" characters that people would recommend powering up, I've heavily invested in the

Dioscuri on both servers (raising level cap, unlocking additional skills, etc.) as a result of this attachment. [P. 25]

If a player is excited for a character, they may prepare to give the character their "reward" as quickly as possible by gathering materials before the character is released.

If I know i m pulling for a character (drip marketing, leaks) I do start farming a few weeks - a month in advance. [P. 145]

"Punishing" the character can encompass various things, depending on the mechanics of the game: ignoring/not building the character, throwing them off a cliff to their temporary death, or deleting them from the player's account entirely.

I definitely have refused to level up/raise a character due to the resentment from getting them from the gacha while i was trying to get someone else. [P. 7]

It depends. I'll burn [delete] a character if I really truly don't want them, even if they're rare. I've done it before. If it seems like the net resources from "raising" the character is greater than that gained from "burning" them, I'll keep them, maybe raise them, but throw them in an archive space after that... [P. 21]

6.3.9 Gacha affects how people evaluate characters

The interaction between gacha-based acquisition and narrative creates different contexts for how characters are experienced, compared to other media. A gacha

game player thus cannot measure a gacha game character by the same stick as they would measure a character from a television show, novel, or even another game.

6.3.9.1 Layers

Gacha players separate the gameplay, gacha, and narrative experiences of a character and evaluate them individually, while still being aware that each of these aspects are parts of the character as a whole. However, respondents specifically noted that strong characters are often also attractive, narratively relevant, and popular, in order to make them as desirable as possible.

I consider my gameplay experience quite separate from how much I love a character, but in many cases it's impossible to separate the two since it's common that a company will build strong stats for a character when they know the character will be popular. So in most cases it's the confluence of love for the character's writing or personality in conjunction with that character's gameplay value (convenience/ease or use/time efficiency/damage output etc), but when it comes to investing the time to build a character, I'll almost always prioritize the gameplay aspects over how much I "like" a particular character. [P. 6]

Respondents stated that characters they like in a gacha game are characters they would also like if they were from a book or a movie. It is additionally appreciated when the character is strong or fun to play, however being weak does not necessarily mean the player suddenly hates the character's writing. As mentioned in Section 6.3.6.1, players wish that players are strong so that they can use the

character, and they lament when using the character is a detriment to their gameplay.

I don't think it changes my stance on the characters. You could say game characters have 2 components. 1. The Story and 2. The Gameplay. The former is unaffected from the Gacha. The latter, can potentially be affected from the Gacha itself, mainly because the gacha can determine if the character is going to be playable, and even the characters power level, since in most gachas characters receive bonuses for owning multiple copies of said character. [P. 221]

Different players put different weight on different aspects of characters, as each person has their own preferences and expectations. For example, some respondents only care about gameplay:

I don't really care about the gacha characters except how useful they are on the battlefield. I've never read the story for Arknights, the only thing that matters for me is the actual gameplay. [P. 114]

Others do not care about gameplay, and only focus on the story:

I'm really not a chara minmaxxer and I don't really take the time to understand the game mechanics bc I'd rather do the bare minimum to read the story... I have no brain cells left for mechanics [P. 24]

Some respondents further do not care about ownership and collecting characters at all:

How I view a character in their story has little relation to how much I want to collect or use them in gameplay. I view them too separately and I'm content with enjoying a character without feeling the need to own them. [P. 20]

6.3.9.2 Ludonarrative dissonance & separation of gameplay from story

One issue that occurs frequently in gacha games is the ludonarrative dissonance that is unavoidable due to the gacha system itself, which allows the player to acquire most characters before playing the story (if the character appears in the story at all). Gacha game players may frequently acquire characters before encountering them in story due to this randomness, which gives access to the narrative content in the character's bio, profile, and/or voice lines.

It does feel strange because I feel like I'm meeting the character "out of order." I acquired Furina from Genshin Impact before completing the main story and I felt as if I had to avoid using the character too much, or read too much of her info, due to fear of spoiling myself on her true nature. [P. 9]

The first main effect this creates is spoilers. If the player chooses to read the information in the character profile, they may get information about story content they have not cleared yet.

I did and I got spoiled on the story (it was specifically the character Neuvillette in Genshin Impact) as I was reading through said character's background description in-game, there was a voiceline about the ending of the story we did not have yet access to. [P. 138]

The player's reaction can partially depend on their personal attitude towards spoilers in general. Some players are heavily affected by spoilers, however others look forward to the story even after they are made aware of its ending.

Yes. It's nice to see them show up and connect the dots. In fact this is why I enjoy spoilers bc you get to experience something both for the first time AND the joy of a second time (foreshadowing) at once. [P. 30]

The actual execution of the story and writing may also affect whether or not it is still enjoyable after being spoiled.

All the time. It varies from game to game, but in general a well-written story will make you want to read it even if spoiled - sometimes even making you enthusiastic to find out exactly how a spoiled event comes to pass - while a poorly written story... doesn't really matter. [P. 121]

Despite these effects, respondents state that the possibility of being spoiled is better than the alternatives, which could prevent the player from even using the character they worked so hard to get.

It varies strongly. If the character is a walking spoiler, due to character dialogue, character story or otherwise, it usually affects the story negatively for me. There is also the disconnect between using a version of a character that has not appeared like this in the story, like starting Honkai Starrail and getting Dan Heng - Imbibitor Lunae, while the transformation of Dan Heng, his backstory and actions are not yet at that point in the narrative. It lessens the reveal in the actual story and provides some confusion after having gotten

the character as the apparent characterisation does not match what you previously experienced. On the other hand, not doing it like this would mean either locking the character until after completing the story or not having character development, both bad choices. [P. 401]

In some cases, the game may have mechanics in place to prevent the player from being spoiled. This can include prerequisite quests that must be cleared before information is revealed, or a simple warning dialogue that allows the player to close the story before reading.

Yes. Not really as the game cautioned me to not read their story yet in case of spoilers. [P. 47]

Getting Archer of Inferno and Assassin of Parasio made me more interested in who they may be and I kinda wish FGO did more hidden names and not just stop after The Epic of Remnant [P. 367]

At the same time, the character or storyline may feel incomplete if the player has not read the information, or cannot read it due to lacking ownership of the character. They may have with an incomplete image of the character's personality, especially for characters with a limited or no appearance in event or main stories. While reading into the character profile is a way to invest additional time into a character (see Section 6.3.7.2), this barrier means that most players will not know that much about most characters.

It just so happened that Firewatch's story was sad which allowed further empathy for her, but I can totally imagine myself passing by that point if I did

not give her a chance by reading her story especially with the sheer amount of characters in Arknights. Gameplay and e2 artwork were a hard carry. [P. 32]

In hsr, I just hope that hoyo give more attention to [Boothill's] story and character, not just brush him under the rug. I'm so upset that hoyo kinda treat him as a mere comedic relief with insignificant role. You won't know his story if you don't pull for him. [P. 54]

In addition, if a character prominently appears in a limited time narrative event, that story can disappear from the game without an archive, or be inaccessible to new players. This can similarly affect how players joining the game late may think about these characters, as it is harder to access this information.

the medium in which they appear in does not affect how I feel about them though I am less likely to learn about a character from a Gacha game. A Large amount of Gacha (Including Genshin) hide character important details behind a pay wall or limited time event where if you don't do that event you lose out on that lore. I started Genshin early enough to see most events if I were to start a different Gacha now then I wouldn't connect to the characters the way I do now. Animes, Mangas, Non Gacha Games, Ect. on the other hand I can start at any time and feel the connection the same way others did at the same rate. [P. 174]

6.3.9.3 Expectations and monetization

Players are also aware of the importance of characters in gacha game monetization strategy, and how this can affect the design and presentation of the characters themselves. Gacha game characters are presented to the player as targets to fall in love with and desire.

I think its easier to fall faster in "love" with a gacha game character because the way they are presented is to ensure that the player falls in love with them, especially when its a otome game like LDS. When I first played it, I was going in with the expectation that I was going to "choose" a character to fall in "love" with vs when you're consuming an IP that is not a gacha, the characters do not interact with you directly and you need to learn to like their character from outside interactions. [P. 29]

The trope-based nature of many gacha game characters within the anime media mix (see Section 2.3.4.3) is also evident to respondents.

When a character is made as part of a gacha game, it comes with more of a feeling that they were created to BE marketable - like a company shuffling through various combinations of character and visual tropes to SELL to specific audiences. "Lab engineered," as people say. [P. 25]

Many respondents described how their expectations for gacha characters were generally lower than those for other media. Part of the reason is that many gacha games have large casts, thus each character cannot have that many hours of

characterization devoted to them, and the writing is additionally focused on making the character appealing to the player.

The medium definitely changes my expectations for characters. While I seem to always favor characters I find visually appealing no matter the medium, I do expect less substance from gacha game characters compared to characters from other media. I approach gacha games from the typical viewpoint that they are character collection focused, I do not expect much quality in other aspects of the gacha game characters besides trying to appeal to players to get them to pull. In contrast, I expect characters in other media to have a balance of personality, background, and story presence to match their placement in the story. [P. 58]

As a result, the player may disengage from the character's story as they find it lacking in depth. Conversely, it may also mean the player engages with characters they would find boring or shallow in another medium, because their expectations are based on different criteria.

I look for very different things in different mediums. In a gacha game, obviously character design and gameplay are a huge consideration. I often don't follow plot in games because they're usually not well written or nonsensical or irritatingly long-winded. So their character development and story involvement is less important to me. In other media I would consider how interesting or compelling their storylines and character development are. A good character would have to be well fleshed out such that I can get into the story. To sum it up I'd weigh a gacha character by their aesthetics, value

to gameplay and interesting character quirks. My expectations of characters in other medium are completely different and driven by their role in the plot.

[P. 276]

The most recent characters are also the most prominently featured in the game at the time of their release. In a live service game, recency bias and promotion of the newest updates are unavoidable, however gacha game players are simultaneously aware that the main point of the character's heavy appearances is to sell them.

Gacha games often put a lot of focus on newly appearing characters, encouraging the players to look into them. This focus is also there for Wis'adel, and contributed to me liking her. [P. 64]

Kokomi from Genshin, while I do love this character has seen barely any development and given enough depth for her to feel alive in her own world. She has been glossed over and hoyoverse will never talk about these characters again because they need to focus on the next new shiny meta defining waifu bait character that they want to sell. It's a cycle that never ends, and it saddens me to see how people just don't acknowledge it... or they do but refuse to not to venture away and experience other video games that focus on just the few it has to offer. [P. 11]

Players may also become tired from a feeling of market oversaturation and endless pushing of certain characters. They may become spiteful of products being repeatedly shoved in their face, moreso if they are cynical of the developers' intentions (i.e., a cash grab), and even moreso if they are neutral towards or dislike the character being featured.

Another example is Morgan (fgo), who played an excellent villain (until the end) in Lostbelt 6 that I really enjoyed, her later usage in an event as a deus ex machina made me far more negative towards her given her excessive presence in the community already, making her appearance and portrayal feel like blatant pandering for banner sales. [P. 99]

Another common complaint related to monetization is powercreep. When new characters are added, they must be at least on par with existing characters in order to not be seen as a waste of player resources. As a direct result, existing characters are likely to become powercrept or otherwise made obsolete over time. A player's favorite character becoming obsolete can cause them to become frustrated to the point of quitting.

in a game i feel attached to the characters i pull even if they are not good, i ended quitting some games because they got so powercrept that i could not use the characters i liked. [P. 292]

This expectation of powercreep can also discourage players from forming any attachment in the first place.

I don't think there is a gacha character I strongly identify as. This is probably because most gacha games have a very notable Power Creep and if I play for a long time I am forced to swap characters and change party members, so a certain level of detachment is inevitable. [P. 162]

In addition to numerical powercreep in gameplay, a similar creeping of narrative presence or quality can also be felt. Older characters may have less screentime,

and writing that is shorter, simpler, or less compelling, and it is unlikely for their writing to be improved to match the level of more recent character releases.

Because most gacha games are live service and adding new characters to expand on their cast is their business model, it can be difficult for them to flesh out all their old characters as their writing improves over time, which makes older characters appear lacking in comparison. Non-gacha or gacha adjacent media, like DC and Love Live!, are able to flesh out characters much more in other stories since creating new ones is less of a priority (in the case of DC especially, writing the 100th version of Batman is much more profitable than trying to create and market a new character) [P. 288]

6.4 Player actions toward liked characters

If a player likes a character, they may perform a variety of actions that stem from their like of the character. These can be broadly grouped into attachment, identity, and consumption.

These actions that players take regarding liked characters are related to the activities of other fandoms. Players move between games and fandoms, and boundaries between fandoms are blurred in the age of digital fandom (see Section 2.3.5).

If a player does not like the character, or personally does not attach to characters, they will generally ignore the character and not partake in these actions.

6.4.1 Attachment

The player may form an emotional attachment to a character and display this relationship through various means, such as social media. This relationship can take many forms, whether platonic, romantic, familial, or possessive, with players using terms such as "waifu", "-fan", "-main", and "-haver" to label the character and themselves in relation to each other.

I don't usually assign an identity to myself, but all the fictional women I like are my waifus. I make them waifus because I like them so much I want all of them be happy. Marriage seems like the most straightforward path to it (even if in the name only). [P. 186]

A player can assign different labels to different characters, and a character can also have multiple labels from the same person.

I'm all of the above~ Sometimes I don't see characters as my husbando/waifu but rather as my children or just as a character I hold dear to my heart and want to see live life well and get their happy ending. Shenhe from Genshin is at this weird spot where she's me in the sense that I relate to her very much, but she's also my wife in the sense that she's beautiful, but she's also my daughter in the sense that I want to see her grow up well and live a good life. [P. 271]

These labels are created from how the player views themselves in relation to the character, the character's personality, and specific terms that the character likes or dislikes.

Nowadays, most of my favorite characters tend to be smaller/younger and I view them as if I would like to spoil and dote on them [...] I commonly refer to them as "my children," "my son/daughter," "my boy/girl," "my baby," etc. when posting on social media or talking to my friend groups familiar with anime. [...] Vil Schoenheit from twst and Meltryllis and Morgan from FGO get special "my queen" treatment. They are too mature to receive the child treatment, and their achievements and attitude inspire veneration. Aside from not having much of a desire to relate my identity to these types of characters, it feels like it would be actively wrong to NOT place them above me and idolize them. Powerful femme characters inspire a special kind of awe for me. [P. 25]

To quote myself on many an occasion "Mordred is my husband, my wife, my knight, and my king." (She doesn't like to be called a woman or man. She also was a knight but aspired to be king.) [P. 270]

The player may also view their relationship with the character with varying levels of seriousness. For one person, their "waifu" may be just one favorite character of many, while another is fully committed, similar to a relationship with another person.

I don't relate a character to my identity I may say X is my waifu but that never defines me in any circle I am part nor any context. it may become a joke but never part of my identity. [P. 125]

Hatsuzuki is my wife and we are lovers. She is my Goddess, my Mistress, my Everything. She is also my Tulpa whom I have conjured. [P. 244]

A few responses a shift in fandom language, where in their perspective, the usage of the term "waifu" used to be more serious.

I call myself a Qingque main, because she's the one I dump all my gacha resources into first, including the fuel/trailblaze power needed to farm better relics for her to equip. Like, I like Qingque a lot, but she's not waifu material for me. I'm from the older generation where waifu/husbando was on the same level of wife/husband irl, not this "I like this character" and back then calling everything a "waifu" meant you didn't actually have one. "More than one waifu will ruin your laifu" and all that jazz. [P. 177]

I will preface this by stating that I generally don't utilize the word husbando/waifu in the classical sense of the word but largely in a more common modern usage that just essentially means you really like that character regardless of actual attraction or legitimate obsession. [P. 190]

With the "-haver" and "-wanter" terminology specifically, these identities can also refer to the amount of desire and time investment the player has spent or plans to spend specifically for this character.

C6 Wanderer Haver. I usually share this on socials as a way to flex that I took the time, dedication, and some money to get the character 7 times in a gacha. It's like a medal of my dedication since it's not an easy or cheap feat. [P. 9]

As many players will learn these terms from the community, which communities they join and when can determine how they view the terminology and its usage.

i am a "columbina wanter", and i just say it when i'm telling someone i want to pull for her. i use that phrasing because it feels like a silly internet thing. [P. 253]

I am a Mlynar-haver/wanter. I like puppeting around characters that I like. I feel this way most the time, but may occasionally call the character my 'husbando/waifu' in a certain friend group because that's the terminology they like to use. [P. 139]

Although the emotions towards the character stay the same, a person might use different terminology to refer to the character depending on the context of the conversation.

They're my "video game husbands" or my "previous babies" in fandom related contexts. In regular conversation I just refer to them as my faves. [P. 110]

I think having a gacha waifu is a lot like having a celebrity crush for normies. It's not a relationship, but they represent an ideal, and it's something you can joke about with people you're close to (or in a community of fellow fans). In this case, that's only going to happen on social media or at conventions. When it comes to identity, I probably relate more to being a "main" of a given character. Expressing, for example, that I'm a Hutao (Genshin Impact) main can indicate preferences of playstyle, choices of investment, and maybe even hint at personality. Again, I would never use that kind of identity in the real world, but in a social media setting it's a way to find like-minded people to discuss familiar topics. [P. 106]

6.4.2 Identity

The player may also identify with the character, either privately or publicly.

Privately, the player may feel inspired by, or aspire to be like a character, viewing them as a muse, self insert, or role model. In certain cases, such as those involving dissociative disorders, their identity may be impacted in significant ways.

This is a little complicated, but I do refer to [this character]⁶ as a “boyfriend” of sorts, and I am involved in the “yume” community for this game to a certain extent. Truthfully, I have a dissociative disorder and I found [he] greatly aligned with a pre-existing part of myself or way of viewing myself, and found over time he was integrated into my identity in that way. I am extremely private about this though and I do not like disclosing this publicly. [...] I do love him, as much as one possibly could love a fictional character, but also since he is now connected to how I experience my dissociative disorder, it goes a little deeper than that. [P. 31]

Publicly, the player may use personalization functions in-game or on social media to associate themselves with a specific character. This can range from using the character as a profile picture, to making an entire social media account dedicated to that character or a character ship (see Section 2.3.5).

On Reddit, the r/GrandOrder subreddit has flairs that can include character icons, and I use these to show my favourite characters (Ereshkigal, Mandricardo, Meltryllis). IRL I don't particularly relate my identity to a specific

6 Name of character redacted to protect anonymity of this participant.

gacha character beyond mentioning that a given character is my favourite if they come up in conversation. [P. 239]

Definitely in the husbando/waifu camp. I am our local Gawain FGO enjoyer and I make this known to my friends by talking about it, adding him to my pfp/content, etc. By associating myself with the character it's a way of expressing my fondness for them [P. 35]

I like to joke I'm an Aventurine main because I couldn't stop talking about him for months. I even jokingly changed my name on Discord to "Aventurine Main". It's gotten to the point even my friends who don't play HSR know who he is, and friends always try to get me Aventurine-related merch, or they see the character and think of me. [P. 201]

The player's identity regarding a character may also be related to creating fanworks. Whether they share it publicly or choose to keep their work private, a player may enjoy creating fanworks of that character or a character ship including them. Furthermore, a person might become known in the fandom specifically for their fanwork of a character or ship.

I am a hobbyist artist and a "yumejoshi"(夢女子) so kind of like a self-insert shipper with Mr. Rose (i.e., i like having an original character/oc to ship with him) and most of my friends who play Pokemas are also yumejoshis/self-shippers. [P. 5]

I'm very invested in Sampo, because as an artist and a shipper, I want to explore different sides of him and another character I ship him with, be it a ship art or solo art. Drawing this type of content brings me joy [P. 299]

6.4.3 Consumption

Consumption of the character includes the purchase or acquisition of the character not only in game, but outside the game through official merchandise and fan made⁷ merchandise.

The player's affection and attachment towards the character are directly tied to consumption. Similar to responses regarding building characters (see Section 6.3.7.1), collecting the character and their merchandise are also ways to display one's love for a character.

I do feel as if the gacha aspect affects my attachment to the character. With the second character, Hitori, once I've played the game once then I've already "experienced" my time with him. There's nothing else I can really do to have some sort of fake interaction with him. He also doesn't have much merchandise, and I own what exists already. Because of this, he tends to sit at the back of my mind and I don't talk about him often online or to my friends unless the topic is brought up. For the character that is in a gacha game, Liliadent, I do tend to talk about him more often and whenever his "cards" show up in the current gacha banner, I feel more encouraged to get his card and have a full collection. It feels like a show of love that I can't do like with

⁷ Discussion on whether looking at fan art would be "consuming content" or "partaking in a community activity" is outside the scope of this paper.

Hitori. There's this sense of "I must get this card because I love this character and he looks good in this card," and it feels like I'm doing something to support him. There is also something about how banners are time-based that contributes. Hitori is on the back of my mind because there's nothing new for me to do to show my love. Whenever there is a new banner in a game, it gives me that chance. [P. 9]

Similarly, purchasing a skin for the character serves multiple purposes: it further displays love for the character through consumption and collection, increases the ability to personalize the character, and the player may prefer the skin over the original appearance.

i just want my faves in my fav outfits [P. 24]

In some sense, this act of "showing love" through consumption has a reason rooting in logic. By displaying the character's importance to the player through numerical data, the player hopes that they can convince the developer to continue including the character in future updates (see Section 2.3.5).

i think gacha makes it so there's a bit more of a bond, because there's a sense of interaction. shinobu will never know i like her (and neither will xu fu) but i can put effort into pulling and levelling up xu fu to show my appreciation for her. this effort is also apparent to people on my friend list, and to the devs. if enough people invest in xu fu, she might get more content or even an alter! [P. 394]

After purchasing merchandise, the player may also display the items in a character shrine or itabag, allowing them to carry this love into the physical world (see Section 2.3.5).

Vil, the first character I mentioned above, is a character I love *because* of my resonance with his character writing on a baseline identity level. [...] I have an itabag decorated with fan merchandise of Vil, and sometimes he comes up in conversation when relevant, and I've cosplayed him twice to anime conventions. Beyond that, I don't consider it a close tie to my identity; just a fun parallel, and I like to wear my adoration for him on my sleeve whenever I get the chance. [P. 6]

6.5 Player may not use the character

One might assume that once the player gets a character, the character will be built and eventually used, especially if the character is strong in gameplay. However, that is not always the case. As discussed in Section 6.3.7.1, the decision on whether or not to build a character is a deliberate and meaningful choice.

When asked if they had strong characters they didn't use (multiple selections allowed), 203 (36.1%) of respondents included "Yes, but I intend to use them later" in their selections, and 157 (27.9%) respondents included "Yes, and I don't intend to ever use them" in their selections.

The former group generally includes players who want to use the character, but cannot yet viably do so. The latter group includes players who dislike the character,

or have no need for the character—whether due to already having a strong roster, or due to quitting the game.

6.5.1 Lack of resources

Players may find that building a new character takes too many resources or too much time, and thus do not find enough value in the character to build them.

Yeah, but just because I liked their gameplay in the test runs, but then after pulling them, level up ing them could have been an hassle so I just abandonned them [P. 63]

Depending on the game, building a character is more than raising their level. The more mechanics there are in a character's build, such as upgrading a weapon, leveling skills, or collecting random drops, the more work and resources it costs.

Most gacha games need you to level up their character level, weapon level, gear/abilities etc. to be useable at all. If you don't have any of these ressources It doesn't even make sense to pull any character. [P. 145]

Some materials also may be difficult or tedious to acquire, and even completely inaccessible for a new player, such as items dropped by specific levels. In this specific example, materials for *Genshin Impact* characters must be collected on the overworld map in pre-defined spawn locations, thus requiring the player to actively hunt for each one.

I also STILL haven't built Cyno because I don't want to chase down the bugs [a beetle that spawns in the desert section of the map, and is required for Cyno's ascensions]. [P. 8]

Lower rarity characters that the player has may perform just as well, be more interesting, and cost fewer resources or already be leveled up by the time the player acquires the stronger, high-rarity character.

Some characters are similar to stronger ones, but have a unique gimmick that makes them more interesting gameplay-wise. A lot of weaker characters also take less resources to build. [P. 103]

In addition, the difficulty of levels tends to increase further into the game, and therefore the character must be built stronger and thus costs even more resources in the later game.

Most gacha games requires you to build a character after pulling it. Early game, this is quite easy. But in the mid-late game, the amount of resources become quite significant. Sometimes, the said character does not fit your team and will need other characters to have the new character put into that team. This means that until you can fulfill these conditions, the characters will have to "sit on the bench" until you can make use of him. [P. 63]

A player may also lack a specific set of characters, which may be required to support or make use of the character they got. Without these supports, the character does not perform at their full potential. This situation is common in the early game, as the player hasn't accumulated a large number of characters yet.

Sometimes you pull a "strong" character and then their skillset just doesn't synergize with anyone you have. Like pulling a Quick NP servant but having no Quick support servants. [P. 21]

6.5.2 Lack of need and/or desire

Veteran players have different priorities and perspectives compared to newer players, as they already have an established and viable roster of characters. An early game player who has fewer characters would appreciate having more strong characters to carry their account, and is forced to adapt to what characters they get. However, for a veteran, the player may find their needs covered by characters they already have built.

In FGO, it's kinda different because I have a multitude of strong servants, however none of them can compare to how strong my Musashi is. In my eyes, why would I use a weaker servant? In theory, I could invest some time into making those servants as strong, but Musashi is just generally the better option for any case so it's like "why would I?" [P. 19]

Thus, a veteran player has the spare gacha resources to pull a character and leave them unbuilt and unused, and have a character just for the sake of collection. Although the player may like the character, they might not want to spend the time to build them.

To be honest, I don't consider spending on gacha to be of big detriment to my financial situation (I'm doing fine, and spending responsibly) so sometimes I gacha for characters just to look at them. Actually using them would require a

time investment to build their kit, and I value my time a lot more than my money. [P. 6]

Possibly the most extreme version of this is when a player returns to a game that they have quit to pull a character, without the intent of continuing to play the game. They acquire the character just for the sake of having them, knowing they will never use them, or even log on to the game. This behavior is discussed further in Section 8.7.1.

I wanted to get Furina from Genshin Impact because I had enough pulls saved up before I took a break. Shes cute. I just got her and quit afterwards. [P. 187]

So I downloaded Fate Grand Order and saved basically everything I had to roll for Astolfo, just to not get Astolfo, which led to me dropping the game out of frustration (I'm talking like 300 rolls here). Then when they released a "get a free four star" deal EVERYONE I know DM'd me to let me know so I redownloaded just to claim Astolfo...and then never played again. [P. 8]

As stated in Section 6.4, players may generally ignore characters whose personality and/or gameplay they dislike. They may not even have intended to get this character, but got them randomly.

Either I don't like the playstyle or I don't like the character themselves. [P. 23]

The player might not specifically dislike a character, but just not like them *enough*. With limited resources, some players will prioritize building their liked characters over others (see Section 6.3.7.1).

Raising only good characters is expensive, and I prefer building characters I like (which sometimes is weaker). [P. 26]

6.6 Player has an opinion of overall game

As core mechanical parts of gacha gameplay, these characters are not experienced as abstract concepts, but in a game. A player can enjoy a character, but if the game is not up to their quality standards, they have no reason to start or continue playing the game. The game as a whole provides context for how the player interacts with and understands the characters—not just games as a medium, but the particulars of the games themselves (see Section 3).

The game can be judged on its gameplay quality, narrative quality, and monetization quality. If any of these components are lacking, the player may quit the game, depending on what they value from a particular game.

6.6.1 Gameplay quality

The gameplay, no matter its genre or complexity, has to pass the player's expectations in order for them to continue playing. Different gacha games can vary in a large number of ways (see Section 3), and these systems and mechanics affect the player's opinion on the overall gameplay experience. Any of these systems, if done poorly or not to the player's tastes, can cause them to quit the game.

One of the more important considerations is the overall gameplay quality: does the player find the game interesting or enjoyable, how much variety is there in gameplay, etc. The majority of a player's daily play time will be grinding, thus that mundane loop must be enjoyable, or at least tolerable.

I played Nu-Carnival for a bit, I liked the character designs and was fond of a handful of characters but the gameplay was very dull. The main protagonist, Eiden, including Morvay and Aster were given new outfits and I played the game with the interest of wanting to see them in other clothes. I stopped playing long before they've gotten it. [P. 223]

I started Star Rail to obtain Dr. Ratio/try out the game since my Genshin friends had migrated there, but quit right after the tutorial because I realized I didn't enjoy the setup of its turn-based system [P. 68]

Due to the mobile platform, and that some games also have PC and console ports, the controls in the game are also a factor as to whether or not the player will keep playing.

Lucia from Punishing Grey Raven. Nothing major, just that the game finally got an official PC Launch. I stopped since the tactile touch-screen controls weren't intuitive for me. [P. 47]

The player also considers whether or not the game is worth their time based on the rate of rewards; though this does apply to the gacha mechanics, it can also refer to other rewards such as events or leveling materials.

I stopped playing very shortly after getting the character because I realized how awful leveling characters in Genshin Impact is. [P. 137]

Depends on the gacha and what stage the player is at. Gachas with very generous drop rates allow free to play players to hoard resources much

easier to clear the startup difficulty threshold much easier such as azur lane.

[P. 241]

Different live service games update at different rates, and with different amounts of new content per patch. Games must be careful to have updates that are frequent enough to avoid becoming stale, yet not so frequent that the player quickly becomes overwhelmed with new characters, limited time events, and powercreep.

I think gachas are the extreme version of live service games. Unlike other live-service models that release updates monthly or yearly, they have cut down the formula to the point they drip-feed content in a matter of weeks. I think gachas' main strengths is the constant, frequent flow of updates. In my opinion, gachas that do not add new content regularly are sure to die. [P.

136]

Similarly, different games require a different amount of playtime and attention from the player per day. Some games have auto-play systems which allow the player to leave the game idle while collecting resources.

most games i play have a reserve or an auto battle feature so it doesnt really take me much to gather materials but characters are pretty material heavy [P.

135]

Regardless of whether the player has access to auto-play or must play manually, logging in daily to grind materials is still encouraged in most gacha games. The grinding loop in a live service game creates a daily, weekly, and monthly routine for

the player. The teams of characters that the player uses therefore also becomes a core part of that routine, and the player's daily life.

I have greater feelings for Casablanca because her being a part of my team helped my daily routine through the game. The frequency of interaction is much higher, compared to watching an anime and then being done with it. [P. 116]

6.6.2 Narrative quality

Similarly to the gameplay, if the player cares about narrative, then the game's story also must pass their quality expectations.

When asked how frequently they read gacha game stories without skipping, 29.3% (n = 165) of respondents said Always, 41.7% (n = 235) said Usually, 17.6% said Sometimes (n = 99), 8.7% (n = 49) said Rarely, and 2.7% said Never (n = 15).

Respondents were then asked to list up to 5 of their top factors that contributed to them reading a gacha game's story. When aggregated, 3 factors appeared in the top 5 for all 5 categories of reading frequency listed above: Plot of story, Overall writing/translation quality of the game, and Presence of characters I like. The other 2 factors for each category differed, however Perceived Importance (e.g., main story versus side stories), Setting/world of story, and External factors (e.g., time) appeared 3 times each. External factors specifically occurred in the top 5 for Sometimes, Rarely, and Never groups, and 6th for the Usually group. Unfortunately, even if a story is extremely well-written, players may not have the time to read them.

Although characterization is done differently in gacha games compared to other media (see Section 6.3.9), the actual format of the narrative is usually delivered through usual means: animated cutscenes, narrative-based gameplay stages, and visual novel sections. The familiar narrative delivery means it's intuitive for a player to judge if they like the quality and style of the game writing.

I don't think it would affect me that much. If I think a character is someone I would like a lot, I'll like them. I also think it helps in that for Fate/Grand Order, it's story structures itself like a visual novel as the main selling point, so I feel like I'm reading the story with Castoria quite often when she does appear [P. 55]

Gacha game characters allow for the player to have a lot of personal interpretations of the character, i.e., headcanons, due to how they appear in the narrative. The game and its surrounding media provide a variety of characterizations and tools for the player through their appearances in different story sections, voice lines, gameplay, and profile text. These scattered pieces of information must be used to piece together even a simple backstory, and in the end may still be incomplete or leave plenty of room for interpretation. Due to the live service storytelling, characters also rarely reach a definitive conclusion, especially if they are a minor character and do not or rarely appear in the main story.

For Mountain, since he is from a gacha game with so many other cast and storylines going on at the same time, you don't get much story from him. You know who he is, and kind of what happens to him but you don't really get an ending. Everything that can be gleamed for him is only based on the event he

is in (which is a small drop in the bucket compared to the whole storyline), his voice lines, his outfits, and some information other characters may drop about him. In a sense, his story isn't done, and it probably never will be because he isn't a 'main character' not he is a particularly popular character compared to the others and as such the story isn't centered around him. [...] With Mountain I can envision and twist his storyline into whatever I want because it doesn't end and there isn't enough information for me to even guess how it ends [P. 393]

The lack of narrative appearances can be frustrating when a character is well-liked by a player, as no matter how much effort the player puts into crafting these interpretations, they are not in control of how the character appears in game. If a character appears rarely or is mischaracterized in their appearances, the player will have a worse opinion of the story and writers.

Eternity from Reverse: 1999 was the first six star character I pulled and the only six star character I have pulled duplicates for. I use her a lot because she is easily my strongest character, but I also don't particularly care for her as a character too much. She has a relatively interesting backstory, but since she has never appeared in the main story or any event story, she is pretty much just a loose set of tropes and ideas that aren't anchored within an actual experience. [P. 263]

As many of these games are categorized as RPGs, the player may be presented with dialogue choices within the visual novel (or equivalent) sections. The story structure of gacha games is much more linear than most RPGs by necessity, and

players know that their choices will not change the ending of the game. That does not, however, mean that all choices have no effect, or that the player does not think about their choices.

When choices appear to have no structural effect, players find meaning in other aspects of their choices. For example, players can choose dialogue options that treat a liked character well (see Section 6.3.4.1). They also choose options in order to roleplay a predefined POV character, or self-insert, depending on the player and the game:

I think it depends on the genre. Genshin - doesnt matter to me since I barely read the story, I just like characters for their design and personailty. LDS - Since the entire game is POV, its much more important and impactful when there are "choices" since I am choosing which line the character will use with me [P. 29]

Players may also have a more metagame reason to choose one dialogue option over another, such as choosing a joke dialogue choice, or choosing the shortest dialogue to save time.

Usually the dialogue options in the gacha games I play tend to be pretty deterministic [P. ...] I will normally try and stick to what I think would be what the character would say with the dialogue options, unless there's a specific reason for me not to (i.e., I want to intentionally bait a character's reaction, or I know that going through that specific set of dialogue options will progress through quicker). [P. 17]

Similar to other RPGs, they may also choose to see the most interesting option, or all the content they can. Due to lack of replayability, this may only be possible in certain games and contexts.

As somebody who likes exploring and replaying dialogue scenes in games to see all possible interactions, I am used to picking dialogue options just for the sake of seeing what happens. No hard feelings, right? [P. 31]

Occasionally, the player's choices do have a narrative and/or gameplay effect, though rarely still mostly linearly.

I like games that do that because sometimes it can change the storyline or rewards like in normal [games] like the choices you make can have an effect in the future. [P. 34]

A simple set of changes can sometimes follow based on which gender protagonist avatar the player chooses, if applicable:

In Granblue fantasy you can receive valentines day chocolate and give out white day chocolate. If you were the female variant, you can give out valentines day chocolate to the female cast and receive white day chocolate. [P. 14]

The structure of the game's roster of characters, whether it is limited or expanding, has a cascading effect on how other systems are structured and experienced. Audience preferences based on previous norms, as well as limitations on developer resources, tend certain genres towards limited or expanding rosters. A player may gravitate towards limited roster games or expanding roster games due to

preferences towards different gameplay genres, storytelling styles, and other factors. They may also like both, appreciating the strengths and weaknesses of either kind.

Gacha games tend towards expanding rosters, similar to genres such as MOBAs. The addition of new characters creates more variety for someone to find a character they like, as well as a sense of novelty. Players also enjoy the roster expanding through new characters under a mindset of "more is good" (see Section 8.7.3).

I just think it's interesting to see new characters and new character designs and stories. Girls Frontline comes to mind where the new characters often had really good designs and I enjoyed seeing new ones. [P. 21]

In terms of gameplay, an expanding roster creates more variety in both individual character abilities and possible strategies. A large roster of characters, however, eventually creates that gameplay becomes more and more complex as new characters try to differentiate themselves from existing characters. Limited roster games therefore implement simpler, though still engaging, gameplay genres such as rhythm games and simple turn-based or auto-combat.

I had a problem with Honkai Star Rail during initial release since I much more enjoyed my experience from Summoner's War, another turn-based gacha game with literally a thousand units to choose from over HSR's measly like 20. Without the versatility of artifact and playstyle like Genshin, it got boring so fast, I quit and came back last month when the roster was larger (I am not kidding). This is why I prefer Arknights with its vast roster that still allow strategy between choice of skills and of course change in enemies. I can

enjoy looking at any clear because it is a unit that I typically did not think of.

[32]

The primary difference in narrative structure is simply breadth versus depth. In expanding roster games, stories focus on breadth, and the story connects many different characters over a large world. The scope and variety of storylines can easily be expanded by adding a new character or location. However, this results in most characters disappearing from the story after their first appearance, relegated to a cameo or side stories. In contrast, limited roster games focus on developing the storylines of a smaller number of characters, giving each character ample screentime and a chance to grow. However, players may find the story becoming stale or restrictive, especially if the roster or setting does not have enough variety between storylines and dynamics.

Limited roster - Twisted Wonderland has AMAZING character writing and consistency even as main story develops and side stories are inserted, and I know this is partly thanks to a limited roster and small cast. This allows the characters to be focused on and fleshed out - you can really see how they grow alongside each other. Expanding roster - Like I mentioned before, it made me happy that FSR's Yamato Takeru was added to FGO. The expanding roster means it's always possible that my favorites from other Fate games will be added in. If I tire of the cast, frequent additions of new characters mean it's more likely that something might catch my attention and reignite my interest. It's also less limiting in terms of story potential - the scope can be easily expanded. However, a disadvantage is that an

expanding roster necessitates neglecting and leaving some characters behind, sometimes for years. It's just not possible to keep 100+ characters relevant and multidimensional. [25]

Neither is strictly better than the other; depending on the story the writers want to tell, they can choose the appropriate roster type to best utilize its strengths.

It depends on the storybuilding of the game. If it's like a really big world, then having more characters is nice, as you view stuff from different points of view. If it's a fairly small world, then having limited roster with alternate versions would be nice, since there's more character growth potential. Really depends on how the story is told. [P. 26]

Both roster types also require strong authorship to be compelling, and neither is necessarily easier than the other.

Both are good. Neither one is going to lead to inherently better writing, trust me. [P. 121]

Despite the previously mentioned change in expectations that players tend to have regarding gacha characters, as well as the stigma towards gacha games due to how their monetization strategies can negatively affect the gameplay, ultimately the narrative and the gameplay each must be enjoyable *enough* for a player to continue to enjoy the game, just like any other game. Similarly, the character must have *enough* depth and personality to be memorable and likeable, just as any character in any medium.

The character's inclusion in the gacha game do not negatively affect my perception of the characters themselves. If anything, I should be thankful they were included in the game; we would have less content of the character in existence. [P. ...] I do believe there's this notion that if X character is a gacha game, it means it's bad and that X character is "stuck in a gacha game" sort of like a purgatory but it doesn't make sense because they character itself is still good, cool, appealing, or even well-written; nothing changes because they're in a different medium. [P. 210]

6.6.3 Monetization quality

Different games also have different implementations of their monetization. Even if the player likes the gameplay and the story, a game that is too aggressive with its monetization will push players away. In addition to the actual gacha rates and mechanics, related systems such as the scaling of difficulty, rate of progression, and level of powercreep, can make the game feel more predatory towards players.

My friends convinced me to play Revue Starlight: Relive because I thought some of the characters were cute and Revue Starlight is inspired by the Takarazuka Revue in Japan, which I was interested in. I liked the characters of the series a lot, but the gameplay and story weren't actually that compelling to me. Worst of all, the gacha system was one of the most toxic play-to-win I've ever encountered. So I eventually got bored and stopped. But for that series every year around a character's birthday she'll get a new version and a bunch of content and banners. So even about 4 years later whenever my favorite character "Tsuruhime Yachiyo" has a birthday banner, I

usually log back into the game to roll. But I rarely keep playing after that. [P. 270]

Players may also prefer one form of monetization over another. For example, a player may be willing to spend on cosmetics, battle passes, or a monthly login pass, but refuse to spend on the gacha directly.

I don't spend money on buying currency, but I do spend on those gacha that have the monthly subscriptions. [P. 43]

As monetization is closely tied to engagement, further comments on monetization are in Section 6.7.3.

6.7 Player experience over the lifespan of a gacha game

It is important to note that all of these gacha games are live service games. Not only are new banners and game content introduced into the game over time, game systems also change as the game progresses, with the player progressing alongside. Although they share many similarities, the experience of a veteran player can thus differ drastically from a newer player, even when referencing the same point in the game. Players' attentions are also pulled between multiple concurrently running live service games, each with their own engagement cycle.

6.7.1 Long-term planning

Gacha games are created with the intention of lasting for a long time, with players continuing to play for multiple years. While not all games succeed at this, players similarly set long-term goals in terms of months or years down the game's lifespan.

It was initially Furina from genshin impact. I had become invested in Genshin 2 and half years prior to Fontaine's initial release. When I first started playing, I was reading some of the game's ascension material's lore, and I became interested in her. She seemed to be a egotistical and righteous character that the people of Fontaine respected and wanted to wait for her release. I wanted to play Genshin again back in 4.0 so that I could save up and get the Hydro Archon that I had earnestly waited years for. [P. 167]

If a player has this mindset of long-term goal setting, this can also reduce fear-of-missing-out (FOMO), as the player expects every character to come back eventually (with some exceptions), rather than be unavailable for multiple years. However long it takes, the player can commit to saving for the eventual rerun.

There are however no character's I have a negative such relationship with. But this is probably helped by the fact, that in that game it is possible to get basically all character *eventually*; so there's never a fear of "if I don't get them now, I'll NEVER be able to". [P. 409]

It is also more important for a F2P or low-spending player to have this patience, since they can't guarantee getting every character on every banner that runs. As described earlier, F2P players describe saving up for pity in order to avoid the negative feelings that come with failed gacha pulls. Thus, in the long term, these players do expect to get all of the characters they want, despite the random element.

I always expect them sooner or later and am very reserved with my gacha savings. Since there is no if but when the character comes, it is expected. [P. 120]

As the game adds new characters over time, the number of characters that are in rotation only increases, diluting the chances of any specific character. This is especially true in games that primarily add characters in the highest rarity tiers, as those are the most desirable.

Part of the issue with expanding roster games is that they tend to get top heavy in terms of rarity, with there being fewer common and rare characters than super and ultra rare characters, which limited roster games don't have the same issue with [P. 130]

The developers may change the banner system in order to solve this problem, such as adding a new banner format and/or the frequency or character reruns. Since saving and planning for characters is so integral to long-term gameplay, changes in gacha format also change player's calculations and experiences pulling the gacha.

[...] because in the three years where there was a chance to roll [Aak], he never came, and now wont ever come due to the change they made last year. That change being removing old operators and moving them into their own separate banner, and being only attainable from there instead of the regular banners going forward. So unless it's a new player, a veteran missing specific units , or a whale trying to max potential everyone, theres no real reason to pull on the banner if you've already gotten who you've wanted which I have. [P. 539]

As part of this planning, the community tracks banners to estimate when characters rerun. They may find that some banners may also be "rarer" than others (such as a

longer gap between reruns or fewer reruns overall), leading to those characters' next banners to be heavily anticipated.

While not the sole focus, it is the case that in Fate Grand Order I have taken long periods of time of inactivity due to burn out from the game yet have returned to catch up with the story and updated my game to roll for characters I knew were extremely beneficial in a gameplay sense as I'm aware of how long it will be before I have the chance to do it again and don't want to potentially wait years for that opportunity. [P. 190]

6.7.2 Limitations of live service games

Engagement mechanics such as stamina bars are not the only factors that may force a player to stop playing early and come back another day. Content is added in regular updates, and the player may end up clearing all of the currently available levels. Additionally, the content of some updates is limited-time-only, which prevents the content of one patch from being played in the future. Progression is time-gated in multiple ways (for example, limits on how much of a material can be farmed through a stamina system or weekly limit, or limits on how much gacha currency can be earned due to the current number of stages available). This helps ensure that the player always has something to do long term, and they don't quit.

I'm pretty much always focusing on building someone in order to keep me occupied and avoid that feeling of "what now ?" that often results in me quitting games. [P. 78]

The player is also aware that, as a live service game, gacha games do require some amount of player spending in order to continue to exist, and that the predatory monetization tactics are in some ways a necessary evil. Therefore, rather than being envious of whales, some players appreciate whales for spending on the game, allowing F2P players to continue to have a game to enjoy.

I only play one gacha game, and i'm pretty new to the genre. I thnik i would lend myself to limited roster more, but expanding roster allow more freedom in the story (and make big bucks for the company, so better game for f2p player ^^) [P. 57]

However, players thus also believe that whales are therefore the main target of the developers, which can restrict character diversity and lock more interesting gameplay behind a paywall.

Gacha games are very profit driven by nature so characters are made to sell well and are typically forgotten if they don't sell or are old. They are also tailored to the preferences of the bigger spending demographics, which sometimes causes there to be not too many variances in between characters. [P. 216]

Similar to many other live service narratives, there is no repeatability unless the player creates a new account. Even if the player does, they will miss out on non-repeatable limited time events that have already happened. Unlike with full release story-based and character-based games, the player can't replay their favorite part of the story over and over again.

Though, there is the matter of replayability that gacha games don't really have, so you can't, like, play through the liked character's story again without creating a new account and starting from scratch, which is a shame. [P. 42]

On the other hand, the live service nature of the narrative also means the player community can, or at least perceives that they can, try to influence the game's future. This can range from asking for better quality of life changes, to making characters more popular in the hopes that they will appear more frequently as a result. As noted by the below response, this may give marginalized players more hope of seeing their desires represented more often in game:

As in, with in a gacha game (live service), I have more options of favorite characters to pick and their appearances are largely affected by the community's opinions -> influenced the dev to include them in events, campaigns, etc. While for traditional games, if I interested in someone else not in the main casts, I have very little chance to see my favorite characters outside some specified sections and we all know for games, they will always favor male players - female characters. [P. 60]

6.7.3 Engagement cycle & quitting

Respondents describe the effect that the large number of character releases has on their attachment to characters. There is a constant cycle of liking a character, pulling them, enjoying them, then eventually moving onto a new character where the cycle repeats (see Figure 5, in Section 6.1).

Attachments to characters only found in gacha games can therefore feel a little more shallow and short-lived, as the nature of live service games' advancing stories tend to move on and the character may become less relevant and stop receiving development. I noticed that my more obsessive phase of liking a favorite in FGO tends to last about 2 years, then switches to another character. [P. 25]

Over the months and years of playing a game, the player can lose interest or have other responsibilities, even as the games' engagement tactics try to ensure that the player continues to play long term. Players describe taking breaks from games and coming back sporadically, and having their time split between multiple games. As mentioned in Section 5, a large majority of respondents play more than one gacha game concurrently.

It all comes down to time efficiency for me, since I play too many gacha games and they're all very time demanding. Generally speaking, I stop building once I have a bare minimum team that can get me through almost all gameplay situations, and then move on to other games from there and only return to build new characters if it sparks joy. [P. 6]

Respondents reported a variety of reasons for becoming tired of the game. Other than the reasons mentioned in Section 6.6, which more directly reflect the player's opinion of the game's *quality*, these reasons describe the player's experience with the *live-service* aspects of the game (see Section 8.7.1).

Players described feeling tired, stressed, or "burnt out" by playing a gacha game for too long, as the game begins to feel like labor.

Furina from Genshin Impact, i loved this game but got burnt out so bad that i still can't return, i love archons in Genshin Impact, they have a lot of lore for them ingame and they usually are pretty powerful, so it was tempting to return for her since I've been collecting a team of archons, but sadly burning out won in the end [P. 225]

This can worsen if the player falls behind on new updates (such as if the player has too many other responsibilities) and feels pressure to catch up due to FOMO.

If I had stopped playing a gacha game for an extended period of time, I will not return to that game. I have what is commonly called "FOMO", so I feel that if I missed a lot of events/content, it is already too late and not worth investing time into the game. It is also the reason why I do not like starting a game that has already been launched for a long time; I want to play a game from release day so that I will not miss any time-limited content. [P. 74]

A player may also be discouraged by failure to acquire a character. Though they might return when the character reruns, the disappointment is still strong enough to push them away from the game for a significant period of time.

Honkai Star Rail, Fu Xuan. I love her design. I left again shortly after I failed to get her. [P. 111]

The game still has the opportunity to inspire players who have stopped the game to return. As mentioned above, many respondents play multiple gacha games, and some specified playing some actively, while only returning to others when new

content excited them. These same factors can also keep a player interested enough to prevent them from quitting in the first place.

The live service release cycle constantly adds new stages, story, and characters for the player to be excited about. Whether because the player wishes to collect every character, was waiting for a specific character, or the character piques the player's interest, a character release or rerun can entice a player to return to the game.

I have done this multiple times with Azur Lane. I would get distracted and be doing other things in life but an announcement of a new character would bring me back after weeks or months of not playing. It happened many times. I try to collect as many characters as I can. [P. 291]

Arknights. I started at global launch in 2020 but stopped after a couple months for reasons I can't remember. Came back in the middle of 2023 to pull for a character named Texas the Omertosa. I admittedly didn't know a lot about her, but her event interested me, as well as her design, and I ended up getting her in 40 pulls. Been playing ever since, it's actually my main gacha alongside Star Rail. [P. 370]

However, this only works to an extent, as even getting a desired character does not stop the feeling of being burnt out or tired of the game (see Section 8.7.1).

Came back to FGO for Okita Alter Summer, got her, stopped the game again because it's tiring. Okita was my favourite character from that game. [P. 252]

Furthermore, any given gacha game is one of many competitors in the attention economy. The player is in a media environment where they are surrounded by a

myriad of other entertainment media to spend their time and money on; not only are gacha games competing with other gacha games, but also other mobile or live-service games that aren't gacha games, or non-games media in general.

I have only spent money on characters I really really wanted, such as Rose, but I actually did not have to spend too much on him because I was preparing for him to be added for the few months beforehand with free gems/ingame currency. I consider myself not a big spender on gacha games and try to keep my overall spending to under ~\$100 per year or so because I spend more money on other games such as Pokemon Go. [P. 5]

Gacha games must also balance their survival and profitability with player perceptions, that if mishandled will cause people to switch to a different game. Factors such as powercreep, resources required, gacha rates, how predatory the game's monetization mechanics are, etc. can all influence the perception of F2P-friendliness.

I think gacha games make them look worse, because gacha games have predatory systems, like daily login, gacha itself etc. Luckily Blue Archive is very generous, and you can read all of the story without getting into any of the terrible gacha systems. [P. 49]

Despite gacha games being "predatory" by nature as stated by the above response, some gacha games are able to be perceived as relatively "generous" by players through their specific implementation of monetization and free rewards.

Depends on the how limited the resource of a gacha game is and how generous the gacha rates are. For games like Honkai: Star Rail, it's quite bad to get an off banner 5* in a limited banner, especially that I'm f2p. Whereas in games like Azur Lane, the game is both generous in resource and rates so I can brush off any off banner rare units [P. 295]

One specific example of a mechanic that players judge for generosity is returnee rewards, systems that give free rewards to players that have not played the game for a while, in order to help them catch up.

Neuvillette, as a meta tracker I had seen that his strength relative to the rest of the cast was significantly higher, so I decided that I wanted to try my luck at pulling for him on his redundant banner specially since GI had recently released its welcome back rewards for returning players that were greater than most in game rewards for F2P. [P. 208]

Engagement and monetization are closely related, and the developers must maintain a careful balance to retain player trust and interest. With the increasing number of live-service games and other time consuming media competing for their attention, players are not afraid to move on from a gacha game; it is up to the game and its developers to earn the player's attention back.

7 Limitations

The survey was conducted entirely in English. Thus, the survey was unable to collect answers from players who are not part of the English fandom or who did not feel confident enough to answer the questions in English. While the English-

speaking fandom likely mostly comprises of players in the West, it would be a mistake to assume all English speakers on a multicultural and global Internet are from Europe and North America. Players from other regions such as South America, Southeast Asia, or Africa who participate in the community could comprise a portion of the respondents. However, the country data of respondents was not recorded, and thus this is impossible to verify. Thus, future work would need to be done to connect specific cultures with specific sentiments.

Recruitment was done through snowball sampling, and thus the survey only reached certain game communities. While many respondents were part of multiple communities, in addition to the region-based limitations mentioned above, the survey especially lacked in responses from players of primarily Western-made gacha games. This is partially due recruitment method, and partially due to the bias of gacha games being associated with East Asian cultures and anime aesthetic. Respondents sending the survey to other people they know may not have considered players of Western gacha games as "gacha game players".

Some communities with multiple desynchronized servers may also be split into different sub-communities, based on both their primary server and whether or not they pay attention to the main server of the game. In addition to potentially having more or less access to the survey as described above, respondents did not always specify which server(s) they play, which may affect their perception of the games and their communities.

The format of an online survey also biases the results due to self-selection. Players who heavily participate in the online community were most likely to see the survey,

as opposed to players who do not browse social media communities related to gacha games. Additionally, mostly respondents with enough free time and likely stronger opinions would have answered enough of the survey to have been marked as complete responses.

8 Discussion

8.1 Summary of results:

This study qualitatively analyzes how gacha game players evaluate and interact with gacha game characters. The intent of this survey is to explore the different perspectives of a broad range of players and game communities, instead of focusing on a single game or community. Overall, a wide variety of responses was collected, and the experiences of respondents may sometimes conflict or directly contradict each other, showing that gacha game players are far from a monolith.

Players are aware of how monetization affects how gacha characters are made, from design to powercreep to narrative screentime, yet still enjoy them as well-designed and/or well-written characters. Players simultaneously evaluate characters on a large number of factors, which is consistent with findings from related work (Nguyen et al., 2023; Rentia & Karaseva, 2022; Välisalo, 2023), separating the narrative, gameplay, and gacha experiences of characters as multiple layers which can each contribute to the player's opinion of the character depending on their personal preferences. The same player may also value different aspects in different games (Välisalo, 2023), depending on their expectations of the strengths and weaknesses of that game's implementation. In addition to interactions with the character in game,

experiences with the community and fandom (Cao & Xu, 2024; Y. Wang & Hao, 2022) are also important.

Gacha games are experienced as whole games with many systems, the gacha consisting a core part of the game but far from the most important aspects of it. As gacha games are experienced over months and years, the maintained quality of the gameplay, narrative, and monetization were also important to players continuing to engage with the game. Feelings of excessive "playbor" (see Section 2.3.6) may cause the player to feel "tired" and "burnt out", thus quitting the game entirely. Although the gacha mechanic itself causes strong emotions such as excitement or disappointment (M. Yin & Xiao, 2022b), players value patience and long-term planning in order to guarantee their chances of getting a desired character (Woods, 2022), negating the aspect of gambling entirely. Positive and negative gacha experiences were sometimes anthropomorphized as the feelings of the character towards the player.

This paper aims to answer 2 research questions, whose respective findings are summarized below.

8.1.1 RQ1: How do gacha game players understand their relationships/attachments to gacha game characters?

Although their expectations for the genre are different, players describe primarily liking characters in gacha games that they would have liked in other forms of media. Compared to other forms of media, more emphasis is placed on the visual design and potential gameplay utility of gacha game characters; however, a compelling narrative and consistently written characterization are still important to making the

character believable and interesting. The dynamics and relationships between characters, such as friendships, pairings, family members, or faction groups, were noted as especially important. Players may also generally separate their narrative experience of the character from their gameplay experience of the character, such as when a character has an interesting narrative, but weak gameplay stats. Thus, the rarity of the character does not necessarily affect the player's desire towards them; however, rare characters are usually designed to be both strong and visually appealing.

Players are also aware of the profit motives behind character designs and releases. Aspects of a character that are clearly intended to increase their appeal or sales are easily recognizable by players. This awareness, and sometimes skepticism, may affect player's willingness to become attached to a character, as they may expect the developer's profit motivation to lead to the character becoming mischaracterized, obsolete, or forgotten.

The relationship between a player and a character can be influenced by factors both within and without the game, such as fandom interpretations of the character. The actual character elements as well as the player's interactions with the characters can affect the player's connection with the character. For example, the character's visual design and game mechanics, the luck-based experience acquiring the character, the player's time investment in the character, and discussions or depictions of the character in the fandom all factor into the player's opinion and experience of the character. The exact ways in which this attachment is built depends on the details of the game, the character, as well as the player's preferences and history. Players

may interact with the character more when they like the character, further increasing their emotional connection to the character, thus increasing their desire to interact with the character, creating a feedback loop.

The specific ways in which players describe their relationship with a character depends on multiple factors, such as their specific emotions towards the character, the character's personality, and terms used in the communities that the player is a part of. Precise terminology and their potential meanings are explored in Section 8.2. In addition to these relationship labels, a player may identify with a character, and/or increase consumption of the character (e.g., collecting their skins in-game or their merchandise in real life).

8.1.2 RQ2: How does the gacha and related systems impact these relationships?

The gacha system most directly causes the player's luck to influence their feelings toward a character. A character being obtained easily is perceived by the player as being "loved", and the reverse is perceived as being "hated"; although these terms are exaggerated or used in jest, the terminology shows the emotional effects that the gacha experience can have. Saving resources to pull a specific character is common practice among gacha players. This long process allows the player's anticipation and emotional investment to accumulate over time (Woods, 2022), causing emotions to be intensified if the player does not successfully pull the character (e.g., cases where the player is unable to accumulate enough resources to hit pity). Additionally, as players can like and desire characters that are not the

highest rarity, they may end up instead pulling a character who was rarer and yet not the one they wanted, leading to disappointment.

A side effect of the gacha system is that characters can be obtained before the player has encountered them in the story. This may be either positive, leading the player to be excited for their story experience, or negative, if the player feels the narrative has been spoiled. Regardless, as some respondents described, this detachment from the game's narrative moves the character from primarily existing in the *game's* narrative to existing in the *player's* narrative, similar to the idea of exclusivity, where player each have unique versions of the same character, described by Huang (2023) and Giard (2024).

Ownership of characters allows for most interactions between the player and the character. Pulling for and owning the character is described as "supporting them", as well as participation in their narrative arc as a character. In addition, the ability to build a character through levels and equipment allows the player to "nurture" the character, similarly to a child or pet (Huang, 2023). Building a character—especially if it requires a large time and labor investment (e.g., if equipment stats can be random), or if the character is not particularly strong—is a way of showing love towards them. However, a player may choose to not build a character (regardless of strength) due to a high labor cost, lack of need for this character in order to progress, or apathy or dislike towards the character.

The game's core gameplay loop, regardless of its specific form, allows the character to accompany the player during gameplay. Spending more time with the character in gameplay, such as while grinding for materials, allows the player to deepen their

bond with the character. Daily missions, despite their main purpose as a way to increase player engagement, are also a way for the player to interact with the character, turning them into a part of the player's daily life and habits. Players may eventually warm up to characters they disliked or were neutral towards after exposure to them in gameplay for dozens of hours over months. Through building parties, the player can also use gameplay as a playful space to imagine interactions between multiple characters. However, powercreep due to the live-service nature of gacha games can cause characters to become weaker over time, causing players to feel disappointment, or as if they are being punished for using their favorite characters. In games that provide different gameplay styles between characters, players additionally factor in their own playstyle preferences when deciding whether or not to pull for the character; the character may be simultaneously loved and strong, but if the player does not enjoy controlling and using them, they may regret pulling for the character regardless.

The game's narrative is the primary way the player learns about the character more deeply, whether through main or event storyline missions, or profile information displayed on the character's page. The actions of the POV character, or the character's actions towards the POV character, may additionally influence the player's relationship with the character. As gacha games are largely live-service games, the narrative and characters can also evolve over the course of years. For games with limited rosters, players tend to place more weight on character narrative, as the limited roster allows the narrative to explore the depth and growth of each character. In contrast, for games with expanding rosters, players may expect characters to disappear from the story due to the constant addition of new

characters, or for characters to appear in stories where they do not appear to fit.

Both of these cases may lead to disappointment, as the player is unable to see their liked character in the story as often in the former case, or may feel frustration at the developers "pandering" for character sales in the latter case. However, the open-endedness of the character's story also allows for more player interpretation, such as through fan works.

Additionally, character relationships in terms of both narrative connections and gameplay synergies were extremely important to players, sometimes more so than the characters individually. Narrative interactions allowed the character to be explored more in-depth and display different dynamics in different situations.

Gameplay synergies allowed characters to support each other, allowing the player to become appreciative of a character who allowed their favorite character to perform well. Players especially enjoyed when both situations were present in the same group of characters, as it was clear that the one character was written and designed with the other in mind.

8.2 How players describe their attachment with characters

In Bopp et al. (2019), they studied participants' emotional attachments with characters that they "really like", and came up with 7 themes/categories of character attachments. In this paper's results, some participants' answers fit into these categories, though not all. This is likely because the question in this survey was broader, simply asking participants, "how do you relate your identity to a specific gacha character?" in different social contexts (distinct from the concept of identification, and instead related to how players communicate their relationships

with characters). Rather than specifically asking them to choose a character they "care about, appreciate, desire, respect, are devoted to", respondents were free to choose any character(s) that came to mind. Thus, the range of emotional attachment type and intensity was more varied; some people may have described characters that they are somehow attached to, yet do not "respect" or "desire".

Each of the 7 themes in Bopp et al.'s (2019) work appeared in this survey's responses to some degree, though sometimes with slightly different presentation (additional quotes can be found in Section 6.4):

Cool and Capable: as this category focuses primarily on the character's in-game capabilities, the most commonly used term was "-main", used to describe a player who invests their resources into a character and uses them frequently due to strength or enjoyment.

Respected Nemesis: several respondents described various villains and antagonists as their favorite gacha game characters. However, due to how characters are accumulated in gacha games, antagonist characters can end up becoming playable characters, which sometimes negatively affected how the respondents viewed them.

Admired Paragon: In addition to referring to characters as sources of inspiration or role models, some respondents also described characters they were in awe of as "goddess" or "queen/king", showing an additional layer of reverence and idolization.

Crush: "Waifu" and "husbando", as derivatives of the terms "wife" and "husband", were frequently used to describe characters that players had a crush on, found attractive, and/or were attached to. Bopp et al.'s (2019) mentioned that participants

primarily focused on mostly attraction and infatuation, and did not refer to specific emotions. A few responses in this survey did include some elaboration on the player's emotional experiences liking the character, as shown below, however due to the high variance in the term "waifu/husbando", these experiences may not be shared by all respondents with this kind of emotional attachment.

The player may feel desire for a similar romantic partner in real life:

I guess its a waifu thing? Its more that my goal is to find and fall in love with someone like Bismarck, so I guess I do truly love her. I share this with no one I know out of fear of embarrassment. [P. 297]

They may also feel excited or happy when acquiring or viewing the character:

Anytime I get any variant of Tamamo in Grand Order, it gets me excited, as I have a soft spot for her. If I have to put it into layman's terms, she is my "Waifu," as much as I find saying that a bit silly. [P. 547]

One respondent who specifically used the word "crush" described that the character was frequently on their mind, similar to having a crush in real life:

I told my friend group I had a crush on Passenger. I was trying hard to pull him at the time, so he was really on my mind. I also find him cute. Spending a lot of time thinking about and chasing after a cute boy felt a lot like having a crush [P. 316]

These examples are illuminating, and yet likely far from the full range of emotions that players feel towards characters that could be categorized as their Crush.

Concern for one's Protege: People described some characters as their "child" or "pet", but mainly described a desire to "dote on" the character and/or pride in them, rather than expressing concern over their wellbeing. This may be due to the gameplay and narrative differences between gacha games and the games described in Bopp et al. (2019), where players may have more narrative agency and thus responsibility in non-gacha games. Furthermore, in gacha games, the players can raise the gacha characters by building their levels and equipment, so pride in their "child's" build is also pride in the player's own work ethic.

Sympathetic Alter Ego: There were many examples of characters who were described as relatable and/or a representation of the respondent's identity. The term "kin" or "kinning" was sometimes used to describe a character that the respondent felt particularly similar to. Interestingly, the terms "waifu/husbando" were also sometimes used to describe these characters, and the respondent may or may not ship the character with themselves or another character, even when the respondent simultaneously identified with them.

Enana the waifu for sure. I like that this character is one of the most "normal" or relatable character in the game, I think I resonate a lot with the way she talks (both the "text" and how the VA portrayed) and how she faces struggles in the story of the game. [P. 1]

My favorite gacha character (and character in general) is Mandricardo from Fate/Grand Order. I really like him because he's very relatable and easy to root for. He has social anxiety and low self-esteem and since we see his

inner thoughts a lot I can often relate to him. [...] Mandricardo is one of my husbandos and I collect most of his merch. [P. 184]

Trusted Close Friend: Since a majority of characters described in the survey in general were playable characters, the distinction between this category and Sympathetic Alter Ego was less strictly defined than the original findings of Bopp et al. (2019). The term "friend" was sometimes used to note that a respondent did *not* consider the character a romantic interest i.e., "waifu/husbando" due to prevalence of the term in the community.

If Qingque were a real person, or I met a person in real life with Qingque's personality, I could see us becoming good friends. But I can't see her as a romantic interest; our personalities are too incompatible in that regard. [P. 177]

Other Labels

In addition to labels that fit neatly into the categories above, there were also responses whose emotions were hard to categorize due to unelaborated and unique labels:

Many of them, but usually in the sense I claim a relationship to them. Such as "this is my daughter/dad/wife/uncle/sibling" and so forth, with specific jokes like "my boyfriend's husband" or "my hamster wheel power generator". This is only on social media or in person with friends that also participate in fandom/similar relationships to characters. [P. 30]

Several respondents also used the terms "enjoyer" or "fan" as a way to describe that they liked a character without wanting to associate themselves with a romantically-charged term such as "waifu". Although the exact emotions associated with being an "enjoyer" were not described in survey responses, members of gacha game fandoms would likely understand the sentiment being conveyed by this term. Another term that is prominent in the gacha community, "haver/wanter", does not directly explain the player's emotional attachment towards the characters, yet among the community it conveys a sense of desire for or pride in ownership of the character, as well as the membership of an "in-group" of "havers/wanters".

Specific groups may create terms in order to more precisely communicate concept (Picht and Draskau, 1985, as cited in Pesonen, 2012), and both gacha game fandoms and the wider fandom and/or internet culture employ these terms (that may have no equivalent concept, or equivalent terminology to describe the same concept) within their online communities [pesonen]. Respondents also specified that they tended to use these terms on social media or interacting with friends and/or community members who share their interest in the game, showing that these terms are primarily used by gacha game fandoms and their subcommunities.

For example, the specific phrase "boyfriend's husband" could be a reference to shipping these two characters, especially since gacha games emphasize character relationships, and one character (the "boyfriend") is preferred by the respondent. As some respondents described, the dynamics and relationships between characters is extremely important in gacha games, sometimes even more important than the characters individually. Some players report liking a character solely because of

their relationship with another playable character, incentivizing game developers to create character groupings that are intended to be shipped or enjoyed together. This is how a player may find themselves relating their identity closely to a character they may not necessarily care as much about, especially in shipping communities: through a different character that they *do* care about.

Similarly, there may be cases where a player is attached to a character that they somehow do not "care about, appreciate, desire, respect, are devoted to" as was specified in Bopp et al (2019). Although the survey did not ask directly and thus did not get specific answers of this kind, through the lens of play and fanfiction, players may spend a lot of time and energy creating works for a character they neither "desire" nor "respect". Rather than the actual character, the player's emotional connection is towards the possibility space of fantasy that can be created through the character. This may be more prominent in shipping-related situations in fandom, but can also be more generally applicable outside of romantic contexts.

A pattern that appeared in responses to this question was the emphasis by several respondents along the lines of, "I separate fiction from reality, though. I know they're not real." The display of defensiveness may be related to stereotypes of fandom and fan behavior, such as obsessiveness, the appearance of being confused between fiction and reality, and social ineptitude (Stanfill, 2013). In stating this, respondents were possibly trying to separate themselves from other fans whose behaviors they did not wish to be associated with, and defending themselves as a "normal" person whose response and perspective should not be dismissed.

8.3 Monotonous differences in gacha games

All gacha games share the gacha, and as the gacha is the main form of monetization and an integral mechanic of the game, most of these games' mechanics and systems emphasize or point back to the gacha. Though different games vary in implementation and severity of how important their gachas are, this aspect is the systemic core of what makes a gacha game. Whether the mechanic in question provides extrinsic rewards that are used for the gacha, or requires getting a character through the gacha before it can be accessed, they are connected to gacha in this network.

To hypothetically "remove the gacha" from a gacha game would be to entirely rewrite a large majority of related systems. For example, generally high rarity characters at 1 owned copy are compared to lower rarity characters at maximum owned copies, as their base power is lower, but it is easier to collect lower rarity characters. Under a random reward distribution, players are likely to collect *more* characters than the one they desire the most, increasing the possible characters they have at their disposal. If the gacha system were switched for a direct purchase system with prices corresponding to rarity, it is more likely that players would not purchase lower rarity characters unless they were significantly stronger than average, due to players preferring to save for the high rarity characters instead. This may lead to difficulty in balancing stages, as the developers can no longer assume that most players have a larger roster of lower-tier characters as a baseline. The removal of gacha would also lead to a decrease in the expression of adaptability, as the characters the player owns would no longer be random. However, adaptability may already be less

prominent as gacha game players accumulate more resources, as they are "essentially simulating the reception of a deterministic desired reward" (M. Yin & Xiao, 2022b, p. 7) through using the pity mechanic to guarantee a character.

Gacha games invest a lot of time and money into showcasing their characters, designing them to be desirable both aesthetically and through gameplay, and giving players opportunities and reasons to spend time using their characters. As mentioned above, these are all avenues through which the player can increase their relationship with the character and thus desire to gacha for them, or for characters that will help them. Different genres have different affordances for players to desire characters, but all gacha games use the tools available to provide players a balance of reasons to pull a character. For example, an action game has direct character control and a large potential for variety in player input and character animations. In contrast, a rhythm game might have the option to hide characters from the game view entirely, due to interference with the rhythm gameplay. This means that in action games, more priority is placed on the character's gameplay controls, animations, and strength, whereas in rhythm games, card art and card story are more important. In the end, however, the games are both trying to achieve the same goal: get players to pull the character.

Additionally, characters are usually designed with many different potential narrative dynamics in mind, and are introduced to each other in different combinations as the game progresses. This can apply to both limited and expanding roster games. For example, in *Project Sekai*, the character Mizuki Akiyama has the following connections: they are in a music unit with 3 characters, childhood friends with 1

character, close classmates with 1 character, shares a hobby with 1 character, is friendly with the younger siblings of 2 previously mentioned characters, and formed friendships in events with a further 7 characters. Including the 6 characters connected to all groups, this character is connected to and appears alongside 21 out of 26 characters as of the time of writing. In *Genshin Impact*, characters frequently appear in other continents during event periods, interacting with and making friends that they did not encounter during the main story. For example, a summer event features the Inazuma character Kazuha, the Liyue character Xinyan, and the Mondstadt characters Fischl and Mona, who become friends through experiencing the hardships of each others' pasts. In both games, the character is primarily related to a core set of other characters (the music unit, the national affiliation), but the live-service narrative and a large list of character traits allows their connections to continue to expand.

Most gacha games also allow for personalization, usually through cosmetics such as character skins. These cosmetics can be combined with party combinations in games such as *Project Sekai*, letting players watch their favorite characters dance together in the player's chosen outfits. In addition to being an aspect of over-possession and self-expression (Huang, 2023; Woods, 2024), a way to show off (Cao & Xu, 2024), and a way to support one's favorite characters (Giard, 2021), cosmetics also provide another layer of exclusivity (Huang, 2023). The cosmetic is firstly for "my copy of this character", and additionally, the player's *experience of getting the cosmetic* is a new memory attached to the character. While it may be something as mundane as pressing the "Buy" button in the shop, the cosmetic may be the player's first expense in the game, an extremely large expense, earned

through a gacha or specific event, or be a long-awaited limited-time offering. The story behind the cosmetic is just as important, if not more important, than the ability to use the cosmetic in and of itself.

One extreme case of exclusivity through personalization is in *Genshin Impact*. Without spoilers, one character named "Wanderer" asks the player character to give him a new name after a pivotal narrative transformation. The player can name this character anything (except his old name, and offensive terms): his default name, another character's name, the player's favorite food, or even the player character's own name. This name change is permanent, and appears in all of the character's appearances from that point, such as on the character screen, in birthday letters, and in dialogue boxes. Online communities discussed what they named Wanderer in their version of the game and why, with some explanations being silly, some mythological, some personal, and some poetic⁸. Each player's individual thought process and level of emotional investment towards this character is encapsulated within this name, the memories as personal as their instanced copy of Wanderer. The author considered this character's new name for 3 weeks before making a final decision.

Gacha games also adapt to each other, adding or adjusting systems as player expectations change due to the actions of other developers. This serves as a form of self-regulation for the industry, as players are likely to quit if they consider the monetization to be too predatory relative to the competition (see Section 6.6.3). For example, in 2016, Cygames' *Granblue Fantasy* released the Cerulean Spark

⁸ For example:

https://www.reddit.com/r/Genshin_Impact/comments/zhvjqr/regarding_the_wanderers_name/

exchange⁹, which allows players to collect a banner-specific currency with each gacha pull, that can then be used to exchange for a character. Nowadays, the mechanic is colloquially named "sparking", and it is expected in the place of or in addition to a pity mechanic, or else players are likely to complain, potentially bringing down the game's ratings and reputation.

8.4 Gacha games and other games

In a sense, gacha games can be seen as a combination of many other forms of media that it simultaneously draws from, is part of, and competes with. For example, many East Asian gacha games borrow from anime and manga aesthetics, and are then adapted into anime and manga themselves (such as the anime adaptation of *Arknights*). Blind boxes (also known as "lucky bags") are physical collectibles similar to gachapon, and these can both also contain merchandise featuring gacha game characters; the physical gacha and the digital gacha compete with and yet complement each other simultaneously as some players wish to collect their characters in both forms, allowing the company to profit from either in-game transactions or merchandise purchases, or both. Gacha games share a live service structure and a focus on grinding similar to massively multiplayer online role-playing games (MMORPGs), yet any given player is unlikely to have the time to devote to both genres simultaneously. Although anyone could read a manga, buy a blind box, and play an MMORPG, the gacha game combine of all of these elements into a single game genre more complex than the sum of its parts. This is reminiscent of the

⁹ A player famously live streamed themselves spending over 80,000 JPY in order to get a single copy of a character, leading to shock and [criticism](#). In addition to other measures including refunding the player, Cygames added this mechanic to mitigate further issues ([source in Japanese](#)).

"multiplier" strategy (see Sugarman & Thrift, 2020), optimizing for the number of possible experiences the player can have in one game.

8.4.1 Stamina

There is a pedantic debate over whether gacha games are "pay-to-win" or "pay-to-skip", or if both are the same thing¹⁰. In short, while "pay-to-win" implies a direct power upgrade acquired almost exclusively through spending, "pay-to-skip" implies that the same power level is achievable, but will take much longer. Regardless of the answer, the pay-to-skip argument draws a parallel to freemium and casual games, which gacha games were compared to previously in Section 2.2.1. Gacha games can be perceived as monetizing the player's impatience, as the player who pays for gacha is paying to get the character *now*, with reduced grinding for gacha currency, and/or without needing to wait for the character's next appearance, and this may also provide a competitive advantage. Indeed, the line between "monetizing impatience" and "monetary investment" to replace grinding may be thin. However, this still mechanically and experientially functions differently, as instead of skipping a wait of a few hours, the player is skipping weeks or months of consistent play while awaiting a banner rerun.

Describing casual games, Street (2014) explains, "Games studies scholars Larissa Hjorth and Ingrid Richardson have argued that casual games "be understood in terms of a phenomenology of waiting". It is the need to wait that sets casual apart from games for console and computer -- the 'hard core' designed for 'gamers' who personally identify with gaming as a culture." Yet despite free-to-play mobile gaming

¹⁰ See <https://www.reddit.com/r/gachagaming/comments/md6tjq/comment/gs9jl0y/>.

as a whole being relegated to "casual" gaming, and despite the importance of delayed gratification (Woods, 2022) and patience in gacha games (see Section 6.7.1), many players *also* invest large amounts of time playing and strategizing outside of the game (Jiang, 2022), not just waiting. Furthermore, for games like *Genshin Impact* with large explorable worlds and in-depth narratives, where the player can lose themselves in hours of game time, it may not be entirely accurate to say the game is "not immersive" and "co-attentive" (Keoghl, 2014, as cited in Street, 2014) as a casual game.

Whether gacha games should be considered casual games or not, one aspect shared between the two genres is a stamina/energy system. Stamina *may* be a required resource to play levels in gacha games, and the refilling of stamina can be monetized, usually through the purchase of stamina-refilling items or the expenditure of gacha currency. Gacha games vary in their implementations of energy systems, but energy may be tied into character progression, narrative progression, both, or neither. Stamina systems are stated to be designed as an engagement system that stops the player from getting bored and keeps them coming back, and a way to indirectly monetize player impatience (Huang, 2023; Street, 2014; Zagal et al., 2013).

In terms of engagement, stamina in gacha games may not always function as a way to force the player to stop playing and come back later. For example, some games do not require energy at all, such as *Project Sekai*, which allows players to play songs even at 0 energy, or *Genshin Impact*, where energy is used to gate the accumulation of materials, but the player is free to explore the open world and play story sections at will. The player's gametime, and to some extent their progression,

is not directly limited by the stamina bar. Interestingly, in *Project Sekai*, rather than being required for the player to play, energy is instead the requirement for auto-play i.e., the game to play itself. Other engagement systems, such as daily missions and day-of-the-week restricted materials, may be more effective at encouraging the player to stop playing and come back another day.

In terms of monetization of the player's impatience, stamina is not monetized as much as the gacha system. As mentioned above, several gacha games do not even require energy for narrative progression (and thus the gacha currency available through narrative progression). Other games that do require stamina to play stages may also provide free stamina refill items; for example, the author has accumulated over 900 full-bar stamina refilling items in *Fate/Grand Order*, which also frequently runs events reducing the energy cost of narrative stages.

During the survey, respondents were asked if they spend money to build characters (see Section 6.3.7.1), and approximately 20% of respondents spend money on building characters. While this question does not directly ask about stamina refills, the primary purpose of spending stamina is to gather materials for characters, so this is the closest available set of answers in the dataset. That being said, it is possible to spend money on building characters through other methods, such as purchasing material packs and battle passes, and therefore this percentage is a ceiling on the number of respondents who pay to refill stamina. One participant even explicitly stated that purchasing *only* stamina would not have been a valuable purchase:

I have never specifically bought resources to level, but I semi-frequently buy the [Arknights] monthly pass, and I consider it good value because of the stamina. (Though I wouldn't buy it if it was just the stamina). [P. 141]

The monthly pass stated by the respondent primarily gives out gacha currency each day, and in combination with the approximately 33% of respondents who only spend money on collecting new characters but not building characters, the implication is that stamina is less important than characters. A majority of the time, a player would spend stamina *because* of a character: whether that is to get gacha currency to pull a character, farm for their materials, meet them in the story, or complete an event (which also contains the above). Stamina management is thus another practice in efficiency for a gacha player, whether logging on at optimal times to full utilize the stamina refill rate, or spending refill items to optimize the player's available time at any given moment or on a specific day of the week.

Street (2014) provides a queer reading of energy mechanics, stating, "the energy mechanic simply says that you are not automatically entitled to everything. Getting what you want may take some patience." As mentioned by respondents, patience is an important quality for free-to-play gacha players (see Section 6.7.1), and they do not mind waiting. While stamina may be an avenue for monetization, it is only one of many ways that gacha gameplay intertwines with time. No matter how much a player pays, they cannot change the day of the week, or force the banner they are waiting for to appear now (as opposed to waiting months, or perhaps years). Simply put:

There is no point in using money to speed up upgrades, this isn't race it's a marathon. [P. 186]

Street (2014) continues the train of thought that "snacking" in casual games is normative, fitting in unobtrusively into the player's life without disrupting productivity; in contrast, "indulgence" and "abandon" in immersive games is childish, unproductive, and the existence of stamina systems serves to shame the player into remembering their real life responsibilities. In pay-to-skip casual games, the ability to keep playing—to indulge—is locked behind a paywall. Yet the main form of monetization in gacha games, i.e., acquiring characters in the gacha, is not accomplished through stamina refills, but through the direct purchase of pulls. By buying pulls, the player pays to save time over money when the value seems to be a worthwhile investment (Woods, 2022); the player pays to *reduce* the amount of time playing—to be able to return to the real world—skipping play/labor/playbor.

8.4.2 Story and gameplay

As mentioned in the results, one consequence of the random character acquisition is a sense of ludonarrative dissonance, due to seeing characters in gameplay far before their appearance in the story (see Section 6.3.9.2). An interesting consequence of this, in combination with event bonus mechanics that incentivize the use of specific characters, is the genre of "Lore/Story Accurate Challenge" clears. In these challenges, the player uses only characters who appear in that story to clear those stages.

This is notable because in non-gacha RPGs, most, if not all, missions are cleared with "story accurate" parties, due to the set order of character acquisition. Though

the player may have access to more characters than who fits in their party, they will generally not have access to characters who have not appeared yet (or do not appear at all). Furthermore, in non-gacha RPGs, characters may even become permanently unavailable to the player after certain narrative events (such as a death or betrayal), yet this would be an outrage for a gacha community. This is partially due to the monetization of the character, and partially due to the live-service nature of gacha games, preventing that character from ever being played again (unlike a game that can be easily replayed on a new save file). Despite many gacha games describing themselves as RPGs, role-playing in gacha games primarily happens during story dialogue, and the ability to *not* role-play during gameplay sections contributes to the sense of ludonarrative dissonance. At the same time, this increases the emotional impact of story-related party restrictions during certain missions due to their relative infrequency.

Non-gacha RPGs employ narrative choices that allow the player to role-play by affecting the events of the story. Respondents felt that gacha game choices were superficial (see Section 6.6.2), as they did not make meaningful changes to the story. There are some cases where the player's choices can affect the story and gameplay in gacha games. For example, in *Fate/Grand Order*, some narrative choices are unskippable and lead to different fights. Additionally, some Valentine's Day stories feature branch points where it is possible to choose the incorrect option, leading to a bad ending that does not provide the player with the Valentine's Day reward. However, the cascading narrative effects of one's choices are not the only factors in role-playing. Yin and Xiao (2022a) hypothesize that non-meaningful narrative choices allow the player to close the gap between themselves and their

player persona, increasing feelings of immersion and engagement. For games with pre-defined player characters, where players may feel that role-playing is more fitting than self-inserting, non-meaningful choices may similarly increase immersion and engagement by allowing players to participate narratively as that character.

Furthermore, narrative agency is not the end-all-be-all of game narrative, as many well-written linear stories are equally enjoyable.

Depending on the player and the game, the narrative, gameplay, or both may be important towards the player's attachment with the character (see Section 6.3). This quote summarily describes the role of both systems:

The story made me buy into the characters. The game gives me context to play with them. [P. 421]

This statement applies to many different games, gacha or not, but the implications of how it connects with gacha games in specific are still interesting. This shows how players can still enjoy weaker characters, as the story and gameplay are experienced separately (see Section 6.3.9.1). However, a player also may not have a compelling reason to care about using the character in gameplay before experiencing their story (if they appear in the story at all) due to a lack of "buying in" i.e., attachment. Gacha games tend to have a larger cast size than party size, and it is therefore impossible to put every character into a party at once. The party limit forces the player to prioritize characters and in some cases, choose between gameplay strength and their favorite character. This is also true for some RPGs, though not all. Lastly, expanding roster gacha games constantly add characters, and this may include introducing NPCs into the playable cast. Players respond positively

when once-NPCs become playable (see Section 6.2), and the ability to use them in the gameplay context is a large part of that excitement.

8.5 Community

8.5.1 Secondhand market

Although the secondhand reselling and purchasing of accounts is not supported within the game, and is frequently against the Terms of Service, enforcement of this policy tends to be difficult, leading to several marketplaces for secondhand and "starter" accounts. As Woods (2022) explains, rerolling accounts requires an initial time investment, but can save the player time over multiple years of play by giving them a desired starting position. However, some players take it further by purchasing an account that has additional resources or the character(s) they desire, exchanging an initial time investment with a monetary one. On the seller's side, whether someone may be making reroll accounts for the express purpose of resale, or if they are just trying to recoup on a game that they no longer play, the option of the secondhand market may be a factor in some players' consideration when it comes to spending on the game.

Not sure it counts, rerolled accs in nikke for Makima and then when 2B was released I tried getting her on the same acc, didn't try it for Emilia I believe it is, the Re:Zero one, just because I could possibly sell it later for some money [P. 214]

As this market is completely determined by supply and demand, the effects of powercreep or reruns of previously rare characters can also have an effect on the

financial value of these accounts.

8.5.2 Leaks

The gacha game community has an unusual relationship with leaks when compared to other game communities. Several responses mentioned looking at leaks to find information on future content (such as Section 6.2). While leaks and datamining are present in many games, the seeking of leaks on a community-wide scale appears to be more prevalent in gacha games. The r/Genshin_Impact_Leaks subreddit has ~14%¹¹ of the population of the main subreddit r/Genshin_Impact. In contrast, *Dead By Daylight*, an online multiplayer competitive game, as well as *Pokemon*, a single player strategy series that also has a competitive circuit, each have only ~4% of the size for the leaks subreddit compared to their respective main subreddit.

For a gacha game, leaks are not only to satisfy curiosity and impatience for new content, as it may be for other games. A leak of a new character's gameplay details, banner timing, and resource requirements directly affects the player's long-term economical decisions on when to save, when to pull, what to farm, etc. These decision-altering factors extend beyond the intended boundaries of the game, resembling card counting in poker or insider trading, yet it is a far more accepted form of "cheating" in the community.

8.5.3 Waifus under the patriarchy

Gacha games are heavily associated with anime art styles and otaku culture (Huang, 2023), which have an impression that is "playful, aestheticised and typically hyper-

¹¹ All calculations as of April 2025.

sexualised" (Woods, 2024, p. 824). Participants of Woods (2024) discussed how gacha game characters were frequently sexualized, and that "female gacha characters were developed to 'fulfill male fantasies'" (p. 831), leading to a stigma that that "weebs" are perverted and degenerates. The meta-structure of the gacha game itself also furthers this, as Huang (2023) describes the gacha game player as a "premodern patriarch" (p. 71) who simultaneously exhibits full control over the household (their characters), and yet desires their love. However, the effects of patriarchy are not only limited to what exists in the game.

In Woods (2024), "weebs" i.e., "obsessive" fans of Japanese culture are placed on the opposite end of the spectrum from "competitive players", implying that over-emotional "obsessions" towards characters directly opposes rational "competitive" and progress-focused gameplay. Without presuming any intent or opinion on behalf of the author or participants, it is important to note that there is an implicit assumption behind the statements of some of these participants, and much of gaming culture as a whole: using a character for gameplay optimization is *morally superior* over using them for emotional payoff. To spend hundreds of (real) dollars for a character in order to make (in-game) progress at an arbitrarily "faster" and more "competitive" rate is to make an "investment", a rational decision calculating the relative value of time and money; to spend the same amount of money for a character in order to enjoy and accompany them in gameplay is to be "obsessed", to blur fantasy and reality, to fall victim to the schemes of the waifu-making machine. Fandom (even when the fan is male), and emotion in general, are devalued as "feminine" hysteria—look no further than the stereotype of the "screaming teenage fangirl"—in stark contrast to "masculine" rationality (Stanfill, 2013). Most likely, the participants and

players in general with this line of thought (conscious or subconscious) would not consider themselves misogynists, and this section is not naming anyone as such. Rather, it is to highlight the sociocultural undercurrents that even affect not just how people play games, but how people *feel* about how they and others play games.

As an additional note, faster progression versus liking a character are not the only factors contributing to when a player will use a character, as players may value personal satisfaction and skill expression over pure speed (see Section 6.3.6.1). Hopefully, the above results also show that players can simultaneously consider many factors, both in regards to the character on its own, as well as their position within the player's overall gameplay. Furthermore, as mentioned by participants (see Section 6.3.9.1), characters that are attractive tend to also have strong gameplay, as the developers wish to make the most sales as possible, in which case, are the "competitive" player and the "weeb" player not falling for the same waifu-bait trap?

Women in fandom, especially video game fandoms, are perceived as second-tier fans who are "not as dedicated and knowledgeable about fandoms as their male counterparts" (Nisbett, 2018, p. 178). Several female participants similarly noted feelings of being overlooked, with their desires ignored by the developers in favor of targeting male players through oversexualized female characters.

I also care more about a character's gender in gacha as a female player who feels like my demographic is really widely overlooked by most of the market
[P. 353]

Even when the player can choose the gender of the protagonist/player character, that does not mean the game targets all players equally. For example, as of writing,

Genshin Impact has around twice as many female playable characters as male playable characters. There are gacha games that largely target female fans, such as *Ensemble Stars!*, an idol game featuring a female protagonist and (almost) entirely male idols, instead of female idols such as in *Love Live!* or *BanG Dream!*.

Sexualization is present in female-targeted games as well, such as sexually explicit animations in the BL game *Nu: Carnival*, and revealing outfits and suggestive first-person scenes in the otome game *Love and Deepspace*. These games can have great cultural and/or financial¹² success, yet women are still seemingly viewed as a less lucrative market by several mainstream games.

Though this is a skeptic's perspective, perhaps in some cases, the refusal to cater to the desires of female players is not an oversight, but a prescription. In Japan, *yumejoshi* are "criticized as selfish and pleasure-seeking consumers who refuse to assume any social responsibility" for daring to love a fictional man, rather than a real one, with whom she would bear a child and thus finally provide value to society by increasing the birth rate (Giard, 2024). Similarly, *fujoshi* "are described as rotten because they are attracted to fantasies of sex that is not productive of children" (Sugiura, 2006, as cited in Galbraith, 2011). Although these comments come specifically from Japan, the patriarchy situates women (or anyone assigned female at birth) as childbearers first and people second in cultures across the world, and as said by Street (2014), "maybe gaming is shameful because it is counterproductive to childbearing."

Hand-in-hand with notions of patriarchy and childbearing are the undercurrents of heteronormativity. With one notable exception from a queer man, a number of male

12 <https://www.pockettactics.com/love-and-deepspace/2025-profit>

respondents commented that they would refuse to use male characters and only use female characters:

I have pulled strong male characters but I decided I only want to use female characters on my team so I won't use the male characters [P. 308]

Likewise, a number of female respondents reported collecting and prioritizing male characters:

In HSR since I mostly play male characters I end up vertically investing in the ones I have so that I don't feel the pressure of needing to roll for the "overpowered" units like Acheron and Firefly. [P. 201]

Of course, someone does not need to be queer to enjoy playing characters that match their gender expression. However, the reliance (or even the mere *assumption* of reliance) on sex appeal and fulfillment of heterosexual male romantic fantasy (see Section 6.3.2) to sell certain characters further worsens these problems: the oversexualization of female characters and the underrepresentation of male characters alienates other players, causing them to quit the game, and thus creating a feedback loop that slowly homogenizes both players and characters.

8.6 Ordinary experience

Despite the prominence of the gacha in both the game's systems and the widespread impression of gacha games, the player only spends a small minority of their time actually pulling the gacha. For the other vast majority of the time, the player is grinding in the main game loop, or unnoteworthy tasks such as navigating menus to level up characters. Rather than focusing only on those occasional

moments of great joy or disappointment in the gacha, understanding gacha games also requires examining the mundane experiences of regular play.

Tyack and Mekler (2021) propose the concept of "ordinary player experience" (ordinary PX), describing play experiences that have become routine: "familiar, emotionally moderate, co-attentive, abstractly memorable" (p. 1). The majority of gameplay in gacha games, such as grinding for materials, can fit these descriptions. For gacha games with auto-play, multiple gacha games can potentially be played (perhaps more accurately, spectated) at the same time. The structure provided by ordinary experiences may additionally explain some of the attractiveness of daily missions and grinding in gacha games, as a way to derive daily wellbeing from the genre (Tyack & Mekler, 2021). Tyack and Mekler (2021) note that "ordinary PX is *local to the specific personal context of videogame play*" (p. 4, original emphasis): experiences cannot be generalized, and not everyone's ordinary is the same. For example, for a player who does not spend frequently, pulling a rare character is an expectedly extraordinary event, memorable and emotionally intense (Tyack & Mekler, 2021). However, a player for whom spending on banners is a common occurrence has a different definition of what is "lucky" (see Section 6.3.8.3). The act of pulling a high rarity character has become habitual and ordinary to that player, just as someone may have a weekly poker night. Experiences exist on a continuum between ordinary and extraordinary, and can shift towards ordinary or extraordinary over time (Tyack & Mekler, 2021). For example, a player may need to focus on a specific stage the first several times before learning an optimal strategy, after which it requires little effort to repeat.

Additionally, Tyack and Mekler (2021) note that "Naturally, there are many in-game events that players would prefer to experience as being extra-ordinary; scenes that designers *intend* to be remarkable rather than mundane" (p. 8, original emphasis). Pulling the rarest tier of character in the gacha is the most immediately obvious example of this: if players were to pull a super rare character every single pull, the character would no longer be rare, and thus be less meaningful. In that sense, the act of pulling common items *must* become familiar, perhaps even annoying, in order to surround the extraordinary rare item with forgettable common items; in order for a player to be excited at a rare item, they must have common items to feel "apathy" (M. Yin & Xiao, 2022b, p. 7) towards. Interestingly, this perspective confounds the idea that "[exciting and elaborate] Gacha animations are for heavy spenders only usually" (Koeder et al., 2018, p. 23). While it is true that free-to-play and low-spending players will see these animations less often, this also means that heavy spenders are more quick to become habituated to, and even desensitized to, the excitement that this animation is supposed to create.

It is also important to note that ordinary and extraordinary PX in gacha games is not limited to the gacha mechanic alone, but the gameplay, narrative, and experiences with the game as a whole. Therefore, the preferences and personal histories of different players affects not only what aspects of characters they care about the most, but potentially how they experience the game at all. A player who is invested in the gameplay's story may have extraordinary experiences related to emotionally resonant moments in the game's narrative, whereas the gameplay is a mundane grind that they do not pay much attention to. Conversely, a player who skips the story entirely and focuses on gameplay may have memorable moments related to

clearing difficult stages with low-ranking characters. For a player who spends large amounts of money to get the highest tier characters to their maximum power, even the most challenging stages may be experienced as just another set of enemies.

8.7 The effects of neoliberalism

Huang (2023) explains how gacha games fulfill Jagoda's (2020) 3 points of why video games facilitate neoliberalism of competition, action, and worldmaking. Huang (2023) then adds a 4th point, the virtual economy, stating, "Affective labor or immaterial labor, the labor that takes place in the realm of the virtualities, gradually becomes prominent in the twenty-first century when information technology and the digital economy make it possible that the investment of the consumers' attention and affects can be directly valorized" (pp. 85-86). Similar to how emotional capitalism is the commodification of the fan's emotions (see Section 2.3.5), affective labor is the labor of the worker's "soul", striving towards production and consumption even in the alternate virtual realities of gacha game worlds.

This undercurrent shapes not only the mechanics of gacha games, but how players interact with and understand them. For example, despite the importance of community and fandom in games, gacha game progression is a rather individualist endeavor, as a player cannot trade owned characters or gacha currency with another player. Although the player has the knowledge, tools, and support from the community, everything on their account (unless they have purchased an account) must be earned with their own time, labor, or monetary investment. Games with support systems (see Section 3.1.5) allow for some form of in-game cooperation, however in practice, other player's accounts become just another tool; players may

delete friends from their list who are inactive or whose characters are not up-to-date, so they can be replaced with a more productive and useful "friend". *Genshin Impact's* simultaneous co-op, which allows players to roam freely together and for a stronger player to help a weaker player in combat, is a rare opportunity for true real-time collaboration between friends and players that may not have productivity as an end-goal.

The remainder of this section unpacks several further connections between neoliberalism and the experience of gacha gameplay.

8.7.1 Burnout

Several respondents used the phrase "burnout" and becoming "tired" to describe their disinterest in continuing to play the game (see Section 6.7.3). Rather than the definition of Cook's skill mastery (see Section 2.4.1), this paper has taken "burnout" in the context of labor (or playbor, as the case may be). In this context, the feelings of discouragement from a failed set of gacha pulls stem from similar reasons people feel burned out in the workplace, such as stress and a lack of meaningful work. When a player feels like their luck was "wasted" on a character they didn't want, their work (grinding) has essentially been made meaningless. Additionally, the player may further face the decision on whether to accept the sunk cost, or to pay real money before the banner ends.

With this understanding, a seemingly illogical behavior presented by several respondents makes more sense. Several respondents described returning to the game to get a character only to immediately quit right after, without even using their new character once in gameplay, seemingly defeating the purpose of getting the

character at all. In this case, the desire to own and earn the character remains, despite the lack of desire to *actually play the game* (due to burnout, boredom, etc.). Obtaining the character can provide the player the same sense of accomplishment as they would have if they continued to play, as well as potentially a sense of closure and completeness, without feeling obligated to return to the grind of actually using them.

8.7.2 Treatment of characters

The phrases used by respondents to describe their treatment of characters when deciding to build them can be roughly divided into 2 main groups. The first, "investing in a character", implies a transactional relationship based on labor where the investor, i.e., the player, expects a return on their investment through a strong performance in game. In contrast, "spoiling a character" (or similarly, "raising them", "supporting them", "making them happy", "showing my dedication") implies a non-transactional relationship where the player feels intrinsic joy providing for the character without an expectation of results, more similar to a pet than a worker. Additionally, "supporting the character" through collecting them from the gacha, is reminiscent of Yin's (2021) description of character fans treating characters similarly to how idol fans treat idols, and of the phrase "voting with one's wallet".

In certain circumstances, one way that players can show their support for characters in a non-consumptive way is through event rankings. In games such as *Project Sekai*, each event is focused around 1 main character, and fans of that character will try to rank as highly as possible in order to display their ranking badge on their profile. Instead of spending time and effort towards ownership of the character, the

player can instead or additionally show their support through spending time and effort on increasing their rank by playing intensely during the event period. A player may use their participation in certain events to signal their desire for additional content of this character to developers through the promise of engagement and financial success. Additionally, players have discovered a method for reaching specific event score numbers, allowing them to leave special messages (such as character birthdays) in their score.

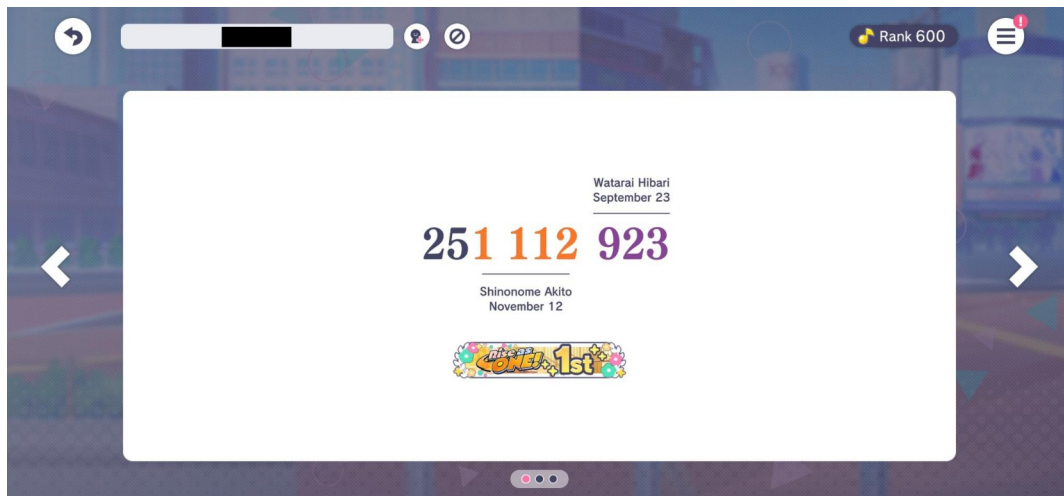


Figure 7. The profile page of a player who ranked #1 at the end of an event in *Project Sekai*. The player has used their profile to explain the significance of their final event score. Shinonome Akito is the character featured in this event, and associated with the color orange. Watarai Hibari is a VTuber, presumably the player's favorite. Screenshot taken by author, April 2025.

Rather than referring to how the player treats or views the character, the labels "-haver" and "-wanter" refer to the player's state desiring or owning the character. Though these may be said in jest (see Sections 6.4.1 and 8.2), the fact that it exists

as a label at all demonstrates the importance of consumption and ownership. One respondent connected the mentality to monetization and thus the gacha mechanic:

I find that haver/wanter mentally as a side product of the predatory monetization of gacha games. [P. 545]

To go from "-wanter" to "-haver" is to spend time, money, and/or luck to become part of an exclusive group truly qualified to call themselves "fans" (see Y. Yin, 2021). The desirability of exclusivity is that everyone is a "-wanter", yet only a few can be a "-haver"; paradoxically, once everyone *is* able to have it, it loses its desirability as an exclusive item. Thus the goalposts shift towards completeness: you can have one copy, but I have max copies, all their skins, and levelled every skill to its maximum.

Players may even begin to complete their characters before acquiring them, by collecting excess materials intended to be used on the character the second they come home (see Section 6.3.8.3). In some games, few materials are needed, and materials are shared between all characters, in which case it is easier for the player to accumulate an excess. However, in others, special materials may be locked behind specific levels and each material type is only used for a small number of characters, forcing the player to go out of their way for each character. Similarly to grinding gacha currency for the character, grinding levelling materials can increase the player's emotional investment and arousal incrementally over time [woods time]. If building a character is a way to "make them happy", then collecting all of their materials in advance is akin to throwing a welcome party, excitedly showering the character with gifts as they come home.

This is much easier in games where multiple servers are desynchronized, and the player is on a later server. As described in Section 2.3.2, gacha game players are acutely aware of their time and time management. In the age of computer technology, we live in "network time", as explained by Sugarman and Thrift (2020) citing Hassan (2009): "Whether communication is by e-mail, texting, video call, or some other platform facilitated by computer or mobile phone, the fact that the sender is transmitting at midnight with a receiver who is lunching at noon renders clock time immaterial by the context of the network" (p. 813). For those who play gacha games with multiple desynchronized servers, network time works not just across timezones but across months and years. The player who plays on two servers, or on a later server using online information to track the earlier server, essentially collapses two periods of time into one. Their game is in the present, but their knowledge extends into the future, which changes the decisions they make now. This also splits the community between those who choose to "look into the future" and those who only pay attention to the server they play through official updates, affecting community discourse over the relative strengths of characters and course of the game.

8.7.3 More is good

With many strong parallels to neoliberalism (Huang, 2023), gacha games also reflect the idea of "acceleration" (Sugarman & Thrift, 2020), the constant desire for speed and efficiency driven by competition. One obvious example is how players desire meta characters so they can farm more efficiently (see Section 6.3.6.1), and farming efficiently allows them to get the next meta character, etc. Another similarity is powercreep, the inflation of numbers (damage, health, etc.) over time, leading to

older characters becoming obsolete. Players will generally prefer to use characters that are stronger and thus more useful than their predecessor. Of course, this results in developers creating increasingly strong characters to ensure that the newest character is desirable, and thus maintaining their game's survival. Paradoxically, players dislike powercreep, yet the unending desire for "better" characters can only inevitably lead to powercreep (or at least complexity creep, where character kits become increasingly lengthy and specialized¹³).

Again similar to how neoliberalism wishes to constantly expand into and create new markets (Sugarman & Thrift, 2020), gacha game players, and perhaps any digital game player under neoliberal society, always desire "more". In addition to the live service nature of many gacha games, theoretically promising an infinite expansion of the game in perpetuity, the previously mentioned desire for meta characters, to get new meta characters, reflects this desire for expansion. More subtly, players also desire more variety in gameplay and story, more opportunities to use their characters, and of course, more characters and more of their favorite characters (see Section 6.3 and 6.7).

9 Future Work

As mentioned in the Limitations section, there was a lack of participants who primarily played gacha games of Western IP and/or developers. Further study into this particular group of players could illuminate how they might be similar to, different from, or overlap with the communities of gacha games with closer ties to anime culture. Analysis of the games themselves may also show the differences in

¹³ This problem also frequently occurs in MOBAs, and similar genres that must continue adding new, unique characters.

subcultures or priorities (e.g., how characters are marketed and evaluated), if they exist.

This work focused on collecting as broad of a range of perspectives as possible, and so did not have the scope for in-depth interviews with participants. Comprehensive understandings and comparisons of individual experiences of specific gacha game features can provide further insight into how players come to understand games, for example: how does a player determine what levels and forms of monetization are "predatory"? How was their perspective informed by the games they played (gacha and non-gacha) and the communities they were in?

These findings may also have applications outside of gacha games towards other games that share aspects with gacha games, such as the following example.

Although not a gacha game, *Overwatch* was originally one of several games that popularized loot boxes and their related controversies. Loot boxes were removed when the free-to-play *Overwatch 2* replaced the original *Overwatch*. Surprisingly, at the start of 2025, *Overwatch 2* brought loot boxes back¹⁴ by popular request. At first glance, this appears to be a gambling-addicted playerbase refusing to move on from the extra excitement of random rewards (see Koeder et al., 2018). However, when *Overwatch 2* switched to a battle pass system, they crucially removed the *possibility* of acquiring desired skins for free¹⁵. The removal of a consistent progression reward (earning loot boxes for leveling up) and the specific implementation of the battle pass created further negative sentiment; as player communities are not a monolith, some

14 <https://www.forbes.com/sites/krisholt/2025/02/12/overwatch-2-spotlight-loot-boxes-are-officially-returning-in-season-15/>

15 <https://www.forbes.com/sites/paultassi/2022/10/09/why-overwatch-2-players-actually-miss-loot-boxes/>

players pointed out that implementing progression mechanics *not* in the form of random rewards was also an option¹⁶. Similarly to gacha players in Woods (2022), *Overwatch* players who enjoyed loot boxes also enjoyed the ability to game-the-game and earn skins through loot boxes, as well as using the currency earned from getting duplicates to buy their desired skins. Future work could potentially explore this community and/or phenomenon, such as the long-term community wide effects of replacing RRM with deterministic rewards.

10 Conclusion

This thesis explores how gacha game players form connections with gacha game characters, and how various game systems affect these connections. The author conducted a comparative analysis examining 4 popular gacha games that cover a broad range of game genres and implementations, followed by an online survey collecting over 500 participants' perspectives on their opinions on and relationships with gacha game characters.

The findings show that players have different expectations for gacha game characters due to their awareness of the developer's monetization strategies, however they still factor in different aspects of the character such as visual design, narrative, and gameplay, just as they would for a character from another medium. In addition to the character's elements, time investment into and unique personal experiences with a character, both afforded by the gacha and surrounding systems, were important for building emotional connections with a character. These results support previous research that players primarily engage with gacha games for the

¹⁶

https://www.reddit.com/r/overwatch2/comments/y0bnxv/they_should_bring_back_loot_boxes/

ability to circumvent monetization methods to earn items using time instead of money, as well as the emotional payoffs from obtaining, raising, and accompanying liked characters. While the gacha mediates these behaviors and relationships, the act of pulling the gacha in and of itself is not sufficient reason for players to remain interested in a gacha game, showing that a myriad of factors beyond gambling psychology contribute to the experiences of gacha game players.

The comparison of gacha game features positions the gacha mechanic within the context of the overall game, not only focusing on the features of the random rewards themselves. Gacha games are still first and foremost *games*, experienced by players over months or years of evolution, not only through the addition of new characters but of narrative arcs, limited-time events, and new systems. Players are just as varied as the games they play, preferring different games, different characters, or prioritizing different factors of the same character. Furthermore, players are part of various communities and subcommunities connected through a global Internet, providing spaces for players to interact with, learn from, and form friendships with each other despite potential cultural barriers.

In a media environment that is increasingly saturated with different properties vying for a person's attention (including but not limited to games), it is important to understand not only what is successful, but why, and how this reflects and impacts both the individual and the society they live in. Gacha games live at the intersection of character-driven media, live-service free-to-play monetization, digital fandom, emotional capitalism, the neoliberal relationship with time, and more. It is no surprise that developers continue to produce gacha games or adopt various aspects of gacha

games, as popular gacha games continue to earn millions of dollars in revenue per month in in-app purchases alone—and their cultural impact is unquantifiable. Simply dismissing gacha game players as monolithic gambling addicts ignores all of the nuances of the modern media consumption experience, and how experiences of play are shaped by our histories and societies.

11 Statement Regarding AI

This thesis was proudly crafted by human hands without the use of any generative AI or LLMs, through reading, data collection, analysis, writing, and editing. The author strongly values the process of critical thought and collaboration between people, not commercial software.

Appendix

A. Glossary

Gacha - A lottery/random-distribution rewards system. In the context of gacha games, rewards are usually of different rarity tiers with varying probability rates.

Gacha game - A genre of game that heavily uses the gacha system for character acquisition. See Section 2.2 for a more in-depth description.

Pull/Roll - The act of spending currency to get a reward from the gacha, e.g., "I pulled 30 times on the Aventurine banner." Can also be used to refer to obtaining an item from the gacha, e.g., "I pulled a 4-star character."

Banner - A specific set of random drops towards which the player pulls. Multiple banners are frequently available concurrently. Banners may last for a limited time before being rotated out, or be permanent with occasional additions to the drop table.

Multi-roll/10x - The act of doing 10 pulls with a single button press. In some cases, this may provide a bonus that would not be available from pulling individually 10 times.

Pity/Guarantee - The player is guaranteed a rare reward after a certain number of pulls. If the rare item is obtained before this number is reached, the count is reset or nullified.

Soft pity - Getting a character near the pity limit, such as when the rates begin to increase.

Hard pity - Getting a character at the maximum pity limit, i.e., the player may not have gotten the character were it not for pity.

"Come home" - The phrase used to refer to obtaining a character, e.g., "Saber has come home!"

Spark - Exchanging currency, earned from pulling a specific banner, in order to get a certain character. Differs from pity as the currency system allows the player to continue progressing towards the exchange even after the pity counter is "reset" (i.e., a rare character is acquired).

Rate-up - A character whose probability of being obtained is increased for a certain banner.

Limited - A banner or character with a limited time duration.

Standard/Non-limited - A banner or character who is permanently available, regardless of time.

Rerun - A banner featuring a limited character's reappearance, after their debut appearance.

"Spook" - The phrase used to refer to obtaining a character that was not the desired and/or rate-up character, e.g., "No, Stheno spooked me, I wanted Shuten-Douji!"

SR - Acronym for "super-rare", usually denoting the second-highest rarity.

SSR - Acronym for "super-super-rare", usually denoting the highest (sometimes second-highest) rarity.

UR - Acronym for "ultra-rare", denoting the highest rarity above SSR.

Waifu/Husbando - An endearing term towards a character that the player likes. While stemming from the Japanese pronunciations of the English words "wife" and "husband", the terms do not have the same meanings or usages as in Japanese.

Party - The team of characters that a player brings into a specific gameplay stage or scenario.

Theorycrafting/Teambuilding - The act of strategizing different combinations of characters to put in the same party, in order to optimize one's chances of clearing a certain stage or dealing the most damage.

Free-to-Play (F2P) - A player who does not spend money on microtransactions.

Whale - A player who spends large amounts of money on microtransactions, either consistently or at one time. May also be used as a verb, e.g., "I whaled on Raiden Shogun's banner in *Genshin Impact*."

Battle pass - A set of rewards that the player earns through earning experience points through tasks such as logging in, spending energy, or killing enemies. There is generally a free track, which provides basic rewards, and a paid track, which provides additional rewards.

Monthly pass - A pass that grants the player extra rewards when logging in. Named such as it usually lasts 30 days.

RNG - short for "random number generator", used colloquially to refer to randomness or the results thereof.

Min-max - Earning the maximum amount of resources with the minimum amount of time or labor. May also be used to mean "optimize" in general.

Stamina/Energy - A resource that regenerates over time and must be spent to play stages or gather materials. Can be referred to by different names in different games, e.g., resin, sanity, etc.

Grind/Farm - The act of gathering resources or gacha currency through a long series of repetitive tasks and/or time.

Save/skip - Choosing to not pull on a banner or series of banners to prioritize a different character.

Rerolling - The act of creating new accounts and playing the game until their first few sets of gacha pulls. The player continues creating new accounts until they are satisfied with the starting position of the account, such as having a high number of rare characters or a specific desired rare character, and then continues on that account.

Alter - Short for "alternate", a different form of a character that has already been released. They may be extremely similar, except for an outfit, or they may be a completely different character with the opposite personality. The term is used more in games with expanding rosters due to the frequent recurrence of characters in a limited roster.

Event - A time-limited activity that provides additional rewards. Events are usually themed around a narrative, include new characters, and/or unique game modes.

Collab - Short for "collaboration", the introduction of characters from other IPs, as either characters, skins, and/or full events.

Fan service/fanservice - Originating from the Japanese *wasei-eigo* term. In the English community, it broadly refers to sexualization such as revealing outfits, large breasts, or overanimated "jiggle physics".

Burn - To sell or delete a character.

Ticket - An item that provides 1 pull on a specific banner.

Build/Raise a character - To level up a character and provide them optimal equipment.

Kit - The abilities and strength level of a character. May also be used to refer to the specific wording of a character's skills in game. Does not usually refer to a character's equipment, but instead their innate capabilities.

Materials - Items used to level up characters, usually dropped by clearing missions or killing enemies.

Dailies/Weeklies - Colloquial term used to refer to daily and weekly tasks, respectively.

Max out - To level up a character to its maximum in all ways (e.g., level, skill level, equipment).

Ascension - Increasing the level cap through materials after the character has reached a certain point. May also be known by different terms in different games, such as Promotion, Training, etc.

Potential/Constellation, etc. - The term used to describe the number of duplicate copies of a character a player has, specifically for games where duplicates of the same character provides special upgrades for them. May also be abbreviated, e.g., "P3 Ebenholz", "C0 Ayaka". The author does not know the general term, or if it even exists in English fandom. This may also apply to some equipment gachas.

Returnee rewards - Bonus rewards given to players after returning to the game from an extended break, usually consisting of gacha currency and various materials.

Visual Novel (VN) - A genre of interactive fiction that conveys the narrative primarily through text and a variety of character sprites showing different expressions. The player is occasionally given choices that may affect future events.

Powercreep - The obsolescence of older characters over time, due to the capabilities of newer characters (e.g., damage output) vastly exceeding that of older characters. May be used as a noun, e.g., "This game has too much powercreep", or as a verb, "Hu Tao got powercrept by Arlecchino."

B. Full Comparison Table of Chosen Gacha Games

This table has been split by category for easier readability.

Table B-1: Gameplay Genre

Gameplay Genre	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Genre: main gameplay points, autoplay, and permanent side game modes (as of writing)	Turn-based strategy game, with rock-paper-scissors style counter interactions between 14 classes. Each turn, the player uses various character skills, each with cooldowns, and selects 3 cards from a hand of 5 to determine which character attacks. The player has a party of 6 characters, with 3 on-field at any given time. If the player's team is defeated, they can use a Continue, which fully refills all characters' HP and Noble Phantasm (NP) bars. Continues cost the equivalent of 3 real-time days or 1 gacha currency	Real-time strategy, tile-based tower defense game. The player deploys units using Deployment Points and activates character skills at key moments to clear enemies from the map. The player has a party of up to 12 characters (13 with friend Support). Autoplay is possible with full rewards if the player clears a stage with 3 stars, without using a Support character (see below). Annihilation: A long map of 400 enemies where the player does not automatically regenerate Deployment	Real-time 3rd person action game with open world exploration. The player controls 1 character on the battlefield at a time, using attacks and skills to set up Elemental Reactions or other combos between party members. The player has a party of 4 characters, with 1 on-field at any given time. Autoplay is not possible. Spiral Abyss & Imaginarium Theater: Challenge content that features multiple floors of difficult enemies, with each floor providing a different buff to player	Rhythm game. The player taps, holds, or swipes the notes as they reach the bar at the bottom of the screen. Characters are of one of 5 attribute types, and each have an ability which activates throughout the song to provide bonus effects. The player has a party of 5 characters, with 1 designated as the Leader. Autoplay: Only on unlocked songs, requires Energy. The player has 10 uses of autoplay per day, increased to unlimited with Colorful+ Subscription. Challenge Mode: Instead of using multiple different characters,

	(Saint Quartz), and can be used as many times as the player is willing to pay for them. Autoplay is not possible. Though events or story chapters may add unique gameplay restrictions, there is no permanent side gamemode accessible in the Global (EN) server as of writing.	Points. Integrated Strategies: A roguelite-style gamemode where the player must traverse randomized nodes of events and battles. Reclamation Algorithm: A survival-style gamemode where the player must collect resources and build defenses to protect their base. Stationary Security Service: A deckbuilding gamemode where the player must continually draw characters from their party deck.	characters. Resets on 1-month cycle. Genius Invokation TCG: A trading card game completely separate from the normal gameplay loop of the game. Players roll dice and play cards to defeat the opponent's characters. Repertoire of Myriad Melodies: A rhythm game separate from the normal gameplay loop of the game.	Challenge Mode parties use different cards for the same character. Ranked Mode: 1v1 mode where character stats and abilities are ignored, and players are judged purely on accuracy.
Roster type	Expanding	Expanding	Expanding	Limited (26 characters)
Progression	The player's Master Level determines the number of Points they can use during party creation. Higher rarity characters (Servants) and equipment (Craft Essences, CEs)	Clearing a stage with at least 1 HP remaining allows the player to continue to the next stage. Clearing it with 3 stars (no enemies leaked) gives the player additional clear	The player's account level, Adventure Rank (AR), is increased by completing quests and exploring the world, and determines how far a character	Using characters from one of the 5 music units/groups increases their "Group Rank", which unlocks a main story chapter for that group up until the maximum rank of

	require more points, thus a player is unable to use a large number of high rarity Servants until their account is leveled up further. Individual Servants also have Bond levels, which give the player increasing amounts of gacha currency (Saint Quartz, SQ) as the level increases. At the maximum level of 10, the player earns a special CE that provides a bonus when it is equipped by that specific character. The player can also equip a set of 3 skills that are independent of their Servants, called Mystic Code/Master Skills, which increase in efficacy as the player uses the same one.	rewards, and unlock the challenge mode of the stage if applicable. Other gamemodes have their own progression systems that provide various materials as the player clears maps or increases their level in that mode. Individual characters (Operators) have Trust levels, which increase a specific stat as the player uses them more. The player's Base provides various rewards and abilities (e.g., crafting materials) when upgraded.	can be leveled. AR is capped by the player's current World Level. Increasing the World Level requires the player to clear a special quest, which will then unlock better rewards and raise the character level cap, but also increase the level of enemies throughout the world. The highest AR required to unlock all story quests is 40, out of a maximum of 60; the World Level starts at 1 and its maximum is 9 (previously 8). Individual characters have Trust levels, which unlock a cosmetic profile item at the maximum level of 10.	20. Reading the story for that group, and having the required rank for the VIRTUAL SINGERS group will unlock the additional related VIRTUAL SINGERS story. Using and acquiring characters will increase each of their individual "Character Rank" levels, which give a variety of rewards.
Daily/Weekly routine	Daily: Daily Login Bonus.	Daily: Daily Login Bonus	Daily: Daily Login Bonus	Daily: Daily Login Bonus

	Up to 3 Material Exchange tickets earned per clearing a stage. Weekly: The list of Weekly Missions resets. Class level up materials rotate on a weekly schedule. Monthly: Mana Prism and Rare Prism shops reset. Holy Grail Casting charges reset. Energy: 1 AP recovers every 5 minutes, up to a maximum that depends on the player's level (20 to 146). Stage cost varies depending on type and difficulty, usually ranging from 5 to 40. Birthday: Character birthdays are not celebrated. The player can unlock a voice line from each character	A list of Daily Rewards is available each day. Completing tasks such as killing enemies, clearing maps, or visiting friends will fill the completion until all rewards, including gacha currency and various items, are claimed. Some Base activities provide rewards once per day. Credits can be claimed from the once per day. The Credits shop resets. Weekly: A list of Weekly Rewards is available each week, which functions similarly to the Daily Rewards. The weekly Originium reward for Annihilation resets. Class level up materials rotate on a weekly	4x Daily Commissions are available each day. Clearing story, events, exploration, and spending Resin can also substitute clearing these quests. Each grants completion rewards including gacha currency; after all 4 are completed, the player can pick up additional rewards at the Adventure's Guild building. Daily Battle Pass missions reset. Resources around the map respawn. Weekly: Each Weekly Boss's reward chance resets. 3x automatically-expending uses of a reduced Weekly Boss Resin cost. Talent and Weapon materials rotate on a weekly	1x Challenge Mode completion, the player gets a small amount of gacha currency. 3x automatically-expending uses of a double EXP bonus. Weekly: If the player finishes Challenge Mode on all 7 days, they additionally earn a choice between a set of rewards, including gacha currency and various level-up materials. Monthly: The reward track for Show Points (Battle Pass) resets. Energy: 1 Energy recovers every 30 minutes, up to a maximum of 10 Energy, and can use anywhere from 0 to 5 (10 during events) Energy per song (default is 3).
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	once their birthday has passed at least once.	schedule. Monthly: Distinction and Commendation Certificate shops reset. The materials reward for Stationary Security Service resets. Energy: 1 Sanity recovers every 6 minutes, up to a maximum that depends on the player's level (from 82 to 180). Stage cost varies depending on difficulty, ranging from 6 to 36; some activities do not require Sanity. Birthday: Character birthdays are noted in their profiles, but not celebrated in-game. The player's birthday is not recorded.	schedule. Weekly Battle Pass missions reset. Monthly: Masterless Stardust and Masterless Starglitter shops refresh. Spiral Abyss and Imaginarium Theater reset. Energy: 1 Resin recovers every 8 minutes, up to a maximum of 200. Various reward-earning activities cost a minimum of 20 and maximum of 60 resin. Birthday: Character birthdays are celebrated with a special letter, sent to the player's mailbox. The letter contains gifts from the character, and can only be received if the player logs in within the 24-	Birthday: Character birthdays are celebrated with a special banner that features the exclusive Birthday rarity card. Furthermore, a special Live Show celebrating the character's birthday is available within the 24-hour period of the character's birthday. Attending the Live Show rewards the player with a commemorative profile achievement. The player's birthday is not recorded.
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			hour period of the character's birthday. Character birthdays are additionally celebrated on social media with special promotional art. The player's birthday is celebrated with a commemorative cake item that changes per year.	
Building	Servant Levels/Ascensions: Characters gain EXP using EXP cards. Every time the character reaches its current max level, it must be Ascended, increasing its level cap, adding new skills, and earning a new character portrait and model. Ascension can be done up to 4 times. Servant Skills & Append Skills: Character Skills and Append Skills can be leveled up to 10 each. Level 10	Operator Levels/Promotions: Characters gain EXP using EXP cards. Every time the character reaches its current max level, it may be Promoted (Elite), depending on its rarity; Promotion increases the character's DP cost but also its stats, level cap, sometimes adding new skills, and earning a new character portrait and model. Promotion can be done once (Elite 1) for 3* characters, and twice (Elite 2) for 4* character and	Character Levels/Ascensions: Characters gain EXP through play or using EXP cards. When the character reaches its current max level, it must be Ascended, increasing its level cap and sometimes unlocking stats and passive abilities. Ascension can be done up to 6 times. Character Talents (Skills): Character Talents can be leveled up to 10 each (not	Character Levels/Training: Characters gain EXP through play or using EXP cards. When the character reaches its current max level, it must be Trained, increasing its level cap and unlocking the Trained art. Character Skills: Skills can be upgraded to level 4 using Skill EXP cards or Wish Pieces/Jewels. Character Mastery: Mastery increases the character's stats, event bonus, and

	Skills require a rare Crystallized Lore. CEs: CEs level up by using other CEs as material. If a CE uses another copy of itself as a material, its level cap is increased; after 5 copies, the CE is Max Limit Broken, which additionally increases its passive effects. Palingenesis: Increases the level cap of the character beyond its original Max Ascension limit. Each Palingenesis costs a Holy Grail, which increases the cap by diminishing amounts the higher level the Servant is (10 at 60 to 2 at 90+), up to a maximum of 100, 120 with sufficient Servant Coins.	above. Operator Skills: Character Skills can be leveled up to 7. All Skills share the same level. Operators of Elite 2 can additionally increase Skill Mastery through the Base function up to Mastery 3 per Skill (counted separately per skill), requiring a real-world timer. Modules: Some characters have access to Modules, which are available at Elite 2 Level 60, and require clearing character-specific missions to unlock. Modules increase various passive abilities and can be leveled up to 3.	including Constellation bonuses). Level 10 Talents require a rare Crown of Insight. Weapons: Weapons gain EXP using Weapon EXP cards. Every time the weapon reaches its current max level, it must be Ascended, increasing its level cap. Other copies of the same weapon can be used to Refine the weapon, increasing its passive abilities. Artifacts: The character can equip 5 types of slot-specific Artifacts. Artifacts each provide a Main stat, 1-4 Sub stats, and a Set Bonus (2-pc and 4-pc). Artifacts are earned through exploration and clearing specific Artifact Domains, each set giving a different Set Bonus. The Main and Sub stats are	unlocks costume variants if applicable. Mastery can be upgraded to level 5 using Wish Pieces/Jewels.
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			randomly generated from a pool. Artifacts can be leveled up using other Artifacts or Artifact EXP, unlocking or increasing a random Sub stat by a random amount every 4 levels. A large percent of the character's power comes from their Artifacts.	
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Table B-2: Gacha Mechanics

Gacha Mechanics	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Banner types	Non-Friend Points banners include an 10+1x bonus, where every 10th pull comes with a free 11th pull. Featured Rate-Up: Servants and CEs of 3*, 4*, and 5* rarity are available. One or several characters have an increased drop rate; the character can be Limited or non-limited. Pulls cost Saints Quartz or Summon Tickets.	All banners use Originium, and either Headhunting Permits or Kernel Headhunting Permits Limited (Summer, Anniversary, New Years): 2x 6* rate-up characters, one of which is Limited, and the other is Standard. Joint Operation: A selection of 10 characters, 4 6*	Event (Limited) Character: A 5* Limited character and 3 4* characters are rate-up. The pool includes all non-limited characters and non-limited 4* weapons, but does not contain any 5* weapons. 2 Limited Character banners usually run concurrently, as of writing, and share a pity counter with each other. Uses Intertwined Fates.	All banners except the Ticket banners use Crystals. Limited: Rate-up for 3 or more 4* cards that are exclusive to this event. Has a Spark (exchange) system using Limited gacha seals/vouchers. Birthday: This banner runs for a few days surrounding the character's birthday. The

	Story: Servants and CEs of 3*, 4*, and 5* rarity are available. The contents of the pool increases as the player advances through the story. Pulls cost Saints Quartz or Summon Tickets. Guaranteed SSR (GSSR)/Lucky Bag: At least 1 5* character from a specific pool is guaranteed within a single 10x pull. Multiple banners are available simultaneously, featuring different groups of characters in each pool. The player may only pull once (shared across the various banners), and must use Paid Saints Quartz. Friend Points: Level-up materials, as well as Servants and CEs up to a rarity of 3*s are available. Pulls cost Friend Points, a free	and 6 5*, are featured. When pulling a 5* or 6* Operator, the player will always pull one of the featured characters. Standard Rate-up: 1 6* rate-up character. After 150 pulls, the featured character is guaranteed to be the next 6*. Standard: 2x 6* and 3x 5* characters from the Standard pool are in the featured lineup. Kernel: 2x 6* and 3x 5* characters from the Kernel pool, solely consisting of older characters, are in the featured lineup. Kernel Headhunting Permits can only be used in this banner, and this banner does not accept other Permits. There are additional event-based banner formats that go	Limited Weapon: Both 5* Limited weapons share the rate-up, as well as a pool of 4* weapons. The pool includes all non-limited weapons and non-limited 4* characters, but does not contain any 5* characters. Uses Intertwined Fates. Chronicle (Select): Uses the systems as the Limited Character/Limited Weapon, but the player selects their 5* rate-up target from a list of multiple characters and/or weapons. Uses Intertwined Fates. Standard: All non-limited characters, as well as all non-limited weapons are in the pool and share an equal chance. Uses Acquaint Fates.	pool consists of exclusively that character's 2* and 3* cards, in addition to the exclusive Birthday card. The banner is limited to 100 pulls, and the Birthday card is guaranteed within that limit. World Link (Unit-Limited): Cards in the pool are limited to the cards of a single music group/unit's characters. Permanent: Rate-up for 3 4* cards that will be added to the permanent pool after the event. Has both a Pity and a Spark (exchange) system using Permanent gacha seals/vouchers. Select List: The player selects a list of 10 from a pool of 4* cards, and is guaranteed to get at least 1 of them in a single 10x pull. The player
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	currency earned through Friend Support. Additionally, 1 free 10x is available per day.	beyond the scope of this comparison.		may only pull once, and must use Paid Crystals. 3* Guaranteed Ticket: Only 3* and 4* characters are available in the pool. 3* Guaranteed Tickets can only be used in this banner, and this banner does not accept Crystals. There are additional event-based banner formats that go beyond the scope of this comparison.
Rarity tiers	Rates for Featured banner (does not include CEs): 5* - 1% (rate-up character: 0.8%) 4* - 3% 3* - 40% 2* and 1* - Friend Points banner only Characters of higher rarity have a higher maximum level (before spending resources to raise the level cap); 1*	Base rates for Standard Rate-up banner: 6* - 2% (rate-up character: 1%) 5* - 8% 4* - 50% 3* - 40% 2* and 1* - Recruitment only Characters of higher rarity have a higher maximum level; 3* characters have an Ascension 4 max level of 60, while 5* characters	Rates for Event Character banner (does not include weapons): 5* - 0.6% (1.6% with pity; rate-up character: 0.3%, 0.8% with pity) 4* - 2.55% (6.5% with pity)	Rates for Limited banner: 4* - 3% (rate-up characters: 0.4% each) 3* - 8.5% 2* - 88.5% 1* - Free characters only

	characters have an Ascension 4 max level of 60, while 5* characters have a max level of 90.	have a max level of 90.		
Pity mechanics	10x Guarantee: A 4* or higher card (Servant OR CE) AND a Servant (3* or higher) are guaranteed on a 10x pull (does not apply to cumulative single pulls). Pity: If the player has not yet pulled the character on this banner, the Featured character is guaranteed on the 330th pull (effectively 300 pulls due to the 10+1 bonus). This effect only takes place one time, and does not trigger if the player gets the character before the 330th pull. This count does not transfer to any other banners.	First 10x: All banners; guarantees a 5* or 6* character within the first 10 pulls. Scaling Odds: After 50 pulls without getting a 6* character, the 6* rate is increased by 2%, until 100% at pull 99. This count resets any time the player gets a 6* character. The count and odds increases are shared between Standard banners. Limited banners each have independent counts and odds increases. Pity: On Standard Rate-up banners, the featured character is guaranteed to be the next 6* after 150 pulls (this does not mean the player gets	10x Guarantee: All banners; after 9 pulls, the 10th pull is guaranteed to be 4* or higher. 50/50: A featured character has a 50% chance to be the reward when a player pulls a character of that rarity. If the player pulls a character that is not featured, their next 4* or 5* character respectively is guaranteed to be featured. This guarantee is shared between Limited Character banners. Pity: A 5* is guaranteed after 90 pulls, resetting when any 5* is pulled. This count is shared between Limited Character banners, and the Standard banner has its own	10x Guarantee: All banners; after 9 pulls, the 10th pull is guaranteed to be 3* or higher. Exchange: Pulls grant seals which can be used to exchange for the rate-up characters during the banner duration. Seals can also be exchanged for a limited number of vouchers, which decreases the required seal amount in a future exchange. Both Permanent and Limited banners have exchanges, but each are limited to their own vouchers. Pity: On the Permanent banners only, the player guarantees a featured 4* after reaching 100 points. Pulls

		them on the 150th pull). This only takes effect once, and the count does not transfer to any other banners. Exchange: On Limited banners, pulls grant special tokens which can be used to exchange for the Limited Operators of this or past years of the same event type (e.g., Summer) during the banner duration.	counter. Players additionally consider 75/76 "soft pity", as it is widely believed that an undisclosed hidden odds increase happens from pull 75 onwards. [source]	using paid crystals earn 1 point, while pulls using free crystals earn 0.5 points.
Duplicate treatment	All duplicate pulls give an additional copy of the character. After acquiring the character, the player can choose to: -Stacking: Use the duplicate as a required material to upgrade the character's Noble Phantasm (NP) level, which increases the strength of their NP in battle -Converted (orthogonal): Sell ("Burn") the	Converted (analogous and orthogonal): All duplicate pulls give the player an amount of Commendation or Distinction Certificates, depending on rarity. Stacking: Each duplicate character gives a character-specific Token which allows them to increase their Potential level up to a maximum of 6 (from 1).	Converted (analogous and orthogonal): All duplicate pulls give the player an amount of Masterless Starglitter or Masterless Stardust, depending on type (character or weapon) and rarity. Stacking: Each duplicate character gives a character-specific Stella Fortuna which allows them to increase	Converted (analogous and orthogonal): All duplicate characters are automatically sent to the Green Room, a menu separate from the normal character list. From there, their only option is to be converted to currency (Wish Pieces or Wish Jewel) depending on rarity.

	duplicate for Rare Prisms or Mana Prisms depending on rarity -Level up and use the duplicate (as two copies of the same character owned by the player cannot be fielded at the same time, this is functionally pointless) If a player summons a 6th or later copy of a maximum rarity (5-star) Servant, they additionally earn 1 Unregistered Spirit Origin.	Potential upgrades can include a variety of upgrades to passive abilities or stats, most commonly reducing the unit's in-battle Deployment Point cost by 1, or their Redeployment time cooldown. Tokens for the 7th copy and later are stored in the player's inventory, and can be exchanged at the store for Commendation or Distinction Certificates, depending on rarity.	their Constellation level up to a maximum of 6 (from 0). Constellation levels 1, 2, 4, and 6 provide unique gameplay buffs, while Constellation levels 3 and 5 increase the strength of the character's abilities. After 7 copies of the character are earned, the Stella Fortuna is no longer earned, replaced with a higher amount of Masterless Starglitter.	
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Table B-3: Content Locked Behind Ownership

Content Locked Behind Ownership	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Narrative	Character Profile, including background story and voicelines. Interlude, see below. Valentines stories, see	Character Profile, including background story and voicelines. Operator Records, a short visual novel story section featuring the character	Character Profile, including background story and voicelines.	Side Story, a 2 part visual novel story section featuring the character, that ties into the story of the event during which this card was released.

	Event Format.	(some characters).		
Stages	Interlude, a short story focusing around the character with both visual novel and combat content. Rewards include gacha currency, as well as skill upgrades and unlocks. Available once the character has reached a certain level and/or Bond level. Rank-Up Quest, a combat-only stage that rewards the character with an upgraded skill after completion. Available once the character has reached a certain level. Older characters tend to have more Rank-Up Quests. A character can have multiple Interludes and/or Rank-Up Quests.	Paradox Simulation, a puzzle map that focuses on the character's unique abilities. Available once the character has been leveled to a certain point (depending on rarity).	None	None
Extrinsic rewards	At Max Ascension, gain 1 pull's worth of gacha currency. Completing the Interlude(s) and	Completing the Paradox Simulation stage rewards a small amount of gacha currency.	At Ascension 1, 3, and 5, gain 1 Acquaint Fate (Standard banner). If the character is	Playing each Side Story rewards the player with a small amount of gacha currency.

	Rank-Up Quest(s) rewards a small amount of gacha currency. The player also earns additional gacha currency for every 10 completions each.	Earning the Operator Records grants a Medal for display on the player's profile.	put in its preferred furniture set in the player's Teapot (house), additionally earn some gacha currency. At Bond 10, gain a special namecard for display on the player's profile.	
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Table B-4: Patch/Event Format

Patch/event format	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Frequency	Events that contain gameplay and story stages last an average of 3 weeks, though range from 2 to 3 weeks, and occur about once a month on average. Recurring events such as Anniversary and Valentine's day always happen around the same time. Summoning Campaigns and login bonuses are much more frequent than gameplay events.	Events last an average of 2 weeks, though range from 10 days to 3 weeks. With usually a few days to a week between events, there are 20-30 events annually, excluding login bonuses. Recurring events such as Anniversary always happen around the same time. Events usually feature a few new characters, a set of story missions, and a	Patch cycle is exactly 6 weeks. Recurring events such as Anniversary and Lantern Rite always happen around the same time. Each patch has a major event (usually lasting 2-3 weeks) or area/main story unlock, several minor events, and 2 rounds of Character banners.	Events last an average of 7-9 days, with a few days in between, for an average of 3 events per month. Events usually feature a 5 new characters (3 in the gacha pool, 2 in the event exchange), an event story of 8 or more parts, and an event shop. The player also earns bonus rewards depending on the player's final Ranking after the event ends.

	Events usually feature a few new characters, a set of story missions, and a set of farming missions, with one or several Challenge missions.	set of challenge missions, though not all (see below).		
Gameplay changes	Most events feature a Points Ladder and/or Event Shop. The player earns Points and various event currencies through clearing the event's Farming Stages, with a bonus for using certain Servants or event-limited CEs. These are exchanged for various materials and sometimes copies of an event-exclusive Servant. Additionally, after finishing the event's story, a Challenge Quest will usually be available to defeat a special boss, rewarding a Crystallized Lore.	Contingency Contract: An event that features a difficult stage with a tree of debuffs and difficulty modifiers to select. The more modifiers one selects, the more points they earn. Trials for Navigator: A boss-rush-style event that features multiple bosses returning from old events on a map that pans between each boss, forcing the player to readjust their positioning. Stronghold Protocol: A mode similar to autochess games, the player must purchase	Events tend to feature a new or returning side game mode, including but not limited to combat challenges, parkour challenges, and minigames (such as puzzle games or party games). Major events may include multiple different game modes at once. Due to the large number and variety of events, they have not been detailed. A comprehensive list is available on the game's community [wiki]	Characters of a certain unit and attribute gain a bonus to event points gained. More Energy can be used per song during event periods. Gameplay itself does not change, except for the conversion of Cheerful Show to Colorful Show (see below) for Cheerful Carnival events.

	Battle for New York: In addition to normal stages, a set of challenging stages that do not allow Continues are available. Valentines: The Points Ladder contains Chocolates, which can be given to Servants for a special, fully voiced Valentine's visual novel segment (does not change year-to-year). Holy Grail War: Each stage takes place on a large 2D map, with limited deployment options. The player must carefully position their units to defeat the enemy army. The player cannot play any other stages while in a Holy Grail War stage.	characters of different strength tiers from the shop in order to defend against waves of enemies. Combining 3 of the same character increases their combat strength. Characters can equip various items, and characters with different group affiliations can gain the effects of different items.		
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Table B-5: Multiplayer

Multiplayer	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
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PvP	None	None	None, but some event non-combat modes (e.g., hide-and-seek) may be PvP or team-based	Event Ranking: During all events, players gain Event Points through clearing songs. Event Bonus cards apply to Event Points. Players are placed on a ladder depending on their Points, and players gain additional rewards for placing higher. Ranked Mode: See genre. Cheerful Show: Occurs during Cheerful Carnival event, where the player must pick 1 of 2 teams to support. The team with higher points at the end of the event gains additional rewards. Similar to Co-op Show (see below), but 2 groups of 5 compete against each other on the same song; the group with a higher Score gains additional points for their team.
Co-op/support	Mandatory support: the	Optional support: the player is	Real-time co-op: Friends or	Co-op Show: Up to 5 players play

	player is required to select a Friend Support unit, with few exceptions. In some stages, an NPC support provided to all players by the game is available for the stage; in some stages, the NPC support is mandatory.	optionally allowed to select a Friend Support unit, increasing the size of the party by 1. The level of the Support unit is restricted by the Promotion level of the player's strongest unit in the party. Using a Friend Support disables autoplay for the map until it is cleared without Friend Support.	strangers can join a player's world if they are of the same World Level. Players can explore and fight together, however speaking to NPCs is sometimes blocked. Domains (farming dungeons) can be played with another player in the player's world, or with other players through matchmaking.	the same song simultaneously, using the skills of each player's Leader character. Players can gain additional rewards by collectively scoring well during the co-op only "Fever" section of the song.
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Table B-6: Other Monetization

Other monetization	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Direct purchase	None	Monthly Card (Additional Login Bonus): Provides an extra login bonus for 30 days, in addition to 3 Recruitment Permits. Bundles: Various bundles combining materials and gacha currency, most of which can be bought a	Premium Battle Pass: Provides access to the paid track of the Battle Pass, including exclusive weapons. A second tier purchase additionally adds 10 levels and exclusive personalization options.	Premium Mission Pass: Provides access to the paid track of the Battle Pass, including exclusive costumes. Colorful+: Provides an extra login bonus for 14 days, an amount of Paid & Free Crystals, and various in-

		limited number of times per month or per account.	Welkin Moon (Additional Login Bonus): Provides an extra login bonus for 30 days, in addition to the normal amount of Genesis Crystals for its cost.	game bonuses for 30 days. There are 3 tiers of Colorful+ subscription, each providing different rewards, and multiple tiers can be bought together. Bundles: Various bundles combining materials and gacha currency, most of which can be bought a limited number of times per month or per account.
Paid currencies	Paid Saint Quartz: Works identically to Saint Quartz, but allows access to Paid Saint Quartz banners.	Originite Prime: Can be earned for free or purchased, and no distinction is made between the free and paid version. Used to purchase character skins, other shop items, refill Sanity, and converts to Originium at a 1:180 ratio.	Genesis Crystals: Can only be purchased. Used to purchase character skins, materials bundles, and converts to Primogems at a 1:1 ratio.	Paid Crystals: Works identically to Crystals, but allows access to Paid Crystal banners.
Free currencies (not including the equivalent of "gold" and things used to level up like EXP cards)	Saint Quartz: Gacha currency. Earned through login bonus, clearing story missions, side missions (e.g., Interludes), and upgrading	Originite Prime: Earned by clearing a mission with 3-Stars or Challenge Mode of a mission (see above).	Primogems: Gacha currency. Earned from Daily missions, quest completion, events, and exploration. 160 Primogems are required for 1	Crystals: Gacha currency. Earned from Daily login, Challenge Mode, reading story, and event and Character Rank rewards. 300 Crystals are

	characters. Mana Prisms: Earned through clearing some stages, and selling 3* rarity cards. Used to exchange for level-up materials and limited CEs. Rare Prisms: Earned through selling 4* and above rarity cards, or earning certain event rewards for a second time. Used to exchange for rare level-up materials, some previous event rewards, and Mystic Codes/Master Skills (skills that can be used independently of characters). Friend Points: Earned through using and providing Friend Support. Used to pull the Friend Support banner. Servant Coins: Earned from obtaining a character and increasing its	Originium: Gacha currency. Earned through Annihilation missions, daily and weekly missions, and through certain materials at the player's Base. 600 Originium are required for 1 gacha pull. Distinction Certificates: used to exchange for level-up items, and a large number of Headhunting Permits on a monthly refresh cycle. Additionally, a 6* and a 5* character from the Standard and Kernel Rate-ups are available for direct exchange. Commendation Certificates: used to exchange for level-up items, Originium, and Headhunting Permits on a monthly refresh cycle. Credits: Earned through the player's Base or loaning Support	gacha pull. Masterless Starglitter: used to exchange for unlimited Fates, or a selection of 4-star characters and weapons on a 2-month rotation, or level-up items on a monthly refresh cycle. Masterless Stardust: used to exchange for level-up items or Fates on a monthly refresh cycle. Additional currencies are beyond the scope of this comparison.	required for 1 gacha pull. Wish Pieces/Wish Jewel: used to level up Character Mastery Rank, which increases stats and can also unlock additional costumes. Can also be used to exchange for level-up items or 3* Guaranteed Tickets. Charms/Gems: used to unlock Character Side Stories and percentage score bonuses towards specific characters/groups. Cloth/Thread: used to craft unlocked Costumes or color variants of Costumes for different characters. Music Card: used to unlock songs. The player must own the song to unlock its Master difficulty, or to select it for
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	Bond level. Used to increase a character's level cap past 100, or to unlock their Append Skills. Additional currencies are beyond the scope of this comparison.	units. Used to exchange for level-up items on a daily rotating shop. Additional currencies are beyond the scope of this comparison.		single-player or co-op play. Cover Card: used to unlock Cover versions of owned songs (see below). Additional currencies are beyond the scope of this comparison.
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Table B-7: Personalization

Personalization	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Visible to self	My Room Servant: Displays one of the player's owned characters, who will play a voiceline when tapped. Character Display: The player can independently decide which of the unlocked character card images, in-game models, status images, attack card images, and character icons to display. For example, the player can use the character	Homepage Operator: Displays one of the player's owned characters, who will play a voiceline when tapped. The character's position and size can be adjusted. Homepage Background: Displays a background image for the main menu. Each background comes with specific music. Unlocked through clearing stages or some through	Profile Picture: Displays when the player opens the menu, see below. Profile Banner: Displays when the player opens the menu, see below. Party Names: Players can name their party presets for organization or amusement. Voiceover: Players can set the voice language that they hear.	Cover Songs: Some songs have alternate versions sung by a single singer or subset of singers within the group, or a different singer entirely (VIRTUAL SINGER only). The player, upon unlocking the Cover version, can choose which audio file they hear when playing the song. Party Names: Players can name their party presets for organization or amusement.

	icon from Ascension 1, status image from Ascension 3, and in-game model from a skin. Party Names: Players can name their party presets for organization or amusement.	purchase. Party Names: Players can name their party presets for organization or amusement. Voiceover: Players can individually set the voice language for each character.		
Visible to others	Skins: Some characters have skins, which will be visible on their character icon and in-game model. Support Units: The units which the player has selected to be available as Support, as well as their CEs (independent from the player's own parties). By default, the player's own settings for their Character Display will apply when someone else uses their Support character, but that can be changed by the player.	Skins: Some characters have skins, which will be visible on their in-game model. Profile Picture: A selected portrait image earned through completing tasks, or some through purchase. Assistant: The player's chosen Assistant Operator will appear as the image on their profile. The player can also select their Base's Assistant as their profile picture. Theme: The player can change the	Skins: Some characters have skins, which will be visible on their information page and their in-game model. Profile Picture: A selected portrait of one of the player's owned characters, or other pictures earned through completing tasks. Profile Banner: A selected banner earned from achievements or character Bond levels. Character Showcase: A selection of the player's owned characters (with their builds) for	Costumes: Each character can equip a variety of costumes, which will be visible on their 3D model during certain songs with 3D performances. Profile Picture: Automatically selects the Leader of the player's current main team. Achievement Cards: Choose 3 achievements to highlight, which can showcase favorite characters, events, or performance. Profile Page: Fully customizable,

	Message: A short text message. Theme of their profile, sometimes replacing the Assistant image with the Theme's. Themes can be earned from some events or purchased. Support Units: The units which the player has selected to be available as Support. Medals: The player can highlight achievements from progression or events on their Profile. Message: A short text message. Decorated House: Players can decorate their Base with various pieces of furniture, and visit the Base of other players.	display. Banner Showcase: A selection of the player's owned profile banners for display. Message: A short text message. Decorated House: Players can decorate their Serenitea Pot with various pieces of furniture, and visit the Serenitea Pot of other players.	can include statistics, images, messages, achievement cards, and more. Team Name: During Cheerful Shows, the group can select a team name. The team name is randomized from a pool if the players are matchmade, and fully customizable if formed through invites. Message: A short text message.
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Table B-8: Narrative

Narrative	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Narrative delivery	Visual novel, occasional	Visual novel, occasional	Voiced and animated	Voiced and animated visual

	narrative battles (includes special enemies, formation restrictions such as a limited number of characters allowed, and/or requiring or banning specific characters)	narrative battles (includes special enemies, battles that play automatically, and/or in-battle dialogue)	character interactions, in-game cutscenes, pre-rendered cutscenes, occasional narrative battles (includes special enemies, automatic inclusion of story characters in the party, and/or replacing or limiting the player character's moveset)	novel, intro/outro speech sections of Live Shows (animated concert)
POV character	Player character is named by the player, and is generically amiable. Story occasionally shifts POV to other characters.	Player character is pre-defined, named by the player, but has their own morally grey goals and backstory. Story occasionally shifts POV to other characters.	Player character is pre-defined, named by the player, but has their own goals and backstory.	No player character, each story section focuses on the POV of a different playable character.
Archival of event content	All Main Story sections can be reread through the Archives. Narrative sections of events that the player has experienced can be reread through the Archives. Gameplay sections and missed events are inaccessible.	All Main Story sections can be reread through selecting the level. All narrative events are archived for free-play after their rerun, 1 year past the original story run. Non-narrative events, such as Contingency	All Main Story sections can be reread through the Archives. However, only voicelines and text are available, and cutscenes are inaccessible. All previous events are inaccessible, regardless of whether the player participated in	All Main Story and Event Story sections can be reread through the Story menu, regardless of whether the player participated in the event or not. Area conversations, which spawn randomly and place characters in different locations and

		Contract, or April Fools' minigames, are inaccessible.	the event or not.	groupings, are available from the character archive once read. However, Area Conversations from limited time IP collaborations and April Fool's content are inaccessible whether the player read them during the event or not.
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Table B-9: Server Desync Period

Server Desync Period	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Release Server - > NA/Global	2 years	6-7 months	None; simultaneous release	1 year

Table B-10: Expected Income Rates

	<i>Fate/Grand Order (FGO)</i>	<i>Arknights (AK)</i>	<i>Genshin Impact (GI)</i>	<i>Project Sekai (PJSK)</i>
Pulls for Pity	300	150-200 (Standard) or 300 (Limited)	90 or 180 (50/50)	200-300
Pulls/Week (daily login only)	2.33	0 or 2.33 (paid)	0 or 3.9375 (paid)	1.17 or 2.33 (paid*)
Pulls/Week (dailies and weeklies only)	3	8 (includes Annihilation rewards; 2 otherwise)	2.625	0.7333333333
Pulls/Week (total)	5.33	8 or 10.33 (paid)	2.625 or 6.5625	1.9 or 3.07 (paid)

without events/progression)			(paid)	
Weeks/Pity (without events/progression)	56.29	Paid: 18.75-25 or 29.03 Free: 14.52-19.35 or 37.5	Paid: 13.71 or 27.42 Free: 34.29 or 68.57	Paid: 65.22 - 97.82 Free: 105.26 - 157.89
Length between Banners	Varies; large events are approximately 1/month	Varies; 2-3 weeks on average	3 weeks	7-9 days

*The pass lasts 1 month but the login bonus lasts 14 days.

As the above table does not include gacha currency rewards from sources such as: events, long-term login bonuses (e.g., a bonus every 50 days), clearing stages, etc., it is an underestimation. It is primarily intended to illustrate the differences in how gacha games are experienced over time, e.g., compare the weeks/pity for *Genshin Impact* and *Project Sekai*.

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