

CHAPTER II

LITERATURE REVIEW

2.1. Literature Review

2.1.1. Gacha Games

According to Chen & Fang (2023) a gacha game refers to a game-selling approach where the seller sells a gacha pull to their customer. The Gacha pull allows the customer to have a certain chance to receive and win a random reward from the gacha game reward pool. The word "gacha" itself derives from the Japanese toy machine known as a "gachapon," which dispenses random toys in plastic capsules. In gacha games, players often collect characters, equipment, or cards to strengthen their gameplay experience. Through a gacha mechanic, players would pull a random reward from a gacha banner that contains a certain reward. These mechanics are quite similar to the lottery system. Within this game, revenue generation is emphasized on the player's willingness to spend money on in-game currency or gacha roll to test their luck in getting a certain reward. For this, other such as Scholten et al (2019) argues that the term "gacha" refers to a game in which players buy "lucky draws" to get virtual goods of various rarities.

2.1.2. Purchase intention

According to Ghazali et al (2023) Purchase intention in games refers to the balance of customer enjoyment and willingness to engage in transactions related to the game. Balancing between the enjoyment that players receive and microtransactions plays a crucial role in preventing the consumer from losing interest in the game. For this reason, game developers need to account for the enjoyment that they can provide the consumer when designing their marketing approach. A failure to balance the enjoyment and microtransaction could lead to a higher tendency to resist and lose interest in engaging in the game microtransaction.

Meanwhile, Purchase intention itself, according to Tuzzahra & Edastama (2024) refers to the choices made by customers after taking into account the justifications for buying a specific product. Within the context of the gacha game, this can be interpreted as the player's decision to engage in the in-game store transaction. In the gacha games, players will often consider the value that they could

get from the transaction. This transaction ranges from currency or resources, character skins, and gacha roll. The player's decision to engage with the microtransaction will contribute to game revenue generation..

2.1.3. Flow

According to Mirvis & Csikszentmihalyi (1991) Flow can be described as a state of intense focus and enjoyment when a person is engaged in an activity within their skill and present a clear goal. Within the game context, this can be described as the state where players are fully engaged and focused on the game activity. Additionally, according to Tse et al. (2020), flow theory is a theory of growth in which a person evolves via an activity and must enter a cycle of skill-building and challenge-seeking in order to maintain a flow.

Flow is a positive feeling or condition that arises when one is totally focused on the activity at hand. Csikszentmihalyi introduced a nine-dimensional framework including challenge-skill balance, clear goals, and immediate feedback as antecedents. Flow benefits people by enhancing positive affect and motivation, and it is associated with well-being and optimal performance (Zhang & Wang, 2024). Within this study, Flow itself was referred to as deep absorption and engagement of activity that was characterized by intrinsic enjoyment. The merging effect of this concentration, focus, and awareness results in enchanted motivation, performance, and creativity. This balance between positive results and engagement from the flow state is identified as optimal experience.

2.1.4 Enjoyment

According to Tuzzahra & Edastama, (2024) enjoyment refers to how much pleasure the player can experience. Within this context, it serves as a measure of how satisfied players feel with the game they are playing and how much they enjoy the overall experience. Enjoyment is considered a crucial factor in determining a game's success, as it directly influences player retention and continued engagement.

Without creating an enjoyable aspect in the game, the player will lose interest in the game.

Another study also indicates that enjoyment plays a crucial role in forming the flow within the individual. According to Abuhamdeh (2020) asking participants to rate how fascinating and pleasurable the activity they are (or were) participating in is the usual method of measuring intrinsic motivation. Since interest seems to be a good emotion that is different from enjoyment, it is crucial to measure both of these emotions. This study implies that in a state enjoyable, individuals are motivated to repeat the activity, even at great cost, simply for the sake of the experience itself. As a result, the state of flow was described as a profoundly enjoyable experience that is long treasured and becomes a memory marker for what life should be.

2.1.5. Skill

According to Chow et al (2023) a skill is a particular ability to carry out an action well, particularly one that is learned and practiced. Within the game context, this can be translated as the player's ability to perform tasks effectively and consistently within the game's mechanics. This ranges from a combination of quick reflexes, strategic thinking, precise timing, and a deep understanding of the game's rules and systems. This definition is supported by Ghazali et al. (2023) that also defines skill as the ability to identify effective solutions.

According to Cowley et al. (2019) skill can be described as the individual ability to perform a task. Within this study, skill plays a crucial role in forming the flow with challenge. A balance of engagement between skills and challenges creates an engaging activity while forming the flow state. Within this flow, individuals will steadily develop more skills to match the challenge that was presented. As a result, skill can be seen as a developing capacity that interacts with task demands and influences the experience of Flow dynamically during the learning process in encountering the present challenge.

2.1.6. Challenge

A challenge is an obstacle, difficulty, or goal that a person needs to overcome to be successful. Within the video game context, this refers to a variety of obstacles such as game bosses, puzzles, difficulty tweaks, and many more. According to Ghazali et al (2023) the Challenge provides players with the motivation to constantly improve and test their skills. It fosters a learning curve where players are encouraged to adapt, refine their strategies, and persist through repeated failures. This cycle of challenge and mastery is a core component of what makes games compelling and rewarding, contributing significantly to player immersion and satisfaction. By balancing difficulty and attainability, games can maintain player interest and promote a more meaningful gaming experience.

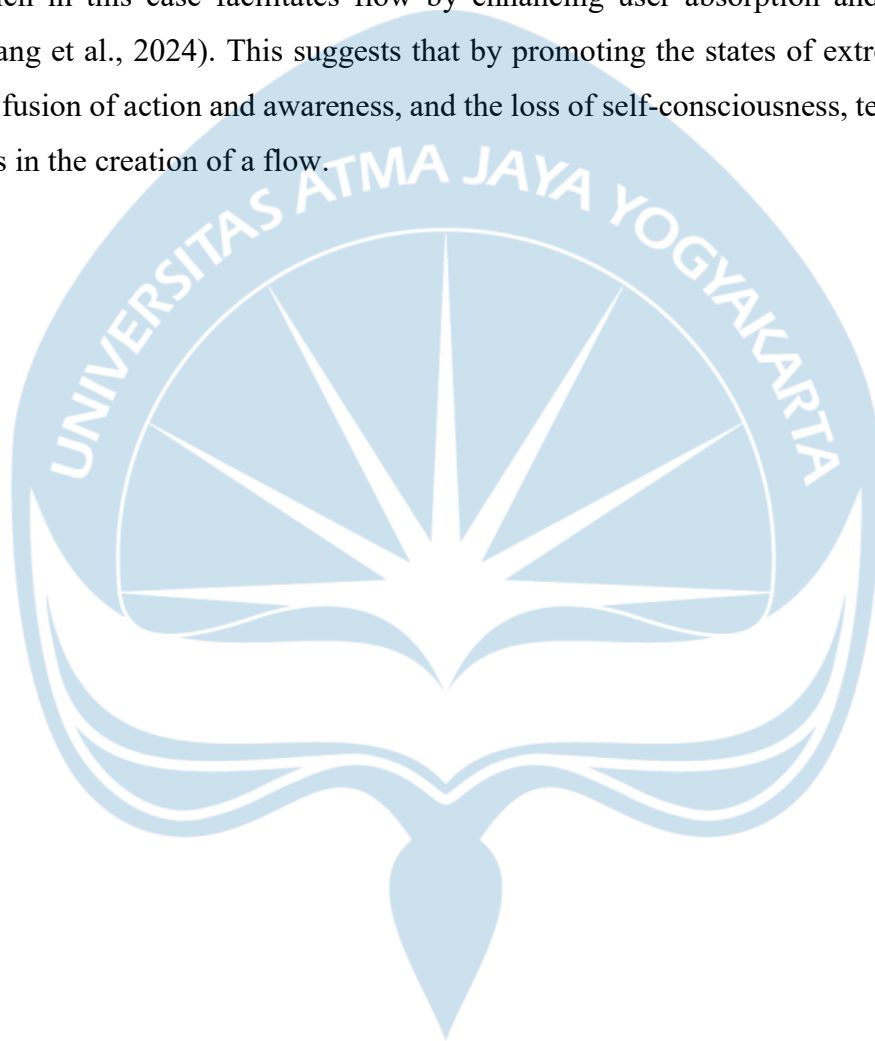
According to Cowley et al. (2019) Challenge plays a crucial role in the source of forming the flow. The balance between challenge and skill contributes to creating engaging activities that generate the flow. Another study such as Moral-Bofill et al. (2023) also defines the challenge as the perceived demands or difficulty of a task that an individual faces. This implies that the challenge was acting as the main precondition needed to generate the flow by providing a clear goal that needs to be met with comparable skill.

2.1.7 Telepresence

According to Tuzzahra & Edastama (2024) telepresence is a state of total immersion and absorption in a virtual environment. Within the game context, this refers to the feeling of being physically present inside the game's virtual world, even though the player is actually somewhere else. This often happens when the game is so immersive that players feel like they are truly part of the environment or story. Other study by Dugan et al (2024) also defined Telepresence as a perception-mediated environment made up of two components: departure, which is the physical sensation of leaving the current location, and arrival, which is the sensation of being in a different environment.

Another study also refers to telepresence as the feeling where an individual or person feels that they "actually there" inside a virtual or mediated environment,

which enhances the experience of flow by increasing absorption and involvement in the task or activity. This reinforced the development of technology such as a metaverse. According to Liang et al. (2024), the term "telepresence" refers to the experience of being fully involved and submerged in the metaverse environment, which in this case facilitates flow by enhancing user absorption and presence. (Liang et al., 2024). This suggests that by promoting the states of extreme focus, the fusion of action and awareness, and the loss of self-consciousness, telepresence aids in the creation of a flow.



2.2 Previous Researchs

Table 2. 1. Previous Researchs

No	Researchs title and author	Hypothesis	Variabel	Result
1.	A study of player behavior and motivation to purchase Dota 2 virtual in game items (E. M. Ghazali et al., 2023)	H1: Enjoyment has a positive influence on the flow. H2: Skill has a positive influence on the flow. H3: Challenge has a positive influence on the flow. H4: Telepresence has a positive influence on the flow. H5: Flow has a positive influence on purchase intention. H6: Continuous intention mediates the relationship between flow and purchase intention. H7a: Enjoyment of buying moderates the positive relationship between flow and purchase intention, such as the relationship is more robust when the enjoyment of buying is high than low. H7b: Enjoyment of buying moderates the positive relationship between flow and continuous intention, such as the	Dependend Variable: Purchase intention Independent Variable: Enjoyment, Skill, Challenge, Telepresence, Flow Mediating Variable: Continuous intention, Enjoyment of buying	This study find out that enjoyment, skill, Challenge, and telepresence has a positive influnce on the flow. The continuous intention also has positively mediated the relationship between flow and purchase intention. Furthermore, the customer's enjoyment of buying can also intensify the positive impacts of flow and purchase intention (7a) and between continuous intention and purchase intention (7c).

		relationship is more robust when the enjoyment of buying is high than low. H7c: Enjoyment of buying moderates the positive relationship between continuous intention and purchase intention, such as the relationship is more robust when the enjoyment of buying is high than low.		
2.	The role of flow for mobile advergaming effectiveness (Catalán et al., 2019b)	H1: A higher level of perceived skills at playing games will lead players to experience a higher level of flow. H2: A higher level of perceived challenge when playing the mobile advergaming will lead players to experience a higher level of flow H3: A higher level of perceived interactivity when playing the mobile advergaming will lead players to experience a higher level of flow. H4: A greater focused attention when playing the mobile advergaming will lead players to experience a higher level of flow. H5: A greater level of telepresence when playing the mobile advergaming will lead players to experience a higher level of flow.	Dependent Variable: Purchase intention Independent Variable: Skill, Challenge, Interactivity, Focus Interaction, Telepresence, Flow, Brand attitude Mediating Variable: Continuous intention, Enjoyment of buying	This study found out that Skill has no positive influence on flow development, however both Challenge, and Telepresence have positive relationship with flow. The study also Flow has a positive relationship with purchase intention

		H6: A higher level of flow when playing the mobile advergaming will lead players to have a more positive brand attitude. H7: A higher level of flow when playing the mobile advergaming will lead players to have a higher purchase intention. H8: A more positive brand attitude will lead players to have a higher purchase intention.		
3.	Factors Affecting Players to Buy Virtual Items in Online Games (Perdana & Tjokrosaputro, 2023)	H1: Flow positively affect continuous usage intention players. H2: Enjoyment positively affects continuous usage intention players. H3: Satisfaction positively affects continuous usage intention players. H5: Flow positively affect purchase intention players. H4: continuous usage intention positively affects purchase intention players. H6: Enjoyment positively affects purchase intention players. H7: Satisfaction positively affects purchase intention players.	Dependent Variable: Purchase intention Independent Variable: Enjoyment, Flow, Satisfaction, Mediating Variable: Continuous intention	This study find out that Flow has a positive relation with the purchase intention and Continuous intention play a role as mediation between flow and purchase intention.

		H8: Flow positively affect purchase intention mediated by continuous usage intention players.		
4.	A study of Flow and Its Factors Towards Compulsive Buying Based on Player Behavior of Mobile Legends In-Game Items (Lapasha et al., 2024)	H1: Enjoyment has positive influence on the Flow H2: Skill has positive influence on the Flow H3: Challenge has positive influence on the Flow H4: Telepresence has positive influence on the Flow H5: Avatar Attractiveness has positive influence on the Avatar Identification H6: Avatar Customization has positive influence on the Avatar Identification H7: Avatar Attractiveness has positive influence on the Flow H8: The Flow has positive influence on the Compulsive Buying	Dependend Variable: Compulsive Buying Independent Variable: Enjoyment, Skill, Challenge, Telepresence, Avatar Attractiveness, Avatar Customization, Flow	This study discovered that enjoyment, skill, Challenge, and Telepresence have a positive influence on the Mobile legend player in forming flow.
5.	Leveraging players' goal-setting and cognitive gaming elements to create flow (Pham et al., 2024)	H1: Game complexity is positively related to flow H2: Game familiarity is positively related to flow H3a: Challenging goals are positively related to flow	Dependend Variable: Flow Independent Variable: game complexity, game familiarity, challenging goals,	In this study, Telepresence and Challenging goals have a positive response to the flow

		H3b: Challenging goals strengthen the positive link between game complexity and flow H4a: Attainable goals are positively related to flow H4b: Attainable goals strengthen the positive link between game complexity and flow. H5a: Telepresence is positively related to flow H5b: Telepresence strengthens the positive link between game familiarity and flow	Attainable goals, Telepresence	
6.	Online Advergaming: Flow, Addiction, and Purchase Intention of Online Game Features (Miranda et al., 2022)	H1: Online game addiction will enhance the intention to purchase online in-game apps features and other advertised items. H2: Online game addiction will enhance online game loyalty. H3: A higher level of flow when playing online will influence the players' intention to purchase online in-game apps features and other advertised items H4: Flow is positively associated with addiction to online game playing. H5: If a player experiences the flow state while playing an online game,	Dependent Variable: Purchase intention Independent Variable: Addiction, Flow, Loyalty towards the Game, Repetition, Sociodemographic Characteristics Mediating Variable: Loyalty towards the Game	This study discovers a supporting result regarding the positive relationship between the flow and purchase intention.

		then he/she will have customer loyalty toward this online game. H6: Online game loyalty will enhance the intention to purchase online in-game apps features and other advertised items H7: Game repetition has a positive influence on purchase intention. H8: Game repetition has a positive influence on flow. H9: Game repetition has a positive influence on addiction. H10: There are significant differences regarding how purchase intention relates to sociodemographic characteristics		
7.	Why Do Gamers Purchase Virtual Items in Moba Games? (Tuzzahra & Edastama, 2024)	H1: Enjoyment has a positive impact on the flow. H2: Skill has a positive impact on the flow. H3: Challenge has a positive impact on the flow H4: Telepresence has a positive impact on the flow. H5: Interactivity has a positive impact on the flow. H6: Flow has a positive impact on the	Dependend Variable: Purchase intention Independent Variable: Enjoyment, Skill, Challenge, Telepresence, Interactivity, Flow, Continuous Intention, Social Value	This Study discovered that Enjoyment, Skill, Challenge, And Telepresence have a positive influence on player Flow. Other than that Flow and Continuous Intention also have a positive influence on player purchase intention.

		purchase intention. H7: Flow has a positive impact on the continuous intention. H8: Continuous intention has a positive impact on the purchase intention. H9: Social value has a positive impact on the purchase intention. H10a: Shopping enjoyment strengthens the impact of flow on the continuous intention. H10b: Shopping enjoyment strengthens the impact of flow on the purchase intention. H10c: Shopping enjoyment strengthens the impact of continuous intention on the purchase Intention. H11: Age strengthens the impact of continuous intention on the purchase intention.	Mediating Variable: Shopping Enjoyment, Age	
8.	The Effect of Flow Factor on Brand Attitude and Purchase Intention in Mobile Legend: Bang-Bang	H1: Skill positively affects the flow in the Mobile Legends: Bang-Bang. application player in Surabaya. H2: Challenges positively affect the flow in the Mobile Legends: Bang-Bang application player in Surabaya. H3: Interactivity positively affects the	Dependent Variable: Purchase intention Independent Variable: Skill, Challenge, Interactivity, Focus Attention,	This study discovered that Challenges and Telepresence have a positive influence on the flow of Mobile legend bang-bang players in Surabaya. Meanwhile, Skill doesn't have a positive influence on the flow. Other than that, this study also discovered that the Flow

	(Anandya et al., 2023)	flow of the Mobile Legend: Bang-Bang application player in Surabaya. H4: Focused attention positively affects the flow of the Mobile Legend: Bang-Bang application player in Surabaya. H5: Telepresence positively affects the flow of the Mobile Legend: Bang-Bang application player in Surabaya. H6: Flow positively affects brand attitude in Mobile Legend: Bang-Bang application players in Surabaya. H7: Flow positively affects purchase intention in the Mobile Legend: Bang-Bang application player in Surabaya. H8: Brand Attitude positively affects purchase intention in the Mobile Legend: Bang-Bang application player in Surabaya.	Telepresence, Flow, Brand Attitude	also has a positive influence on the Purchase Intention.
9.	Analysing mobile advergaming effectiveness: the role of flow, game repetition and brand familiarity (Catalán et al., 2019a)	H1a: Flow has a positive influence on brand attitude. H1b: Flow has a positive influence on purchase intention. H2a: Game repetition has a positive influence on brand attitude. H2b: Game repetition has a positive influence on purchase intention.	Dependent Variable: Purchase intention, Brand Attitude Independent Variable: Game Repetition, Brand familiarity, Flow Experience	This study discovered that the Flow experience in mobile advergaming has a positive influence on the player purchase intention.

		H3: Game repetition has a positive influence on flow. H4a: Brand familiarity has a positive influence on brand attitude. H4b: Brand familiarity has a positive influence on purchase intention. H5: Brand familiarity has a positive influence on flow. H6: Brand attitude has a positive influence on purchase intention.		
10.	Exploring player behavior and motivations to continue playing Pokémon GO (E. Ghazali et al., 2019)	H1a: Achievement positively affects enjoyment. H1b: Achievement positively affects flow. H2a: Challenge positively affects enjoyment. H2b: Challenge positively affects flow. H3a: Escapism positively affects enjoyment. H3b: Escapism positively affects flow H4a: Social interaction positively affects enjoyment. H4b: Social interaction positively affects flow. H5: Enjoyment positively affects continuance intention. H6a: Flow positively affects	Dependent Variable: Purchase intention, Brand Attitude Independent Variable: Achievement, Challenge, Escapism, Social interaction, Enjoyment, Flow, Nostalgia, Need to collect, Network externalities, Community involvement, Continuance intention	This study discovered that Challenge has a positive effect on the flow of the Pokémon GO. The flow also doesn't have a positive influence on the Pokémon GO player's continuing intention to play the game. However the Continuance intention to play the game has a positive effect on Pokémon GO player Purchase intention.

		enjoyment. H6b: Flow positively affects continuance intention. H7a: Nostalgia positively affects the need-to-collect. H7b: Nostalgia positively affects continuance intention. H8: The need-to-collect positively affects continuance intention. H9: Network externalities positively affect continuance intention. H10: Community involvement positively affects continuance intention. H11: Continuance intention positively affects purchase intention.		
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2.3 Conceptual Model and Hypothesis Development

2.3.1. The Influence of Enjoyment on Flow

The hypothesis development for the relationship between enjoyment and flow will be based on the premise that intrinsic motivation could enhance player engagement in playing gacha games. Enjoyment itself can be defined as how much pleasure the player can experience in playing the games according to Tuzzahra & Edastama (2024). This means that enjoyment can be seen as a player's positive emotional response to a game's content of the gacha games. According to the flow theory by Mirvis & Csikszentmihalyi (1991) Individuals are more likely to experience a feeling of flow when they believe that an activity is intrinsically fulfilling and enjoyable. Which in this context will be the player enjoyment that arises from a satisfying game. This idea was supported by previous studies such as Ghazali et al (2023) that support the relationship between enjoyment and flow. An example of this will be that players who play open-world gacha games such as Genshin Impact find immense joy in exploring the open world, completing quests, and listening to the soundtrack. Because they enjoy these experiences so much, they enter a state of flow where hours pass without them noticing, fully immersed in the game. With this, we can hypothesize the following:

H1: Enjoyment has a significant influence on the flow.

2.3.2. The Influence of Skill on Flow

The hypothesis development for the relationship between skill and flow will be based on the core theory of flow. According to Catalán et al. (2019b) Flow occurs when there is an optimal balance between the challenges presented by an activity and the individual's perceived skill level. In this context, it will be the player's skill to navigate and complete the task within the game. As stated by Tuzzahra & Edastama (2024), the longer the player plays a game, the longer they practice and nurture skills explicitly centered around that game. This in turn enhances their ability to become deeply more immersed in the game. Previous studies such as Ghazali et al. (2023) support similar findings. An example of this will be that an

experienced Honkai Star Rail player who understands team synergy and enemy weaknesses can easily clear difficult event quests. Their mastery of game mechanics lets them get into a rhythm or "flow state" because the challenge matches their skill level, keeping them deeply focused and engaged. With this, we can hypothesize the following:

H2: Skill has a significant influence on the flow.

2.3.3. The Influence of Challenge on Flow

The Hypothesis development for the relationship between challenge and flow will be based on flow theory by Ghazali et al. (2023). Challenge itself refers to the degree of difficulty presented by a task or activity. In this context, it comes in the form of a variety of boss fight, puzzle, and other obstacle that stand between players. The presence of challenge within the game will act as the obstacle that motivates the player to become better. When the level of challenge is appropriately aligned with the player's skill level, it can lead to heightened concentration, intrinsic motivation, and deep immersion. This was supported by previous studies such as Tuzzahra & Edastama (2024). An example of this will be a player that plays a tower defense game such as Arknights often stuck on a high-difficulty stage that requires precise operator placement. After several attempts and planning, they were finally able to beat the level. The challenges presented by the game have kept them highly engaged, pushing them into a flow state during their focused strategy execution. With this, we can hypothesize the following:

H3: Challenge has a significant influence on the flow.

2.3.4. The Influence of Telepresence on Flow

The hypothesis development of telepresence relationship with flow will be based on the grounded idea that a heightened sense of being "present" in the virtual environment enhances immersive experiences. The telepresence itself according to Anandya et al (2023) was a state of total immersion and absorption in a virtual

environment. This sense of immersion that telepresence provides, helps the player to focus and engage with the game that they play. Flow theory by Mirvis & Csikszentmihalyi (1991) also suggests that deep concentration and full engagement are essential for achieving a flow, and telepresence directly supports these conditions by strengthening the illusion of presence and interaction within the game environment. An example of this will be when an Honkai Impact player becomes deeply immersed during a cinematic boss battle. The high-quality 3D visuals, voice acting, character animations, and dynamic camera angles during skill activations make them feel like they're part of an epic anime episode. This strong sense of "being present" in the game's universe enhances their engagement, helping them forget the real world. As a result, they enter a flow where they focus entirely on strategy and timing, fully absorbed in the experience. With this in mind, we can hypothesize the following:

H4: Telepresence has a significant influence on the flow.

2.3.5. The influence of Flow on purchase intention.

The hypothesis development of flow relationship with purchase intention will be based on individual tendency within the state of flow. According to (Mirvis & Csikszentmihalyi, 1991) Flow is a state of intense focus and enjoyment when a person is engaged in an activity within their skill and presents a clear goal. While within this state, the player will have a tendency to engage in activities that revolve around the game. This includes the engagement in microtransactions related to the games. This was supported by previous studies such as (Ghazali et al., 2023). An example of this will be a player who plays gacha games often spends several hours fully immersed in a new story update and enjoys the flow of combat and exploration. Wanting to get the newest character related to the story, they feel more compelled to spend money on gacha rolls due to the emotional connection and flow experience. With this, we can hypothesize the following:

H5: Flow has a significant influence on purchase intention.

2.4. Conceptual Framework

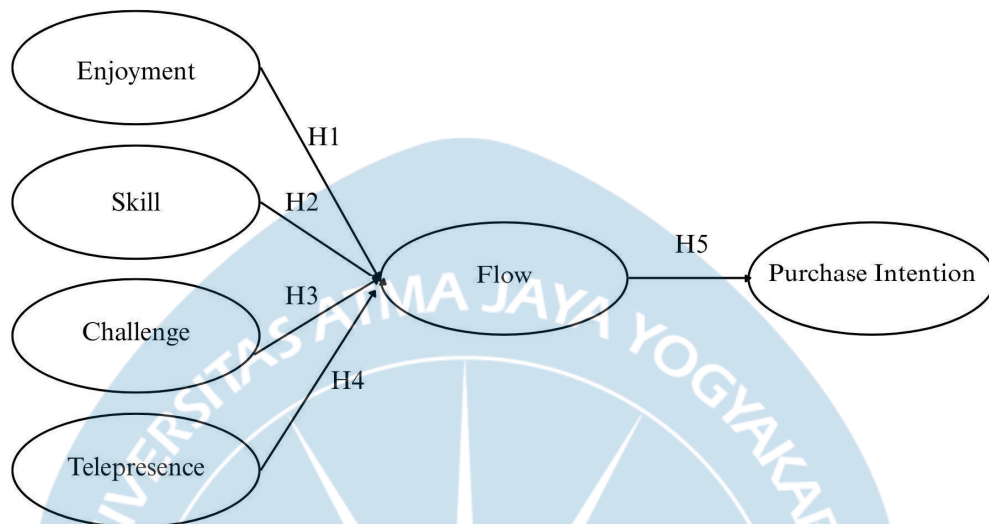


Figure 2. 1 Conceptual Framework

Source: Modified from (Ghazali et al., 2023)