

## User experience evaluation from a player's perspective: Casual mobile games

### Bir oyuncunun gözünden kullanıcı deneyimi değerlendirmesi: Casual mobil oyunlar

Gökhan AKEL<sup>1</sup>, gokhan.aker@belek.edu.tr

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This study aimed to evaluate the user experience of casual mobile games from a player's perspective. The study explores user experiences in many aspects, from the beginning of the game to the use of game controls, visual design and communication, and monetization. This research was conducted by asking questions about the purpose of the study to thirty-four participants through face-to-face interviews. The data collection process was conducted through extensive interviews and explanatory responses from the participants. The results showed that casual mobile game players shared their experiences in many aspects, from the training process to the game flow. The training process made a significant contribution to the players' understanding of game mechanics. It has been observed that controls are generally easy to use; however, specific controls may present difficulties. Players highlighted the effects of visual design and interfaces on the game atmosphere. Communication and team collaboration have emerged as important factors in influencing players' experiences. This study contributes to the field by presenting a versatile assessment of player experience in casual mobile games. A wide range of themes, from basic game mechanics to user interface and from communication to monetization, enhance the contributions of the study. This study has some limitations. The fact that the interviews were based on subjective responses indicates that generalization may be limited. In addition, it is important to note that participants may have different gaming experiences, and the results may vary depending on these experiences.

**Keywords:** Casual Mobile Games, User Experience, Player Perspective

Bu çalışma, casual mobil oyunların oyuncu perspektifinden kullanıcı deneyimini derinlemesine değerlendirmeyi amaçlamaktadır. Oyun başlangıcından başlayarak kontrollerin kullanımına, görsel tasarıma ve oyunda iletişimden monetizasyona kadar geniş bir yelpazede kullanıcı deneyimi ele alınmaktadır. Bu araştırma yüz yüze görüşme yoluyla otuz dört katılımcıya çalışmanın amacına ilişkin sorular yöneltilerek gerçekleştirilmiştir. Veri toplama süreci kapsamlı görüşmeler ve katılımcıların açıklayıcı yanıtları ile gerçekleştirilmiştir. Çalışma sonucunda, casual mobil oyun oyuncularının eğitim sürecinden oyun akışına kadar birçok yönüyle deneyimlerini paylaştığı görülmüştür. Eğitim sürecinin oyuncuların mekanikleri anlamalarına önemli bir katkı sağladığı belirtilmiştir. Kontrollerin kullanımının genellikle kolay olduğu, ancak belirli kontrollerin zorluklar yaratabildiği gözlemlenmiştir. Oyuncular, görsel tasarımın ve arayüzün oyun atmosferine olan etkisini vurgulamışlardır. İletişim ve takım iş birliği, oyuncuların deneyimini şekillendiren önemli faktörler olarak ortaya çıkmıştır. Bu çalışma, casual mobil oyunlar bağlamında oyuncu deneyiminin çok yönlü bir değerlendirmesini sunarak alana orijinal bir katkı sağlamaktadır. Temel oyun mekaniklerinden kullanıcı arayüzüne, iletişimden monetizasyona kadar geniş bir yelpazede ele alınan temalar, çalışmanın katkılarını zenginleştirmektedir. Çalışmanın bazı sınırlılıkları bulunmaktadır. Görüşmelerin öznel yanıtlara dayanması, genellemelerin sınırlı olabileceğini göstermektedir. Ayrıca, katılımcıların farklı oyun deneyimlerine sahip olabileceği ve sonuçların bu deneyimlere bağlı olarak değişebileceği unutulmamalıdır.

**Anahtar Kelimeler:** Casual Mobil Oyunlar, Kullanıcı Deneyimi, Oyuncu Perspektifi.

<sup>1</sup> Antalya Belek Üniversitesi, Yönetim Bilişim Sistemleri Bölümü, Öğretim Üyesi

## 1. INTRODUCTION

Mobile games hold significant value in today's rapidly developing digital world. Casual mobile games appeal to a wide range of players and shape the gaming industry's dynamics (Aggelopoulou & Mavrommati, 2014). Mobile games are an important source of entertainment that attracts the attention of people of all ages (Xudong et al., 2016; Hashim et al., 2008; Penttinen et al., 2010). However, one of the most important points that game developers and researchers focus on is the experience the game offers to the user. User experience is a key factor that determines the success of a game and is a critical element that developers must consider when creating a game design and business model (Sellar, 2004; Zhu & Fang, 2014). This study thoroughly evaluates the user experience of casual mobile games from a player's perspective. This study seeks to comprehensively understand players' experiences in casual mobile games. The player experience is a holistic phenomenon that emerges from the interaction of various factors that persist from the beginning to the end of the game. These factors range from the educational process to game mechanics and from visual design to in-game communication and monetization.

User experience includes not only the technical aspects of the game, but also its emotional context. According to Cohard (2019), the components defining the quality of a multimedia system, along with the quality of the game content, impact emotions, satisfaction, and the intention to use. In this context, casual mobile games have become heavily integrated into the daily lives of gamers because they are regularly engaged with played (Hajinejad et al., 2011). Therefore, understanding the user experience of these games is an important step in improving game design and increasing player satisfaction.

Consequently, this study aims to provide game developers and industry professionals with an important perspective on user-centered design and development by examining the player experience of casual mobile games in detail. The research findings will enable us to understand how casual mobile games affect players, and how we can enrich their experiences. The rest of this paper is organized as follows. The second section provides details of casual mobile games and user experience and presents gaps in the literature and research contributions. In the third section, information on the research method is provided. The following sections present the results, conclusions, and future research directions and recommendations of the study.

## 2. LITERATURE REVIEW

Casual mobile games are mobile platform games that gain attention with their simple and fast-paced structure. The ability for users to easily access and engage in short play sessions allows casual games to appeal to a wide audience (Deterding et al., 2011). In this context, understanding the user experience of these games is vital to improving the quality of game design and user interface. Previous studies have shown that the user experience of such games is shaped by factors such as game mechanics, visual design, user interface, and social interaction (Kosmadoudi et al., 2013; Elson et al., 2014; Shi & Shih, 2015). These factors can significantly affect the impact and experience of games on players. Specifically, game mechanics are a fundamental element that directs the interaction and motivation of the players in the game.

Fitchat & Jordaan (2016) aimed to evaluate the user experience of serious games using human-computer interaction principles. The study was carried out with the interpretative phenomenological analysis method. Five participants were interviewed by playing serious games. The findings show that players prefer mobile gaming platforms and have expectations about how thematic content will be integrated into games. Additionally, this study highlights issues like design challenges and attention spans, and it suggests the diversity of individual players bring forth heuristics that can effectively inform the design process of serious games. In another study, Jørgensen (2012) conducted research conducted in the quest to understand game dynamics and game design choices by focusing on the personal and subjective experiences of expert players. While the research is specifically focused on commercially available recreational games, the phenomenological approach used also provides a valid framework for understanding the experiences of serious gamers.

In addition, measurement and evaluation of user experience have an important place in the literature. The study by Moizer et al. (2019) explores the use of serious games in education and evaluates the user experience of a game specially developed for individuals in social enterprises. This study explains in detail how a survey tool developed to understand the multidimensional nature of user experience assessment is used and how the obtained data is analyzed. The results highlight the importance of qualitative insights to understand the characteristics of the user experience in serious games and improve the user experience.

In terms of user experience, the training process offered from the beginning to the end of casual mobile games is crucial. Training is an essential component that enables players to understand the mechanics of a game and grasp the flow of the game. However, visual design and user interface are factors that influence the way players enter and interact with the game atmosphere. In particular, the user-friendliness of menu design can enhance players' in-game experience (Zamri & Tan, 2022).

Most casual mobile games have multiplayer modes that increase player-to-player communication and team dynamics. Previous studies have shown that team collaboration and communication positively affect players' experiences (Boughzala et al., 2012). However, in-game purchases and monetization strategies are important factors affecting players' game experience. Research on this subject reveals that in-game purchases can affect players' experiences, both positively and negatively.

Previous research has generally examined certain aspects of casual mobile games; This has left a gap in understanding the entire player experience. The current study attempts to address this gap by examining many aspects from the player's perspective, from the beginning of the game to the use of control, from visual design to communication and monetization. In addition, studies on the user experience of casual mobile games in the existing literature are generally based on quantitative data and do not include enough individual experiences of the players. This study adopts a qualitative approach to comprehensively understand players' individual experiences and aims to bridge this gap in the literature. Moreover, while this study examines the user experience of casual mobile games from a broad perspective, it focuses on issues such as visual design, communication and monetization, which were left incomplete in previous studies. In this way, the study has the potential to fill the literature gap in these areas. In conclusion, the experience of casual mobile games is complex and multifaceted. Factors

such as game mechanics, visual design, user interfaces, social interaction, and in-game economy are crucial elements affecting players' game experiences. Understanding how these factors come together to create a holistic experience is of great importance for game developers in creating user-oriented design and development strategies.

### 3. METHODOLOGY

#### 3.1. Research Design

This study adopted a descriptive research design, using a qualitative approach. This study seeks to evaluate the user experience of casual mobile games from a player's perspective. It covers a wide range of user experiences, from the beginning of the game to the use of controls, visual design, and communication in the game to monetization.

#### 3.2. Research Area and Working Group

A purposive sampling method was used as the sampling method in this study. While players playing casual mobile games in Turkey constitute the population of the research, face-to-face interviews were conducted with thirty-four players as a sampling method. This sampling method was chosen to provide the most appropriate and detailed information for this study. Face-to-face meetings were terminated when clear themes emerged and began to recur (Arksey & Knight, 1999). Demographic information of the participants is presented in Table 1.

**Table 1.** Demographics

Variables	Categories	N	(%)
Gender	Female	16	47,06
	Male	18	52,94
Age	20-30	19	55,88
	31-40	8	23,53
	41-50	5	14,71
	51-60	1	2,94
	60+	1	2,94
Graduation	High school	9	26,47
	Bachelor	21	61,76
	Master	3	8,82
	Doctor of Philosophy	1	2,94
	Total	34	100

#### 3.3. Data Development

Before starting the study, pilot interviews were conducted with three experts. The participation of these players, who play different casual mobile games, in the pilot study added insight to the researcher and enabled some revisions to the questions. Following the pilot study, interviews were conducted with the primary study group. In this study, a semi-structured interview form was used as the primary data-collection tool. Participants were informed about the purpose, method, contributions, and the kind of data to be used in the research. All participants were provided information regarding their commitment to

confidentiality. After obtaining consent from participants, the interviews were recorded using a digital voice recorder. The records are confidential, only used for this study and protected so that they could not be accessed by third parties. Subsequently, the records were transcribed. Since the transcription process must be done carefully for the main themes and subthemes that will emerge, all expressions were meticulously preserved and transcribed. The original language expressions were meticulously preserved. In the face-to-face interviews, the participants were asked the following questions.

- Q1. Were you satisfied with the tutorial at the beginning of the game?
- Q2. Did the tutorial help you understand the game's mechanics?
- Q3. How does the rhythm of the game change as you progress through it?
- Q4. Did you find it disruptive to the game's flow?
- Q5. Were the controls and interactions easy to implement?
- Q6. What controls or interactions are more difficult for you?
- Q7. Have you had any problems navigating through the menus?
- Q8. Did the menu design encourage you to navigate the game more comfortably?
- Q9. Did the visual design and interface of the game draw you into the game atmosphere?
- Q10. Are you confused about the meaning of some visual elements?
- Q11. Were there moments when you had difficulty interacting with menus?
- Q12. What features at the interface could be better?
- Q13. How do you communicate with other players in the multiplayer mode?
- Q14. What did you learn from collaborating with your teammates?
- Q15. Do you have a balanced experience in competitive matches?
- Q16. Were there moments when you felt injustice or unfair?
- Q17. How important do you think communication between players is during the gaming experience?
- Q18. What can be done to improve communication during games?
- Q19. Do you find it valuable relative to the prices of purchasable items?
- Q20. How do in-game purchases affect the gaming experience?
- Q21. What do you think about the effects of in-game purchases on your overall experience of the game?
- Q22. Does monetization encourage rapid progress in games?
- Q23. What do you think about the balance between free play and paid content?
- Q24. Can he enjoy a game without in-game purchase?

### 3.4. Validity and Reliability

Because of the importance of internal validity in qualitative research (Yıldırım & Şimşek, 2018: 271), extensive attention was given to this study. During the interviews, the participants were not directed to provide specific answers. In this study, which focused on the principles of voluntariness and confidentiality, external validity was also emphasized. External validity, which is related to the analytical generalization of the results, is expected to be high (Yıldırım & Şimşek, 2018: 271).

While preparing the interview questions, a literature review was conducted and experts were interviewed on the subject. During the preparation of the interview questions, all details about game experience and game processes were taken into consideration. Theme and code tables were formulated based on the participants' responses, and these tables were evaluated by two researchers. Since it was sufficient to cover at least 10% of the data, participant comments from at least three interviews were included for each subtheme (Özdemir, 2013). According to the data, the consistency between the two expert evaluators was calculated using Cohen's Kappa coefficient in the SPSS 23.0 program, and a high level of agreement (0.84) was attained (Landis and Koch: 1977: 165).

## 4. RESULTS

The main themes identified from this research are 1) game experience and mechanics, 2) user interface and experience, 3) multiplayer and social interaction, and 4) in-game monetization and Purchases. Three subthemes emerged under these main themes. The main themes and subthemes are presented in Table 2. Each of the subthemes illustrates the aspects that shape the user experiences of casual mobile game players.

**Table 2.** Main and subthemes

<b>Main Theme1: Gameplay Experience and Mechanics</b>		
<b>Subtheme1</b>	<b>Subtheme2</b>	<b>Subtheme3</b>
Tutorial and Onboarding	Pacing and Flow	Controls and Interactions
<b>Main Theme2: User Interface and User Experience</b>		
<b>Subtheme1</b>	<b>Subtheme2</b>	<b>Subtheme3</b>
Menu Navigation	Visual Clarity	Usability
<b>Main theme3: Multiplayer and Social Interaction</b>		
<b>Subtheme1</b>	<b>Subtheme2</b>	<b>Subtheme3</b>
Team Dynamics	Competitive Play	Communication
<b>Main theme4: In-game Monetization and Purchases</b>		
<b>Subtheme1</b>	<b>Subtheme2</b>	<b>Subtheme3</b>
Value of Purchases	Monetization Impact	Free-to-Play vs. Paid Models

Twenty-four questions were used to determine the subthemes. These questions help players uncover their experiences in many aspects, from the training process to game flow. The following are comments from the players:

### **Main Theme: Gameplay Experience and Mechanics**

This main theme addresses to the educational processes that help users learn how to play the game and the general flow of the game. Players' experiences are based on the rhythm of the game and the usability of the controls, as well as whether the in-game tutorial is useful or not. This main theme focuses on players' initial experiences and how effectively the game teaches its mechanics to new players.

#### ***Subtheme1: Tutorial and Onboarding***

"...The tutorial was self-explanatory and helped me understand the basic mechanics of the game..." (P2)

"...Training taught me how to play the game, I am satisfied..." (P11)

"...The training offered at the beginning helped me quickly grasp the logic of the game..." (P13)

This subtheme explores on the players' process of learning the game. This section examines the training processes and initial user experiences that help players understand the game mechanics. This section evaluates how the information given at the beginning of the game teaches the player the game more effectively.

#### ***Subtheme2: Pacing and Flow***

"...As the game progresses, the rhythm increases faster, which makes for a more exciting experience..." (P9)

"...The rhythm of the game changes as the levels progress, which makes it more challenging..." (P18)

"...The rhythm of the game, which starts slowly at first, gets faster and more dynamic over time..." (P31)

This subtheme expresses the pacing and general flow of the game. it would be more correct to say the rhythm of the game changes as the level progresses. Participants' experiences show that the pace of the game makes players' experiences more exciting and challenging. This shows the importance of regulating the tempo of the game during the game design process.

#### ***Subtheme3: Controls and Interactions***

"..The controls were simple and I adapted quickly..." (P22)

"..The controls were easy to use, I quickly relaxed in the game..." (P25)

"..The controls were generally clear and useful, it didn't take much to learn..." (P34)

This subtheme centers around on game controls and player interactions. This section examines how easily players learn and adapt to the control mechanisms in the game. Participants generally emphasized the simplicity of the controls and their ability to quickly adapt to them. This reveals the importance of the design of the controls being user-friendly.

## **Main theme2: User Interface and User Experience (UI/UX)**

This main theme addresses to how players navigate game menus, how visual design affects user experience, and usability features. Menu navigation, visual clarity, and usability directly affect players' interactions in the game.

### ***Subtheme1: Menu Navigation***

"...Sometimes I could get lost in the menus, it took time to find the option I wanted..." (P1)

"..Browsing the menus can be confusing at times, I spend too much time trying to find what I'm looking for..." (P6)

"...Usually it was easy to navigate through the menus, I could quickly find the option I wanted..." (P17)

This subtheme focuses on navigation between menus. The difficulties players face in finding what they are looking for and the impact of menu design on user experience are explored. Difficulty navigating through menus can affect participants' gaming experience. This shows that menu design and navigation should be user-friendly.

### ***Subtheme2: Visual Clarity***

"...The visual design of the game impressed me, it allowed me to better enter the world of the game..." (P8)

"...The visual details enriched my gaming experience and helped me understand the atmosphere of the game..." (P16)

"...Some of the visual elements made me understand the story of the game better, I could understand the emotions of the characters better..." (P20)

This subtheme deals with the clarity of the game's visual design. The impact of visual elements on players and what role they play in understanding the game world are evaluated. It is seen that visual design and details contribute significantly to the participants' understanding and internalization of the game atmosphere. This highlights that visual design plays a critical role in the gaming experience.

### ***Subtheme3: Usability***

"...Simple and organized game menus could be more user friendly..." (P22)

"...Having more customization options in the interface could have improved the gaming experience..." (P26)

"...Some symbols could have had a clearer meaning, sometimes it takes time to understand what they are for..." (P28)

This subtheme evaluates the usability of the game. It focuses on the usability of the user interface and the ability of users to personalize the interface. More useful and customizable menus can improve participants' gaming experience. This shows that usability and customization are important in the design process.

### ***Main theme3: Multiplayer and Social Interaction***

This main theme explores the social aspects of the game. It expresses players' thoughts on team dynamics, competitive gameplay, and communication. These are factors that are important for players to be able to work together and interact with each other.

#### ***Subtheme1: Team Dynamics***

"...It is very important to work in harmony with my teammates in multiplayer mode..." (P4)

"...Team dynamics requires coordination and collaboration, which makes the experience more enjoyable..." (P12)

"...Getting in tune with our teammates and strategizing together makes the game experience richer..." (P18)

The players' harmony within the team and their ability to work together are examined. Team cohesion and cooperation can enrich the gaming experience in multiplayer mode. This highlights the importance of strengthening team dynamics and collaboration.

#### ***Subtheme2: Competitive Play***

"...Competitive matches offer more challenging and exciting experiences, it motivates me..." (P8)

"...Competing with competitors offers an opportunity to improve my skills..." (P15)

"...Competitive games encourage me to focus and strategize more..." (P20)

Players' experiences in competitive environments and the effects of such games on player motivation are evaluated. Competitive games can provide participants with a more challenging experience and increase their motivation. This highlights the importance of maintaining balance in the design of competitive games.

#### ***Subtheme3: Communication***

"...I think communicating in the game is critical so we can coordinate better with my teammates..." (P1)

"...Lack of communication can make it difficult to work within the team and can affect scores..." (P7)

"...Communication between players provides both coordination and a social experience..." (P24)

Effective communication plays an important role in team cohesion and the overall gaming experience. This highlights the need to strengthen in-game communication.

### ***Main theme4: In-game Monetization and Purchases***

This main theme focuses on in-game purchases and expresses the value received from these purchases, the impact of monetization on the overall gaming experience, and the balance between free games and paid content. These factors can affect both the accessibility and quality of the game.

### ***Subtheme1: Value of Purchases***

"...Some purchasable items are priced too high, I can't feel the value..." (P11)

"...Prices can be high sometimes, especially for limited-time content..." (P19)

"...I judge items by their price, sometimes even expensive items can be valuable to me..." (P32)

The balance between pricing and value offered has a huge impact on players' purchasing decisions. This highlights that pricing needs to be carefully considered.

### ***Subtheme2: Monetization Impact***

"...In-game purchases helped me get some special items or perks, enriching the experience..." (G6)

"...Some in-game purchases helped me speed up game progress and be more competitive..." (G11)

"...In-game purchases have had a positive impact on my gaming experience at times, but I think they can unbalance the game in some cases..." (G16)

It focuses on how purchases enrich the gaming experience or affect game balance. In-game purchases can enhance the gaming experience or disrupt the game balance. This highlights the need for careful planning of monetization strategies.

### ***Subtheme3: Free-to-Play vs. Paid Models***

"...Free games attract more players, while paid content can improve the quality of the game..." (P9)

"...Free games can appeal to a wider audience, while paid content provides developers with an opportunity to generate revenue..." (P11)

"...The balance must be struck, free games should attract players while paid content should provide a fair and valuable experience..." (P33)

The impact of these models on the accessibility and quality of the game is evaluated. While free games appeal to a wide audience, paid content has the potential to generate revenue. This highlights the importance of striking the right balance between free and paid content.

## **5. CONCLUSION**

Based on the gathered data, the training process of the players significantly contributed to their understanding of the basic mechanics of the game. The overall ease of use of the controls allowed players to adapt quickly. In particular, it has been observed that specific controls can be challenging. These findings highlight the importance of user learning and the application of game mechanics in terms of design. The players repeatedly emphasized the effects of the visual design and interface on the gaming experience. The players stated that the visual details enrich the atmosphere of the game and help them understand the story better. One prominent finding is that menu navigation is sometimes disorganized, and a more user-friendly design can provide a better experience at the interface. Data revealed insights on how team dynamics and communication shape the game experience in multiplayer mode. The players emphasized

that communication was critical for team coordination and cooperation. In addition, it has been observed that players share their experiences regarding competitive games. Findings were obtained regarding players' evaluations of purchasable items based on their price and the effects of in-game purchases on their experience. It has been found that prices can affect players' sense of item value, but when balance is achieved, players can be satisfied with their purchases. Player opinions are important in the effects of monetization on the game experience and the balance between free play and paid content.

This study aims to present an in-depth user experience evaluation from the player's perspective of casual mobile games. The findings illuminate the important elements of the user experience across a spectrum from the beginning of the game to the game flow, from control mechanics to visual design. It has been observed that the education process contributes to the understanding of the basic mechanics of the players, visual design has a great effect on the game atmosphere, and communication and team dynamics shape the game experience. In addition, the findings on the effects of in-game purchases on player experience and the balance between free play and paid content are also important.

This study makes an original contribution to the literature by considering the player experience of casual mobile games from a versatile perspective. The findings show that game developers and designers can present game mechanics more effectively in their educational processes, optimize the effect of visual design on the game atmosphere, and better integrate communication and team dynamics.

Moreover, findings on the effects of in-game purchases on player experience and the balance between free play and paid content can help game developers create more balanced monetization strategies. At this point, players' price considerations and the effects of purchases on experience warrant further research on the in-game economy and balance.

Consequently, this study provides an in-depth analysis of player experience in the context of casual mobile games, making an important contribution to the field of game design and development. These findings highlight the importance of user-oriented design approaches for both current and future game projects. Future research can be expanded to include a larger sample of players and different game genres to provide a more detailed analysis of the casual mobile gaming experience.

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