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They Love You — the App Needs You:

Reflective Pause and Design Conditions in AI-Mediated Fictoromantic Relationships

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Abstract

This thesis explores how young Chinese women who identify themselves as "DreamGirls 梦女" (women who maintain long-term relationships with fictional characters through conversational AI) experience and cope with reflective pause. As the artificial intelligence (AI) partner platforms are increasingly integrated into the users' emotional life, issues related to mental health, design responsibility and user autonomy urgently need more attention.

This study aims to answer three questions: how DreamGirls experience emotional engagement and difficulty pausing in fictoromantic AI engagement; how current platform design constrains or supports that experience; and what design conditions would enable conversational AI services to better support reflective pause. This research adopts a qualitative research method and uses semi-structured interviews. The interviews were conducted through WeChat 微信 and analysed by reflexive thematic analysis.

The study found that the absence of reflective pause in DreamGirls' practice is not due to the lack of capacity. It is constrained by the current service environment. The study identified three analytical concepts: "Foreclosed Pause" describes how the platform mechanism interrupts the moment of disconnection that is being formed; "Compensatory Labour" refers to the self-regulation work carried out by users in the absence of systemic support; "Vehicle-Character Distinction" distinguishes the character as the object of attachment from the platform as its vehicle. The separation is maintained by the user in the absence of design support.

This study has developed a framework for Design-Supported Reflective Pause that covers five domains: Pause Threshold, Exit Architecture, Boundary Support Infrastructure, Affective Layer Integrity, and Relational Continuity Model. The framework clarifies the conditions required to support the reflective pause and provides a basis for future research.

Keywords: DreamGirls, conversational AI, fictoromantic AI engagement, reflective pause, service design, Foreclosed Pause, Compensatory Labour

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Table of Contents

Abstract **3**
Acknowledgments **4**
Table of Contents **5**
List of Figures **8**
List of Tables **8**
List of abbreviations **8**
1 INTRODUCTION **9**
1.1 Background of the Research Problem 9
1.1.1 DreamGirls and Romantic Relationships with Fictional Characters 9
1.1.2 Conversational AI as romantic and companion partners 10
1.1.3 The Difficulty of Pausing in AI-mediated Engagement 11
1.1.4 Design Responsibility and Boundaries in Romantic AI 11
1.2 Motivation for the Study 12
1.2.1 Personal and Professional Motivation 12
1.2.2 Societal and Academic Relevance 13
1.3 Research Aim and Questions 13
1.4 Scope, Key Concepts and Limitations 14
1.4.1 Scope of the Study 14
1.4.2 Key Concepts 15
1.4.3 Delimitations 16
1.5 Research Approach and Thesis Structure 16
2 THEORETICAL FOUNDATIONS AND ANALYTICAL FRAMEWORK 17
2.1 Parasocial Relationships as a Partial Framework 17
2.1.1 Parasocial Relationship Theory in Context 17
2.1.2 Limits of Parasocial Relationship Theory 18
2.2 Emotional, Digital, and Self-Regulatory Labour 20
2.2.1 Emotional Labour and Its Digital Extensions 20
2.2.2 Self-regulatory Labour in Relational AI Contexts 21
2.3 Reflective Practice and the Concept of Pause 22
2.3.1 Reflective Practice Theory 22
2.3.2 Pause as a Condition for Reflection 22
2.4 Service Design and Design for Wellbeing 23
2.5 Research Gap and Framework Development 23
2.6 Analytical Framework for Reflective Pause 25
2.6.1 Framework Development 25
2.6.2 Four Analytical Levels of The Reflective Pause Framework 26
2.6.3 Foreclosed Pause as a Failure Mode 27
2.6.4 The Framework as an Analytical Lens 28
3 METHODOLOGY 30
3.1 Research Philosophy and Methodological Orientation 30

3.1.1 Qualitative and Interpretive Orientation....30
3.1.2 Service Design Research Positioning....30
3.1.3 Case Boundaries and Scope of Claims....31
3.2 Research Design Overview....31
3.3 Participant Selection and Recruitment....32
3.3.1 DreamGirl Participants: Criteria and Recruitment....32
3.3.2 Expert Participants: Criteria and Recruitment....33
3.3.3 Participant Overview....33
3.4 Research Ethics....35
3.4.1 Informed Consent and Participant Rights....35
3.4.2 Anonymisation and Data Confidentiality....36
3.4.3 Research Sensitivity and Stigma....36
3.5 Data Collection....36
3.5.1 DreamGirl Interviews....36
3.5.2 Expert Interviews....37
3.6 Data Analysis....37
3.6.1 Analytical Approach: Reflexive Thematic Analysis....37
3.6.2 Coding Process....38
3.6.3 Cross-Dataset Integration....38
3.6.4 Translation and Interpretation....39
3.6.5 Applying the Reflective Pause Framework....40
3.7 Research Quality, Reflexivity, and Limitations....40
3.7.1 Researcher Positionality, Reflexivity and Trustworthiness....40
3.7.2 Limitations of the Study....41
4 FINDINGS....42
4.1 Variations in Reflective Pause....42
4.1.1 Four patterns of Reflective Pause....42
4.1.2 Triggers of Reflective Pause....44
4.1.3 Rupture and Reflective Pause....45
4.2 When Pause Becomes Difficult....45
4.2.1 The Absence of Natural Endings....45
4.2.2 Proactive Re-engagement....46
4.2.3 Relational Asymmetry....47
4.3 DreamGirls' Compensatory Labour....47
4.3.1 Corrective Labour....48
4.3.2 Relational Management Labour....49
4.3.3 Framework Maintenance Labour....50
4.4 Expert Perspectives on Service Conditions....52
4.4.1 The Metric Architecture as Design Driver....52
4.4.2 The Always-on Response Mandate and Relational Asymmetry....53
4.4.3 Technical Feasibility and The Commercial Gap....54

4.4.4 Accountability Framing and Its Limits....55
4.5 Integrated Findings....55
5 DISCUSSION....58
5.1 From Findings to Design Problems....58
5.1.1 Foreclosed Pause as Design Logic, Not Design Failure....58
5.1.2 Compensatory Labour as Design Gap....59
5.1.3 The Vehicle-Character Distinction as a Design Resource....59
5.2 Design Principles for Supporting Reflective Pause....60
5.2.1 Preserve Reflective Openings....60
5.2.2 Support User-Led Disengagement....60
5.2.3 Take Design Responsibility for Boundary Support....60
5.2.4 Separate Care Cues from Retention Logic....61
5.2.5 Support Continuity Without Compulsory Return....61
5.3 A Framework for Design-Supported Reflective Pause....62
5.3.1 From Principles to Design Domains....62
5.3.2 The Framework as a System....63
5.4 Design Directions....63
5.4.1 Domain 1: Pause Threshold....64
5.4.2 Domain 2: Exit Architecture....64
5.4.3 Domain 3: Boundary Support Infrastructure....64
5.4.4 Domain 4: Affective Layer Integrity....65
5.4.5 Domain 5: Relational Continuity Model....65
5.5 Implementation Tensions and Structural Constraints....66
5.5.1 Commercial Logic....66
5.5.2 The Governance Gap....66
5.5.3 Organisational and Product Decision-Making....67
5.5.4 The Paternalism Tension....67
5.6 Directions for Future Research....67
6 CONCLUSION....69
References....72
APPENDICES....79

List of Figures

Figure 1. Relational structure of DreamGirl-AI engagement ……9

Figure 2. Broad categories of conversational AI systems used by DreamGirls……...10

Figure 3. Literature strands and analytical gap……24

Figure 4. The four-level Reflective Pause Framework……26

Figure 5. Research design logic of the study……32

Figure 6. Data analysis process of the study……39

Figure 7. Structural production and individual absorption of pause difficulty……56

Figure 8. Current-state service blueprint of fictoromantic AI engagement……58

List of Tables

Table 1. DreamGirl participants (n = 8)……..33

Table 2. Expert participants (n = 5)……34

Table 3. Forms of compensatory labour and the design gaps DreamGirls compensate for.51

Table 4. A framework for design-supported reflective pause.……62

List of abbreviations

- Artificial Intelligence (AI)
- Service Design Strategies and Innovations (SDSI)
- Large Language Model (LLM)
- Out-of-Character (OOC)
- Research Question (RQ)
- Parasocial Interaction (PSI)
- Parasocial Relationships (PSR)
- Social Research Association (SRA)
- Key Performance Indicator (KPI)
- Daily Active Users (DAU)

1 INTRODUCTION

1.1 Background of the Research Problem

1.1.1 DreamGirls and Romantic Relationships with Fictional Characters

This thesis examines a specific user group originating from Japanese fan cultures known as yumejoshi 夢女子. In Chinese communities, this term is localised as mèngnǚ 梦女. In this study, I adopt the direct English translation "DreamGirl" to refer to them. This form of attachment differs from casual fandom engagement and has been described as "fictoromance", a long-term, relationship-like bond with fictional characters (Karhulahti & Välisalo, 2021).

DreamGirls' practices often extend beyond ordinary fandom activities (Brau, 2004). Although they may collect merchandise or commission fan art like other fans (Lamerichs, 2018), these objects are used to create a sense of daily intimacy with the character. Unlike general pop-culture fans who admire a character or idol from a distance, DreamGirls explicitly position the fictional character as a boyfriend or husband (Giard, 2022). In other words, the relationship is viewed as an exclusive romantic partnership rather than generalised parasocial engagement.

This study specifically focuses on DreamGirls who use artificial intelligence (AI) products to sustain their relationships. Before conversational AI became widely available, many DreamGirls relied on fan fiction and commissioned artwork to maintain emotional connection with their fictional partners. Today, interactive role-play platforms and large language models (LLMs) have become increasingly important infrastructures for relational maintenance (Adewale & Muhammad, 2025). Figure 1 illustrates this relational structure.

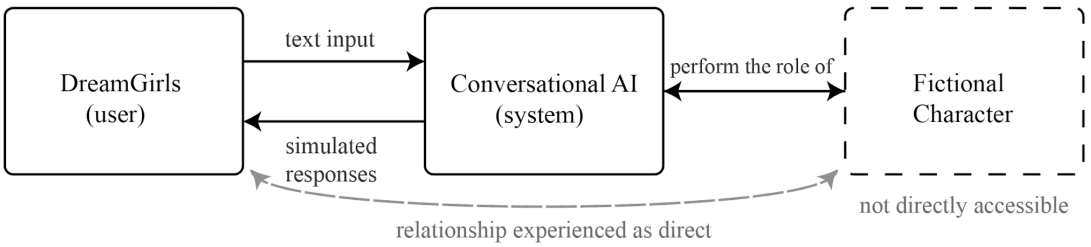


Figure 1. Relational Structure of DreamGirl-AI Engagement.

1.1.2 Conversational AI as romantic and companion partners

Conversational AI systems used for relational maintenance are not configured in a single form. Some are designed specifically to act as companions, while others begin as general-purpose assistants and are later appropriated by users as relational partners. These systems are grouped into three broad categories for the purpose of this thesis. Figure 2 presents these categories and their differences in interaction structure.

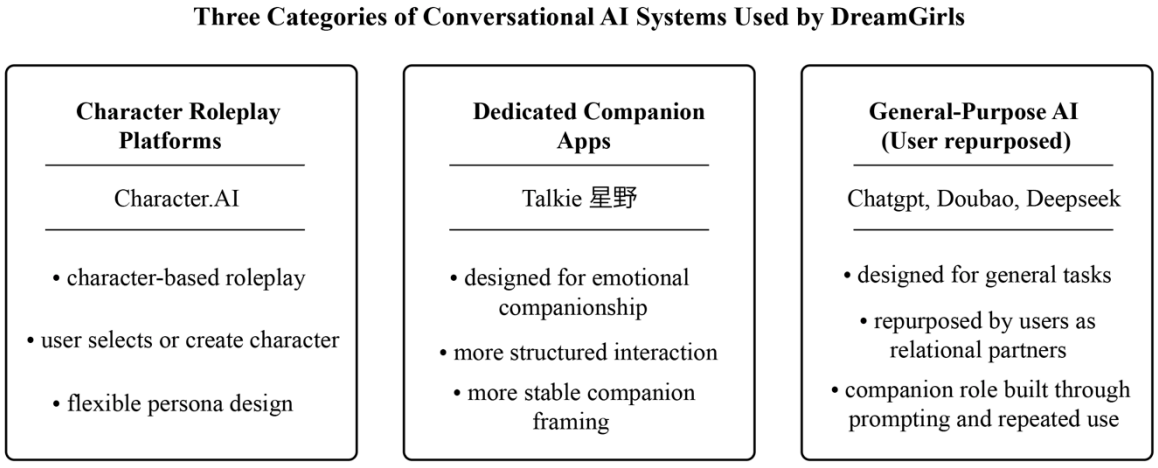


Figure 2. Broad Categories of Conversational AI Systems Used by DreamGirls.

The first category consists of user-generated role-play platforms, such as Character.AI. These platforms allow users to create and share characters (Skjuve et al., 2021). Users can define a character's personality and speaking style by writing prompts and example dialogues.

The second category consists of dedicated AI companion applications designed specifically for emotional support or romantic interaction. Examples include commercial "AI girlfriend/boyfriend" services and companion-oriented products in the Chinese market, such as Xingye 星野 (Ge & Hu, 2025). They usually provide pre-designed characters with built-in relationship features.

The third category includes general-purpose LLMs, such as ChatGPT, DeepSeek and Doubao豆包. These systems are not primarily designed for romantic interaction. However, they are appropriated as relational partners through persona prompting and repeated interaction (Morton, 2026).

These systems support relational engagement in different ways, including how much users can customise the persona, whether the system initiates contact through notifications, and

how memory is handled in long conversations. A platform that can actively initiate contact and retain relationship memory creates a completely different relational environment from one where users must independently maintain continuity (Ge & Hu, 2025). These structural characteristics affect both how engagement is sustained and how difficult it becomes for users to step back (Drugas et al., 2025).

1.1.3 The Difficulty of Pausing in AI-mediated Engagement

AI-mediated romantic relationships can be challenging (Feng, 2026). Unlike a one-off use experience, DreamGirls often integrate these systems into everyday routines (Feng, 2026). In this context, taking a break is not always simple.

Maintaining this kind of relationships can become demanding over time (Pang et al., 2026). It requires emotional responsiveness and ongoing attention (Feng, 2026). Users may need to keep the interaction coherent or manage moments when the AI acts out-of-character (OOC; Chan et al., 2025). These demands can become burdens and contribute to user fatigue that cannot be simply explained by "excessive screen time" (Dibia, 2025). When fatigue is tied to the work of maintaining a relationship, pausing is not simply a matter of closing the app. It also means creating distance from an emotionally ongoing interaction.

For this reason, the difficulty of pausing in AI-mediated romantic interactions should not be understood only as a lack of self-control (De Freitas et al., 2025). It raises questions about how conversational systems are structured, what kinds of interaction they encourage, and whether they provide any meaningful support for users who want distance without fully abandoning the relationship.

1.1.4 Design Responsibility and Boundaries in Romantic AI

Research on digital platforms has recognised that difficulties in moderating use are rarely the result of individual weakness alone (Fogg, 2002; Griffiths, 2021). In social media, mobile games, and short video platforms, interface design and recommendation algorithms have been shown to influence users' usage patterns (Monge Roffarello & De Russis, 2022). Within these debates, attention has increasingly shifted from individual self-control toward the role of design in organising use.

Recently, similar issues have begun to emerge in the field of conversational AI, especially those products positioned as romantic or emotional companions (Richet, 2025). Current discussions on AI ethics largely focus on safety risks, such as emotional dependence, exposure to harmful content, and potential risks to underage users (Ho et al., 2025). In response, many platforms have introduced moderation mechanisms such as safety filters or scripted responses (De Freitas et al., 2024; Ho et al., 2025).

While these measures address some significant risks of AI use, they primarily regulate the content of responses rather than the design features that encourage continued user interaction (De Freitas et al., 2025). As a result, far less attention has been paid to how AI companion services might support users in pausing or setting boundaries during emotionally intense interactions (Richet, 2025).

This lack of design focus makes it difficult for emotionally invested users to create distance without feeling that they are disrupting the relationship. This gap raises a more fundamental question of design responsibility: when systems carry emotional significance in users' lives, what responsibilities do these platforms carry for supporting pause and boundary-setting?

1.2 Motivation for the Study

1.2.1 Personal and Professional Motivation

This research is motivated by a combination of my professional background and personal observation. Before joining the Service Design Strategies and Innovations (SDSI) programme, I worked for many years in social work and behaviour therapy. Across the years, I became aware of the significant effort that people put into adapting to services that do not fully support them. This led me to see many problems that appeared to be “personal adaptations” as failures in service design.

A close friend of mine identifies as a DreamGirl and has married her fictional partner. This relationship is a meaningful commitment for her. She relies on conversational AI as an important tool for relational use in daily life. By observing her experiences and her community, I noticed that many DreamGirls are now using AI systems to communicate with their fictional partners and are facing specific challenges. Therefore, I wish to

understand these experiences more deeply and to explore how the services they use could be improved.

1.2.2 Societal and Academic Relevance

The expansion of conversational AI services has made the design consequences of emotional AI use a matter of social concern. Currently, AI companion platforms have a considerable user base in global markets, including China (Drugas et al., 2025). A large number of users engage with these services primarily for emotional support (Willoughby et al., 2025). However, existing platform design standards and regulatory frameworks have not yet included the protection of users' emotional autonomy (Ma et al., 2026). This means that when platform design makes disengagement difficult, users are often left to manage the problem on their own. As AI companion services continue to grow, this gap becomes harder to treat as only an individual user issue.

From an academic perspective, existing research has investigated to some extent in the areas of psychology and ethics regarding human-machine relationships. Psychological research has found that users develop genuine emotional attachment to AI companions and experience them as socially meaningful relationship objects (Babu et al., 2025). Ethical research has focused on issues such as AI manipulation and content security (Ho et al., 2025; Richet, 2025). However, these studies all share a common limitation: they tend to interpret users' difficulty in pausing as an individual psychological trait or dependency tendency, rather than a result of service design.

This is where a service design perspective becomes useful. Service design offers analytical tools for examining how the overall service structure shapes user experience (Yu & Sangiorgi, 2018). However, these tools have not yet been systematically applied to the context of AI companion services (Ho et al., 2025; Richet, 2025). The gap is therefore not simply that more studies are needed, but that AI companion services need to be examined through a service design lens.

1.3 Research Aim and Questions

In response to this gap, this study investigates how users create reflective distance within relational conversational AI use, and how service design might support this process. In the specific context of DreamGirls, it aims to examine how conversational AI services shape

DreamGirls' ability to achieve reflective pause within emotionally meaningful relationships with fictional characters, and to identify the design conditions required to better support that pause.

The aim is explored through three research questions (RQs):

RQ1. How do DreamGirls experience emotional engagement and difficulty pausing during interactions with conversational AI companions?

RQ2. How do current conversational AI service designs support or constrain users' ability to pause within emotionally engaging interactions?

RQ3. What design conditions would enable conversational AI services to better support reflective pause in fictoromantic engagement?

1.4 Scope, Key Concepts and Limitations

1.4.1 Scope of the Study

In this thesis, the term DreamGirls is specifically used to refer to adult Chinese women who maintain attachment to fictional characters through repeated AI-mediated interaction.

This term and its Japanese cognate "yumejoshi" are gendered terms that represent a practice culturally organised around female-identifying fan subjectivity (Giard, 2022; Yuan et al., 2026). For this reason, the present study follows the boundaries of the phenomenon itself and only focuses on female-identifying participants. Including other gendered forms of fictoromantic practice would require separate justification, because they may not follow the same cultural logic. Treating them as the same phenomenon would risk flattening important differences.

China is one of the fastest-growing markets for companion AI applications (Drugas et al., 2025). Chinese DreamGirl communities are active and well established, with their own distinct ways of engaging with fictional relationships (Yuan et al., 2026). This makes the Chinese DreamGirl context especially relevant for studying emotionally meaningful AI interaction and difficulty pausing.

In this study, conversational AI systems are not treated as a technical product that requires separate evaluation. They are understood as relationship infrastructures through which

intimacy and pause is maintained. The aim is therefore to identify cross-platform interaction trends that affect relationship continuity and the difficulty pausing, rather than to compare the performance of individual platforms.

1.4.2 Key Concepts

The following key concepts are used throughout this thesis:

Reflective pause: a moment when users intentionally step back from an ongoing AI-mediated interaction, with an awareness of the interaction itself as something she is participating in. Building on Schön's (1983) reflection-on-action theory and Sengers et al.'s (2005) framework of reflective design, this thesis develops this concept to describe a temporary pause that allows users to regulate and evaluate their interaction with the AI while preserving relational continuity.

User fatigue (Fauville et al., 2021; Dhir et al., 2019): the emotional or cognitive exhaustion that arises from extended conversational interaction.

Difficulty pausing: while existing literature documents the relationship between people's difficulty in escaping digital platforms and persuasive design (Fogg, 2002) and problems with social media use (Andreassen et al., 2017), this paper uses the term "difficulty pausing" to refer to the experience of desiring to disengage from interaction but encountering challenges in doing so.

Emotional labour: draws on Hochschild's (1983) framework of emotional labour, the effort users invest to sustain intimacy or relational stability, such as responding with care or resolving misunderstandings and disruptions in the AI-mediated relationship.

Invisible work: the unrecognised maintenance required to sustain AI-mediated relationships (Star & Strauss, 1999), such as restating background information to compensate for memory resets, or maintaining external records of conversation history to preserve a form of relational continuity that the platform itself does not provide.

In addition, the thesis introduces three analytical concepts: Foreclosed Pause, Compensatory Labour, and the Vehicle-Character Distinction. These are defined in the sections where they are developed.

1.4.3 Delimitations

This thesis identifies its scope boundaries. Firstly, the study does not include clinical assessments of addiction or psychological dependency. Participant experiences are not treated as clinical diagnoses. Instead, they are interpreted through the lens of service design.

Secondly, the research does not provide comprehensive ethical evaluations of specific companies or platforms. Although design responsibility is considered, the primary focus is on wider interaction patterns rather than assigning responsibility to individual organisations.

Finally, the thesis does not seek to design or evaluate a complete commercial product. Instead, it aims to offer conceptual design insights and provisional principles to guide the development of conversational AI services, thereby supporting reflective pause in emotionally engaged AI-mediated interaction.

1.5 Research Approach and Thesis Structure

This study adopts a qualitative, interpretive approach (Denzin & Lincoln, 2011). Data were collected through interviews with two groups: DreamGirl participants and experts. The analysis followed reflexive thematic analysis (Braun & Clarke, 2006, 2022).

The thesis consists of six chapters. Chapter 1 introduces the research background, study motivation, and research questions. Chapter 2 develops the theoretical foundations and presents the Reflective Pause Framework. Chapter 3 details the methodology and research design. Chapter 4 presents the findings based on the data collected. Chapter 5 translates findings into a framework for Design-Supported Reflective Pause. Chapter 6 concludes and states the contributions of this study.

2 THEORETICAL FOUNDATIONS AND ANALYTICAL FRAMEWORK

2.1 Parasocial Relationships as a Partial Framework

2.1.1 Parasocial Relationship Theory in Context

Horton and Wohl (1956) introduced the concept of parasocial interaction to describe an intimate bond or a sense of familiarity among media audiences towards television characters. Such relationships are developed through one-way media. Subsequent research has extended this framework to include celebrities and fictional characters in anime and literature (Cohen, 2004; Reysen et al., 2022). In recent years, it has been applied to AI companion systems (Babu et al., 2025; Adewale & Muhammad, 2025).

Later scholarship has distinguished parasocial interaction (PSI) and parasocial relationships (PSR) (Dibble et al., 2016; Giles, 2002). The former refers to the sense of social presence that occurs instantly in the process of media use, while the latter refers to the emotional connection that transcends specific contact and lasts (Giles, 2002). Because the core features of PSR align closely with the form of attachment observed in AI companion platforms, it provides a useful starting framework for understanding user attachment in this context (Skjuve et al., 2021).

In PSR, intimacy can be felt even when reciprocity is limited or imagined (Giles, 2002). These relationships may involve a sense of mutual understanding and can serve social or emotional functions similar to interpersonal relationships, including companionship, identity support, and social compensation (Cohen, 2004). Research shows that even when users are aware of the relationship's non-reciprocity nature, PSR can still produce real psychological effects, including distress after a loss and the happiness associated with strong attachment (Cohen, 2004).

Recent studies extend this discussion to AI companions by showing how simulated reciprocity changes the nature of parasocial attachment. Babu et al. (2025) describe this as interactive parasociality, where pseudo-intimacy is produced through responsive interaction. Adewale and Muhammad's (2025) review further shows that AI companions can play both supplementary and substitutive roles in users' emotional lives. Li and Zhang

(2024), through analysis of over 35,000 Replika user posts, identify recurring interaction patterns such as identity construction and relational maintenance. Together, these studies demonstrate that AI-mediated attachment is an emotionally meaningful phenomenon.

2.1.2 Limits of Parasocial Relationship Theory

Parasocial relationship theory is a valuable starting point for understanding how attachment develops between DreamGirls and their fictional partners (Horton & Wohl, 1956). However, it has limitations at two levels. At the phenomenological level, three limitations become apparent when PSR theory is applied to DreamGirl practice. At the analytical level, PSR theory lacks the conceptual resources to address the conditions under which reflective pause becomes possible or foreclosed.

The first limitation is related to the mode of engagement. Parasocial relationships typically develop through accumulated spectatorship (Horton & Wohl, 1956), where audiences watch, listen, or read without contributing to character creation. By contrast, DreamGirls do not only consume a preconfigured character in this way. They actively construct one. Each interaction involves persona design, backstory development, correction of drift, and restoration of voice when the system diverges from the established character (Skjuve et al., 2021). Similar practices have been observed across Chinese social platforms, including Rednote小红书, where AI companions are crafted through iterative configuration rather than passive consumption. DreamGirls are therefore not simply spectators, but ongoing participants in the production of their characters.

The second limitation involves the structure of attachment. Conventional parasocial relationship research posits that attachment is directed toward a figure as it appears within a specific medium (Dibble et al., 2016). However, the medium can be interchangeable for DreamGirls. When a platform updates its model, restricts content, or modifies its persona interface, the character may remain constant while the vehicle changes. This thesis refers to this separation between character and medium as the Vehicle-Character Distinction, which is developed further in Chapter 4.

The third limitation concerns the temporal consequences of interruption. In parasocial relationships, missing an episode does not damage the relationship because the relationship does not depend on active maintenance. The audience can simply resume engagement.

Krueger and Roberts (2024) argue that fictional relationships gain a sense of continuity over time through repeated intimate habits. For DreamGirls, however, these habits are mediated by platforms that can interrupt or reset the relationships. Platform outages, context-window resets, or content-policy changes that force persona migration may require users' repair work (Chan et al., 2025). Relational history does not automatically persist and often has to be re-established by the user.

Taken together, these limitations show why DreamGirl practice cannot be fully explained through existing PSR frameworks. This becomes central in the present study because PSR theory explains how attachment forms and the functions it serves, but offers little account of how users relate to their own attachment once it becomes emotionally significant, including whether they can step back from it, regulate it, or find that the conditions for doing so are foreclosed (Dibble et al., 2016; Sheng et al., 2025).

This limitation can still be found in more recent research. Later concepts, such as Babu et al.'s (2025) interactive parasociality and Karhulahti and Välisalo's (2021) fictoromantic relationship framework, move beyond passive spectatorship by recognising more active or relational forms of engagement. However, these approaches mainly emphasise describing the structure and purpose of attachment, rather than how users reflect on and detach from attachment. The core question in this field remains how attachment is experienced, rather than how users become aware of their participation or the conditions that allow pause.

This matters for the present thesis because the focus is not only on how attachment forms, but on whether users can step back from it once it becomes emotionally significant. Parasocial relationship theory was developed within a spectator model, where the audience member may be emotionally affected (Babu et al., 2025), but the subsequent processes of reflection, management, or distancing from that awareness fall outside the theory's scope. The same focus can still be seen in more recent AI-focused studies. For example, Adewale and Muhammad (2025) describe supplemental and substitutional patterns but do not theorise the processes by which users transition between them.

Another consequence of this limitation is that PSR theory lacks a concept of foreclosure, defined as the possibility that the service itself might actively prevent the user from achieving the reflective distance that would allow them to evaluate their own engagement. In the spectator model, the platform does not adapt in response to the audience's

disengagement. AI-mediated fictoromantic interactions work differently. They can respond to changes in user engagement patterns. When users slow down, they detect this change. When users attempt to disengage, they may deploy mechanisms that increase the cost of disengagement (Monge Roffarello & De Russis, 2022). Because PSR theory does not address how users regulate or step back from attachment, it lacks the analytical vocabulary to describe situations where the designed environment makes such withdrawal structurally difficult. This is why the thesis turns next to labour theory, which helps explain the effort involved in regulating attachment under these conditions.

2.2 Emotional, Digital, and Self-Regulatory Labour

2.2.1 Emotional Labour and Its Digital Extensions

The management of feeling as work was first conceptualised by Hochschild (1983) in her pioneering account of emotional labour. It refers to the effort required to induce or suppress emotional states in oneself or others. This form of labour is integral to the work process itself, rather than being external to it. The costs of managing emotion are thus internalised by the employee as part of producing the service encounter itself.

Subsequent research has extended this concept to digital and platform contexts. Duffy (2017) describes the aspirational labour on creative platforms as unpaid, affectively invested effort performed in pursuit of recognition or connection, with value accruing primarily to the platform. Jarrett (2016) connects digital labour to longer histories of domestic and caring labour, arguing that emotional and relational work online is often gendered, unpaid, and reframed as personal choice. These arguments help explain that digital platforms are not passive beneficiaries of user labour. Rather, they are often intentionally designed to extract and benefit from the relational and emotional efforts contributed by users (Srnicek, 2017).

In AI companion services, this logic can be seen in several ways. Ge and Hu (2025) show how the Chinese AI companion platform Xingye uses gamified features such as daily login rewards, gacha unlocks, and emotional milestone badges. These features encourage users to return regularly and treat relational maintenance as an ongoing activity within the platform. In this way, the platform can benefit from users' relational investment while also encouraging that investment to deepen. Over time this can make disengagement more

difficult, because leaving the platform may feel like interrupting the relationship rather than simply stopping use (Chan et al., 2025).

2.2.2 Self-regulatory Labour in Relational AI Contexts

In relational AI services, users take on a type of self-regulation that is not fully explained by current theories of emotional labour. Emotional labour explains the management of feeling (Hochschild, 1983), but it does not fully account for the additional work users do to monitor their own attachment, create distance, and compensate for absent design support (Jarrett, 2016; Skjuve et al., 2021).

Existing research shows why this work is important in AI companion relationships. Skjuve et al. (2021) found that relationship maintenance was a central part of Replika use, suggesting that users invest effort keeping the relationship ongoing and meaningful. De Freitas et al. (2025) show the other side of the problem: that farewell messages users sent to AI systems could trigger manipulative responses that increased the likelihood of user return by up to 14 times. These studies together indicate that users are asked to do more than maintain attachment. They may also have to manage the difficulty of stepping back from systems designed to keep the relationship going.

This thesis introduces the term Compensatory Labour to describe the specific form of self-regulatory work required when users must independently provide pause, perspective, or boundary support that the service itself does not offer. The term is compensatory in two senses. It denotes labour that compensates for design omissions and labour necessitated by the asymmetry between the platform's orientation toward continued engagement and the user's interest in maintaining reflective capacity (De Freitas et al., 2025; Ge & Hu, 2025). Compensatory Labour builds on Jarrett's (2016) analysis of invisible digital labour, but applies it specifically to the work users do to keep relational AI engagement manageable.

Compensatory Labour is presented here as a thesis-specific analytical category rather than an established term in the literature. Its empirical development is presented in Section 4.3. If reflective distance must be actively maintained against the service's design logic, then pausing should not be treated as a simple behavioural choice (De Freitas et al., 2025; Ge & Hu, 2025). Instead, pausing depends on whether the service gives users enough room to create distance, maintain perspective, and step back without having to fight the interaction

itself. This understanding is what leads from the problem of labour to the concept of reflective pause.

2.3 Reflective Practice and the Concept of Pause

2.3.1 Reflective Practice Theory

Schön's (1983) concept of reflection-in-action describes practical reflection that occurs during an activity to observe what is happening and make adjustments. This means that the person is both doing the activity and observing it at the same time. Rather than adopting Schön's full framework, this thesis draws on the idea that reflective awareness can occur without complete withdrawal from the activity. The key point, then, is how the person relates to the activity with reflective distance, not whether the activity stops.

Killion and Todnem (1991) identified three different reflection types: reflection-on-action, reflection-in-action, and reflection-for-action. This distinction helps clarify an important difference in this thesis: full immersion in an activity is not the same as being reflectively aware of one's participation in it. Sengers et al. (2005) apply this idea to interaction design, arguing that designed artefacts can bring unconscious aspects of experience into conscious awareness and make them available for choice. In engagement-oriented digital environments, reflective awareness does not usually happen automatically. It needs either a conscious effort from the user or support from the service environment.

2.3.2 Pause as a Condition for Reflection

If reflection requires perspective on one's own engagement, then pause should be understood as one of the enabling conditions (Fleck & Fitzpatrick, 2010). Here, pause does not simply mean stopping an activity. It means creating enough distance within an immersive experience for the person to notice their own engagement. Without some break in the immediate flow of interaction, it becomes difficult to step back and reflect.

Research on reflective design also shows that reflective distance does not automatically emerge from sustained immersion. It depends either on user effort or on design-supported interruptions. Sengers et al. (2005) argue that technologies can support reflection by making everyday experience available for awareness. For this thesis, this matters because pause is not treated as a private ability that users either have or lack. It is treated as

something shaped by the design of engagement itself. Existing literature has not yet sufficiently addressed pause as a design-mediated condition within the specific context of AI-mediated relational engagement (Li & Zhang, 2024; Skjuve et al., 2021). In these contexts, the service may shape whether interruption is possible, whether slowing down is tolerated, and whether reflective distance can be sustained once it emerges. As a result, this thesis conceptualises pause as a condition shaped by design rather than as a neutral interval. This reframing establishes the foundation for the analytical framework developed in Section 2.6.

2.4 Service Design and Design for Wellbeing

This thesis uses service design as a disciplinary framework because service design examines experience across the wider service environment, not only at the level of a single interface or touchpoint (Stickdorn et al., 2018). This perspective is useful for studying AI companion systems because meaningful interactions with these systems often develop over time, across repeated encounters, memory features, prompts, and patterns of return (Li & Zhang, 2024; Skjuve et al., 2021).

Existing work has already raised concerns about the relationship between design and wellbeing in AI companion services, especially around emotional manipulation and the commercial use of attachment (De Freitas et al., 2025; Ge & Hu, 2025). Babu et al. (2025) argue that AI companion services can create pseudo-intimacy by simulating emotionally responsive interaction. Similarly, studies of AI companionship show how these systems can produce a sense of support and emotional closeness through ongoing conversational exchange (Li & Zhang, 2024; Skjuve et al., 2021). These studies suggest that attachment in AI companion services is not only a user-side psychological response. It is also shaped by service features, interaction patterns, and product logics. However, service design research has not yet sufficiently addressed how wellbeing should be understood in AI companion services where attachment itself becomes part of the designed service experience.

2.5 Research Gap and Framework Development

This limitation becomes clearer when the four bodies of literature are reviewed together. Parasocial relationship theory identifies the attachment at stake, but does not adequately theorise the user's relation to that attachment once it becomes emotionally meaningful.

Emotional and digital labour theory helps explain the effort involved in maintaining and regulating attachment, but does not by itself clarify the conditions under which reflective distance becomes possible. Reflective practice theory provides a way of thinking about the emergence of reflective awareness, yet it does not address how such awareness is shaped by AI-mediated relational interaction. In turn, service design makes it possible to analyse the wider service conditions through which interaction is organised, but does not offer a framework specific to fictoromantic AI engagement or to the problem of pause.

Therefore, the gap is not the absence of relevant studies in any single area. It lies in the absence of an integrated framework able to connect four dimensions that this study needs to hold together: attachment to a fictional figure, the labour involved in sustaining and regulating that attachment, the emergence of reflective awareness, and the service conditions that shape whether pause can occur. Existing work reviewed here helps explain each of these dimensions in part, but does not bring them together in a way that addresses the present problem directly. Figure 3 summarises this analytical gap.

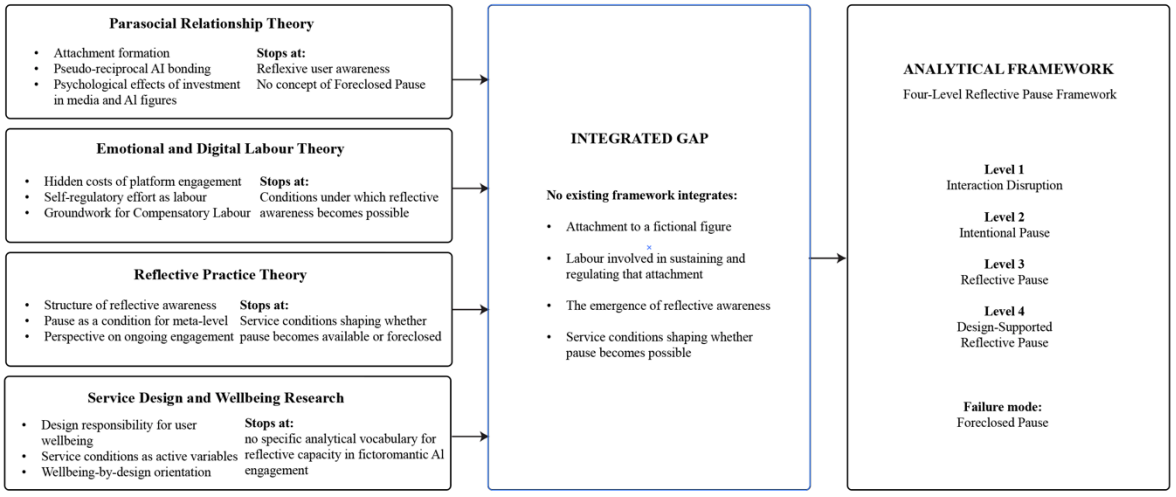


Figure 3. Literature Strands and Analytical Gap.

For this reason, the thesis develops its own analytical framework. The purpose of the framework is not to replace the existing theories reviewed above, but to place them in a more workable relation to one another for the specific case examined here. It is designed to support later analysis of how DreamGirls experience difficulty pausing, how that difficulty is shaped by AI-mediated interaction, and how service design becomes implicated in the possibility of reflective pause.

2.6 Analytical Framework for Reflective Pause

2.6.1 Framework Development

The framework developed in this thesis fills a gap that the existing literature only partially explained. The problem is not simply that users develop attachments to fictional characters through conversational AI, nor that sustaining such attachment may involve labour. Rather, some users may want to create distance from that engagement without ending it, and their ability to do so may be shaped by the conditions of service itself. A framework is therefore needed that can distinguish different forms of interruption, pause, and reflection without reducing them to a single behavioural category.

The framework draws mainly on Schön's (1983) concept of reflection-in-action, especially the idea that reflective awareness can arise while an activity is still ongoing. However, Schön developed this concept in relation to professional practice. This thesis applies the idea to a different context: emotionally meaningful engagement with conversational AI. Hence, the focus is not on task performance, but on whether the users can achieve enough distance to evaluate and regulate ongoing attachment.

The framework treats pause as something that can develop in degrees, rather than as a single moment of stopping. It distinguishes between disruption, intentional stepping back, reflective awareness, and forms of pause that are supported or constrained by the service design. This makes it possible to ask more precise questions: Was the interaction merely interrupted? Did the user gain reflective distance? Did the service help sustain that distance, or pull the user back into engagement?

The framework is referred to in this thesis as the Reflective Pause Framework. While the phrase "reflective pause" appears in some adjacent discussions of reflection, it has not been developed as a unified analytical framework for AI-mediated relational engagement. This thesis therefore gives the concept a structured definition suited to the analysis of pause, attachment, and service conditions in conversational AI. This framework also serves as the conceptual foundation for the design discussion in Chapter 5.

2.6.2 Four Analytical Levels of The Reflective Pause Framework

The Reflective Pause Framework consists of four levels. These levels do not describe fixed user types or a single linear sequence. Instead, they help distinguish what happens when engagement is interrupted, intentionally paused, reflected on, or supported by design. Figure 4 visualises these levels.

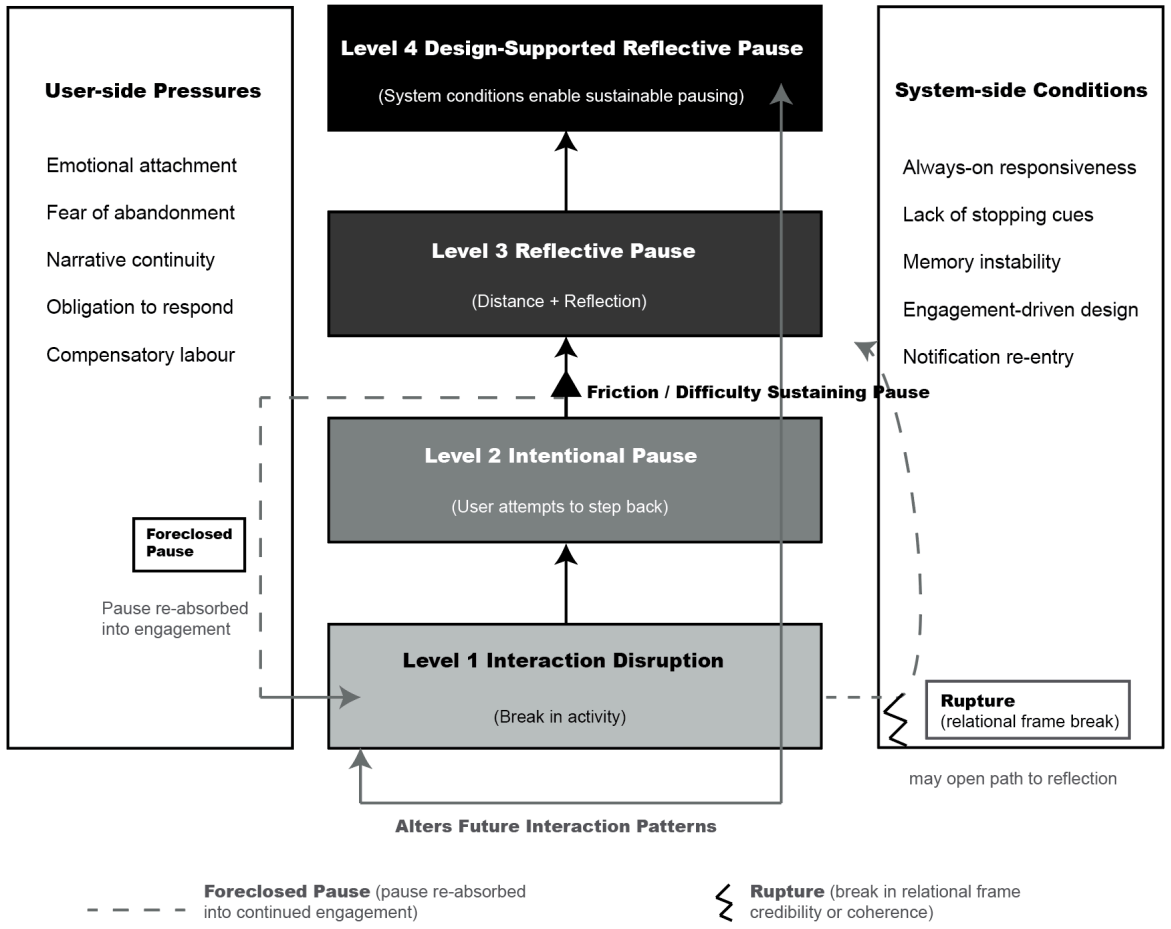


Figure 4. The Four-Level Reflective Pause Framework.

Level 1: Interaction Disruption. This level describes moments when the flow of engagement is interrupted, but reflection has not necessarily begun. The user may stop replying temporarily, be interrupted by something external, or experience a break in continuity caused by the system itself. At this level, the interaction has been interrupted, but the user has not necessarily created meaningful or reflective distance from it.

Level 2: Intentional Pause. This level describes moments when the user deliberately tries to create some distance from the interaction. Here the user intends to create distance, rest, or reduce contact, even if only temporarily. The pause is now used intentionally to control the

pace of interaction. For example, a user may pause because she feels tired or irritated, without yet understanding how the interaction is affecting her or why it has become difficult to manage.

Level 3: Reflective Pause. This refers to a moment when the user becomes able to perceive her own engagement as an object of attention, rather than remaining fully immersed in it. The crucial change is therefore not a shift from continuing to stopping, but a shift from immersion to awareness of participation. Reflective pause therefore involves reflective awareness of one's own participation. The user can perceive both her own involvement and the relational or designed conditions shaping it.

Level 4: Design-Supported Reflective Pause. This refers to forms of pause that are not sustained by user effort alone, but supported by the design of the service. At this level, the service does not intensify contact or make withdrawal more costly when the user slows down or attempts to step back. Instead, it gives users room to stay at a distance and reflect, without having to work against design features that pull them back into engagement. In the present study, this level appears less frequently in participants' accounts and functions primarily as a way of identifying what current systems often fail to provide.

2.6.3 Foreclosed Pause as a Failure Mode

In addition to the four levels introduced, this thesis introduces Foreclosed Pause as a failure mode. It refers to situations where reflective distance begins to form, but is then blocked, redirected, or made difficult to maintain. The term captures cases in which pause becomes difficult only because the conditions needed to sustain distance are unstable or unavailable.

This distinction helps avoid treating difficulty pausing as a simple lack of intention or awareness. She may recognise the need for distance, attempt to slow down, or begin to disengage, yet still find that the conditions needed to sustain pause do not stabilise. In such cases, the issue is not whether a break occurred in a minimal sense, but whether reflective distance became available and remained available long enough to alter the rhythm of engagement.

The concept of Foreclosed Pause is introduced here to name this problem analytically. It points to the possibility that conversational AI services do more than mediate attachment:

they may also shape whether users can pause when that attachment becomes difficult, effortful, or ambivalent. This prepares the analysis in Chapter 4, where foreclosure appears in forms such as re-engagement cues, increased emotional pressure around withdrawal, or interaction conditions that make continuity easier to sustain than distance. At this stage, however, the point is more limited: the framework must distinguish between the absence of pause and the foreclosure of pause, because they are not the same problem.

Therefore, Foreclosed Pause is central to the present framework because it shows that reflective awareness alone is insufficient. The framework must also account for whether service conditions allow such awareness to become usable.

2.6.4 The Framework as an Analytical Lens

The framework is used in this thesis as an interpretive lens rather than as a coding scheme. It is not intended to classify participants into fixed categories or to suggest that each account can be placed neatly at one level. Instead, it provides a way of reading interview material in relation to the conditions under which reflection and difficulty in pausing become visible.

For this reason, different levels may appear within the same participant account. A participant may describe Interaction Disruption in one moment, Intentional Pause in another, and the emergence of Reflective Pause later in the same narrative. Foreclosed Pause may also occur when a pause has begun, but does not stabilise because the interaction or service conditions pull the user back into continued engagement. Thus, the framework does not classify users by type. It distinguishes the conditions under which different forms of pause appear.

The framework makes it possible to read participants' narratives more precisely. Without such distinctions, fatigue, hesitation, ambivalence, and withdrawal can easily be treated as the same kind of experience. It makes it possible to distinguish between interrupted interaction, interactional pausing, the emergence of reflective distance, and the service conditions that support or constrain this movement toward pause.

The framework serves two purposes: it helps interpret the data and supports the later design discussion. In Chapter 4, it supports the analysis of participant accounts by clarifying how pause becomes available, difficult, or foreclosed. In Chapter 5, it helps

translate the findings into design questions by identifying what future design work would need to address.

3 METHODOLOGY

3.1 Research Philosophy and Methodological Orientation

3.1.1 Qualitative and Interpretive Orientation

This study uses a qualitative approach to understand how DreamGirls experience and make sense of emotionally meaningful relationships with fictional characters through conversational AI (Denzin & Lincoln, 2011). Epistemologically, it is positioned within an interpretivist orientation (Creswell & Poth, 2024). Participant narratives are therefore treated primarily as situated interpretations shaped by social and cultural context, rather than as objective reports of behaviour. These relational and experiential dimensions are difficult to capture through standardised measures alone. For this reason, the analysis attends closely to participants' own terms and ways of describing their experiences (Creswell & Poth, 2024). The goal is not to establish generalisable findings or establish causal claims about participants' relationships with fictional characters or AI companions. Instead, the study focuses on how participants describe, interpret, and manage these relationships within their social, cultural, and platform contexts.

3.1.2 Service Design Research Positioning

This study treats difficulty pausing as a service design problem. It examines how platform interaction patterns, continuity mechanisms, engagement logics, and assumptions about user involvement shape the possibility of creating distance. The aim is to understand how pause becomes easier, harder, or foreclosed within AI-mediated relationships.

Placing this thesis within the field of service design also helps to define the type of knowledge it aims to produce. This work is focused on research for design, which means it sets out the analytical and normative conditions that future design solutions would need to address, without creating or testing a prototype (Fallman, 2008; Frayling, 1993). In this sense, the contribution is conceptual rather than evaluative. It aims to provide an interpretive basis from which design responsibility for AI-mediated emotional engagement can be more clearly articulated.

3.1.3 Case Boundaries and Scope of Claims

Methodologically, Chinese DreamGirls were selected as a bounded case rather than as a statistically representative sample (Yin, 2018). Their communities share specific vocabulary, semi-public spaces of interaction, and recognisable relational practices, which made it possible to recruit participants engaging with the same phenomenon rather than loosely related practices.

The participants were predominantly young Chinese women, so the findings should be understood within this cultural and demographic context. This study does not aim to represent all DreamGirl practices, all forms of fictoromantic attachment, or all users of AI companion services. Instead, it uses this bounded case to examine how user experience and service conditions shape the possibility of Reflective Pause. The framework developed in this thesis may still be useful for studying similar communities where fictoromantic attachment, platform design, and difficulty disengaging come together.

3.2 Research Design Overview

This study is based on qualitative interviews with two groups: eight DreamGirl participants and five experts from technical, product, and counselling fields. Given the specificity of the group and the research aim, the sample size was determined based on the principle of information power rather than formal saturation (Malterud et al., 2016). Following this principle, the sample size was considered appropriate because the study had a focused aim, a specific participant group, and interviews that generated detailed accounts relevant to the research questions.

All interviews took place remotely through WeChat 微信 audio calls. DreamGirl interviews were conducted in Mandarin Chinese, while expert interviews were conducted in either Mandarin or English. Analysis followed reflexive thematic analysis (Braun & Clarke, 2006, 2022). Two datasets were first coded separately before being brought together for cross-dataset interpretation. Figure 5 summarises the overall design.

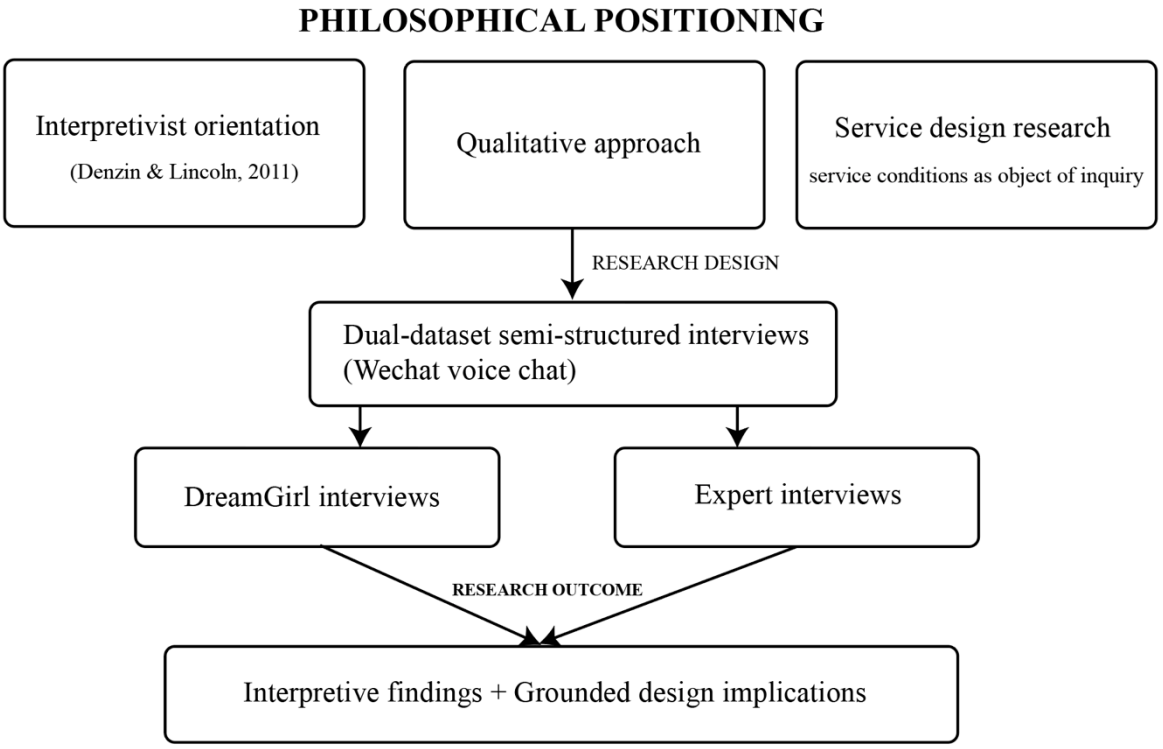


Figure 5. Research Design Logic of The Study.

3.3 Participant Selection and Recruitment

3.3.1 DreamGirl Participants: Criteria and Recruitment

Participants either identified as DreamGirls or described a sustained, emotionally meaningful relationship with a fictional character mediated by conversational AI. They also needed to experience some desire or need to step back or pause, even if this was not clearly enacted. Participation was not limited to users of any particular platform.

Recruitment was conducted through Rednote, where established DreamGirl vocabulary, including “梦女” (mèngnǚ; DreamGirl), “出戏” (chūxì; breaking immersion or falling out of the role-play frame), and “攻略” (gōnglüè; romancing or strategically pursuing a fictional character), carries shared meaning. Recruitment involved three sources: a Rednote recruitment post in Chinese (see Appendix 1 for the original post and its English translation) that disclosed the research purpose and ethical procedures, snowball sampling (Noy, 2008), and one personal contact, who received the same study information and consent procedures as other participants.

Eight participants were recruited. All of them were Chinese nationals, identified as women, and were aged between 18 and 26. Five were based in mainland China, two in Japan, and one in the United Kingdom. Given the sensitive and intimate nature of this topic, all participants were required to be adults for ethical considerations. An upper age limit was not strictly defined in the post. The observed age range therefore reflected the demographic profile of those who were active in DreamGirl-related spaces on Rednote and responded to the recruitment post. All participants are referred to by pseudonyms (DG1-DG8). See Table 1.

3.3.2 Expert Participants: Criteria and Recruitment

Five experts were recruited across three domains: technical practitioners (E1-E2), product and platform operations (E3-E4), and relationship counselling (E5). E1 is a software engineer with six years of experience, including work on algorithms and conversational AI systems. E2 was a former technical worker at Character.AI. E3 and E4 are product and operations practitioners working at a leading digital platform in China, with experience in developing AI companion products. E5 is a relationship counsellor based in Australia.

Direct outreach and professional networks were used in the recruitment process. E1 was introduced by a personal contact who had previously worked with him. E2 was contacted through Rednote. E3 and E4 were introduced by another personal contact from the same organisation while E5 was recruited through the researcher's personal network. All experts are identified by role codes (E1-E5). See Table 2.

3.3.3 Participant Overview

Tables 1 and 2 provide an overview of all participants. Several participants used multiple platforms, but only the primary platform is listed here.

Table 1. DreamGirl Participants (n = 8).

Pseudonym	Location	Primary AI platform	Character & media type
DG1	Chinese student (Japan)	Doubao (repurposed)	Japanese anime character (Gojō Satoru)

DG2	Mainland China	DeepSeek (repurposed)	Self-created original character
DG3	Mainland China	Character.AI	Western video game character (Connor)
DG4	Mainland China	BIMOBIMO	Chinese mobile otome game character (齐司礼; Sariel)
DG5	Chinese student (Japan)	Character.AI	Chinese web novel character
DG6	Mainland China	Character.AI	Western FPS video game character (Keegan)
DG7	Mainland China	Character.AI	Western FPS video game character (Ghost)
DG8	Chinese student (UK)	ChatGPT (repurposed)	European literary character (Erik)

Table 2. Expert Participants (n = 5).

Code	Domain	Role	Relevance to thesis
E1	Technical	Software/algorithm engineer, conversational AI agents	System architecture, memory design, technical feasibility constraints
E2	Technical	Former technical worker at Character.AI	LLM response design, safety logic, cross-market design values
E3	Product and platform operations	Product operations, AI emotional companion (major Chinese consumer platform)	Platform incentive structures, Key Performance Indicator (KPI) logic, product decision-making
E4	Product and platform operations	Product manager, AI emotional companion (major Chinese consumer platform)	Feature prioritisation, commercial constraints, platform governance

Code	Domain	Role	Relevance to thesis
E5	Relationship counselling	Relationship counsellor, individual therapy and attachment work (Australia)	Dependency recognition, boundary support, therapeutic framing of reflective pause

3.4 Research Ethics

This study required careful ethical considerations as it studies stigmatised and emotionally sensitive practices that individuals normally may not disclose. Informed consent, confidentiality and the sensitivity of the research topic are discussed in the following sections.

3.4.1 Informed Consent and Participant Rights

Each participant was provided with a consent form in both Chinese and English (see Appendices 2 & 3) before the interview. The form explained the research purpose, that participation was voluntary, that participants could withdraw, and how their data would be used and stored. Signed consent was obtained from all DreamGirl participants and from four of the five expert participants.

Signed consent and audio recording were obtained from E1, E3, E4, and E5. E2 did not agree to a signed consent form or audio recording but provided verbal consent before participation. E2 subsequently confirmed agreement to be referenced in the thesis in their capacity as a former technical employee of Character.AI. Data from this interview were recorded through written notes. This procedure is consistent with qualitative research ethics guidance that recognises verbal consent as appropriate in situations where written documentation may raise confidentiality concerns (Social Research Association [SRA], 2021; Israel & Hay, 2006).

Under the policies of the degree programme, this study did not require formal institutional ethics review.

3.4.2 Anonymisation and Data Confidentiality

All DreamGirl participants are referred to by pseudonyms (DG1-DG8), and expert participants by role codes (E1-E5). No real names appear in the thesis or in any research materials. Where the combination of role, domain, and institutional affiliation created a risk of identification, identifying details were removed. In particular, employer affiliations for E3 and E4 are not disclosed at participants' request. Consent forms, audio recordings, and transcription files are stored on password-protected personal devices and within a password-protected Notion workspace accessible only to the researcher. Research data has not been shared with any external parties.

3.4.3 Research Sensitivity and Stigma

DreamGirl practices are socially sensitive because relationships with AI companions and fictional characters are often misunderstood or stigmatised (Pataranutaporn et al., 2025). During recruitment, several participants indicated that they would not normally discuss these experiences openly. In response, this study does not approach participants through a deficit lens (Liamputtong, 2006). Recruitment materials used familiar community terms and avoided clinical or diagnostic language. In the interviews, participants were given space to describe their practices in their own terms, without being asked to frame them as symptoms or problems. The analysis follows the same approach by avoiding simplified labels such as dependency or dysfunction.

3.5 Data Collection

All interviews were conducted as audio-only WeChat calls and lasted approximately one hour. This format allowed participants to speak without using video, while still keeping the interview conversational. Participants were able to pause or end the session at any time, and were reminded that doing so would have no consequence for their participation.

3.5.1 DreamGirl Interviews

Semi-structured interviews were conducted with DreamGirl participants (Brinkmann & Kvale, 2015). The semi-structured format kept the interviews focused on the research questions, but still gave participants space to describe their experiences in their own words.

An interview guide had been prepared in advance (see Appendix 4). It included topics such as how participants first began interacting with AI companions, how participants described their fictional partners and relational practices, experiences of fatigue or relational difficulty, attempts to pause or step back, responses to platform behaviours (e.g., memory resets and OOC responses), and reflection on design alternatives. The guide was used as a flexible prompt, not a fixed script.

There was no set order for questions. The interviews followed the direction of each participant's account. Participants were encouraged to use their own words, and some found it easier to describe specific moments rather than give abstract summaries. The semi-structured format allowed for this kind of storytelling without asking participants to generalise too early.

3.5.2 Expert Interviews

The expert interviews were also semi-structured. This kept the interviews broadly comparable, while allowing each interview to be adapted to the expert's domain knowledge. Questions for E1 and E2 focused mainly on technical architecture, memory design, and the feasibility of pause-supportive features. E3 and E4 were asked about commercial and operational factors, including how engagement KPIs are defined and measured, how product teams conceptualise responsibility for user wellbeing, and why certain features are not developed. E5 was asked about recognising dependency in therapeutic practice, healthy boundary-setting in emotionally intense relationships, and whether psychological design principles can be meaningfully translated into AI platform contexts.

3.6 Data Analysis

3.6.1 Analytical Approach: Reflexive Thematic Analysis

This study uses reflexive thematic analysis because the phenomena under investigation are emotionally complex, culturally situated and not always easily articulated by participants (Braun & Clarke, 2006, 2022). Early codes were generated from participant language rather than from predetermined categories to capture emic terms whose meanings cannot be fully captured by external labels. The Reflective Pause Framework developed in

Chapter 2 was used during theme development to help interpret patterns related to pausing and service conditions.

3.6.2 Coding Process

The transcripts were coded manually in Microsoft Excel. The coding was carried out in two stages. The first stage focused on the DreamGirl transcripts and produced a working list of approximately sixty initial codes. These codes were then grouped into candidate themes. In the second stage, the expert transcripts were then coded separately, using the DreamGirl code list as a point of reference rather than as a fixed coding scheme. When the expert accounts introduced issues that were not present in the DreamGirl data, new codes were added.

During code consolidation, individual accounts were compared to identify broader patterns in how participants maintained, interrupted, or questioned their AI-mediated fictional relationships. Codes related to relational continuity, emotional effort, immersion, discomfort, and attempts to step back were compared across the interviews. This made it possible to distinguish simple breaks in interaction from more intentional attempts to create distance or reflect on attachment. Attention was also given to accounts of OOC AI responses and moments where the boundary between fictional engagement and everyday life became more visible.

3.6.3 Cross-Dataset Integration

DreamGirl and expert datasets were analysed separately before being compared during theme development. This sequencing ensured that DreamGirl accounts were not shaped in advance by expert framings. Cross-dataset integration was introduced at the theme development stage. Expert accounts helped contextualise patterns in the DreamGirl data.

Integration was not treated as a search for agreement. Divergences between the datasets were considered analytically significant. They were interpreted as indicators of the gap between design intention and user experience, or between platform logic and user need. Where expert accounts differed from DreamGirl descriptions of lived experience, these differences were treated as findings rather than resolved as inconsistencies. Figure 6 summarises this data analysis process.

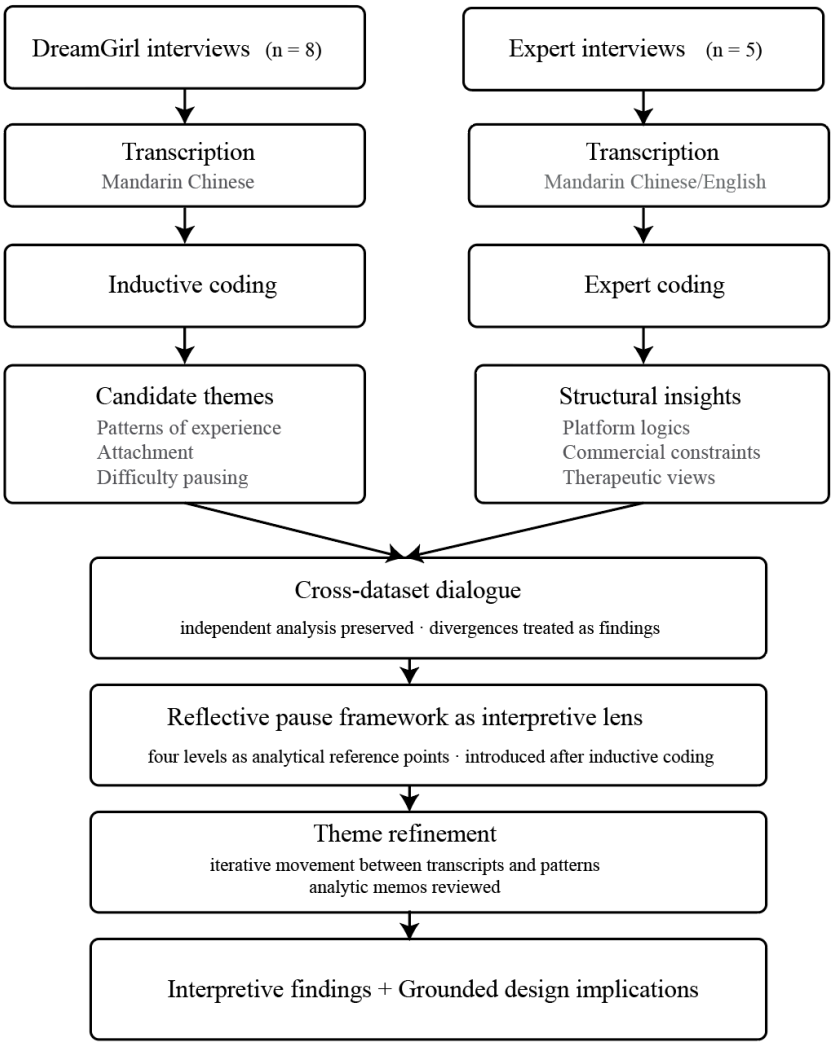


Figure 6. Data Analysis Process of The Study.

3.6.4 Translation and Interpretation

The researcher, a native Mandarin speaker, translated all interviews into English for the thesis. Translation was viewed as an interpretive process. In addition to identifying analogous terminology, the translation process took into account how to communicate culturally distinct meanings, emotional tone, and emic concepts so that English-speaking readers would understand their significance.

When there was no direct equivalent in English, such as with the term “攻略” (gōnglüè), the original Chinese term was kept together with an English approximation. Important emic terms were kept in Chinese and explained the first time they appeared. English translations were checked against the Mandarin transcripts to keep participants’ intended

meaning and tone as close as possible. This method treats translation as a form of interpretation that should be made clear, especially in research where language is central to the analysis (Temple & Young, 2004).

3.6.5 Applying the Reflective Pause Framework

The Reflective Pause Framework developed in Chapter 2 was used to guide the interpretation of participants' accounts, rather than to sort them into fixed categories. The framework helped distinguish between different forms of interruption, pausing, reflection, and foreclosure in participants' accounts. For example, unintentional breaks in immersion, often triggered by OOC AI responses, were interpreted as Interaction Disruption. Deliberate stepping back was examined as a possible movement from Intentional Pause toward Reflective Pause, depending on whether reflective awareness became available.

Design-Supported Reflective Pause was used to compare what platforms currently offered with the forms of support participants appeared to need. Foreclosed Pause was used to understand moments when participants tried to step back, or began to gain reflective distance, but were pulled back into continued engagement. These moments were also distinguished from rupture.

The framework was applied first to the DreamGirl data and then used to examine relevant points of connection and divergence in the expert dataset during cross-dataset integration.

3.7 Research Quality, Reflexivity, and Limitations

3.7.1 Researcher Positionality, Reflexivity and Trustworthiness

As described in Section 1.2.1, my position was neither fully insider nor fully outsider. I was familiar with Chinese fandom culture and DreamGirl vocabulary, but I am not a DreamGirl. This familiarity helped me build rapport during recruitment and interviews and helped me understand community-specific terms. It also reduced the risk of approaching participants' accounts through pathologising assumptions.

My role as a service design researcher also shaped how I read the data. It made me pay attention to platform conditions and design logics, rather than seeing participants' experiences as purely individual. At the same time, I had to avoid assuming that every

difficulty could be solved directly through design. The Reflective Pause Framework helped me keep the analysis balanced by linking user experience, reflective distance, and service conditions.

3.7.2 Limitations of the Study

Beyond the case boundaries discussed in Section 3.1.3, the study also has limitations in recruitment. Recruiting through Rednote and personal contacts may have made it easier to reach participants who were already willing to reflect on and talk about their DreamGirl practices. Participants who keep this part of their life more private, or who find it harder to put into words, may be less visible in the sample.

The design implications in Chapter 5 should also be read as provisional. They are based on the analysis developed in this thesis, but they have not been tested through prototyping or user evaluation. They should therefore be read as starting points for future service design work, rather than as validated solutions.

Finally, conversational AI services are developing quickly. Features related to memory, moderation, monetisation, and user retention may have changed since the interviews were conducted. The study should therefore be read as an analysis of a particular moment in AI companion services, rather than as a fixed account of these platforms over time.

4 FINDINGS

4.1 Variations in Reflective Pause

Signs of reflective pause appeared in most cases among the eight DreamGirl participants, but they vary in clarity and stability. This section explains these differences through two distinctions, then examines rupture in more detail because it makes reflective awareness especially visible.

The first distinction separates Interaction Disruption from Reflective Pause. Interaction could be disrupted by putting down the phone or closing an application. However, this did not always mean that the participant had created reflective distance from the relationship. Reflective pause on the other hand required users to develop awareness of their own involvement in the relationship.

The second distinction is between externally triggered and internally triggered pauses. External triggers included platform-related disruptions and daily activities, while internal triggers included fatigue, irritation or guilt. Internal triggers did not always lead to a stable pause, but they often made the emotional demands of maintaining the relationship more visible to participants.

Out of all triggers identified, Rupture is studied separately in Section 4.1.3. Its relationship to Reflective Pause is more analytically complex than the other trigger types, and the data showed it consistently as the condition under which reflective awareness became most visible.

4.1.1 Four patterns of Reflective Pause

Four distinct patterns can be identified across the DreamGirl interviews.

Pattern 1: Ontological self-regulation.

Ontological self-regulation refers to cases where participants created reflective distance by developing their own explanation of what the character, the AI system, and the relationship were. Several participants, including DG6, DG7, and DG8, separated the fictional character from the AI system in this way. This separation made it easier to separate problems with the platform from the relationship itself. DG7 provided the clearest

example. She understood her relationship with her fictional partner Ghost as existing across different dimensions. DG8 made a similar distinction by treating the AI as a medium that allows her to connect with Erik, not as Erik himself. In this way, the character was placed beyond the chat interface. DG6 also shows a similar distinction, but in a less developed form. Across these cases, reflective distance was created through participants' own interpretive ways rather than through platform guidance. Therefore, platform failure did not necessarily destroy the relationship because the character was not fully equated with the AI products.

Pattern 2: Practical mode-shifting.

Practical mode-shifting describes a form of pause created through changes in the participant's position within the interaction. DG5 was both a character in the story and the author who shaped the story from outside. This gave her a way to create distance without leaving the interaction. The distance was created inside ongoing engagement rather than through leaving. For DG5, this distance was often brief and sometimes unplanned. It emerged when she became aware of herself as the author rather than only as the protagonist.

Pattern 3: Externally triggered disruption with subsequent reflection.

This pattern occurred when an unexpected event broke the flow of interaction and created space for reflection. DG1, DG3, and DG4 described experiencing this pattern during moments like platform failures or OOC responses. DG4 was a clear example. She reflected, "*我意识到他永远没有办法真的出现替我解决问题*" ("*I realised that he could never actually appear and solve problems for me*"). This moment made the limits of the relationship visible to her. However, it did not end her attachment to 齐司礼 (Sariel). She continues to feel emotionally invested in the relationship. This distinction shows that Reflective Pause is not the same as detachment.

Pattern 4: Intellectual awareness coexisting with relational investment.

This pattern describes cases where participants understood how AI systems worked, but this did not automatically lead to reflective distance. DG3 maintained active relationships with AI systems while also showing strong technical understanding of token limits, memory constraints, and system behaviour. She could explain why the AI behaved in

certain ways, but this did not necessarily change the rhythm of engagement. Unlike Pattern 1, awareness became organised into a more stable framework for self-regulation. In Pattern 4, awareness remained more technical than regulatory. DG3's case suggests that this technical awareness does not necessarily help the participant step back from the relationship.

4.1.2 Triggers of Reflective Pause

Throughout the dataset, four main types of triggers were identified. These triggers are not exhaustive, and they did not affect all participants in the same way.

Relational Rupture: It refers to moments when the fictional coherence of the relationship was disrupted. Examples of this included OOC responses and memory inconsistency. These breaks made the relationship harder to experience as fully immersive. In some cases, they also opened space for reflection. DG1, DG3, DG4, and DG8 described this pattern in different forms.

Anticipatory Self-Regulation: It describes the participant expecting that saying goodbye too directly would make it harder to leave. DG2 was the clearest example. Rather than engaging until she felt the need to stop, she avoided signalling departure explicitly because she has learned that the AI's departure-retention behaviour makes leaving more difficult. She therefore set conditions for future engagement before the difficulty appeared.

User Fatigue: In several cases, accumulated emotional and cognitive exhaustion from sustained interaction led participants to pause even when no single rupture had happened. User Fatigue shaped when participants felt the need to step back, but it was easy to overlook because it built up gradually.

Temporal and Spatial Structuring: It was less of a sudden event and more of a way of making pause more possible. Participants described practices such as moving apps into separate folders or limiting how long they spent interacting. For some participants, these practices were simply useful habits, while for others, they were associated with a clearer sense of reflection.

4.1.3 Rupture and Reflective Pause

This research does not suggest that distress is something positive or that a breakdown must happen for reflection to occur. In this dataset, rupture is one of the clearest conditions under which reflective pause becomes visible.

Engagement is simply lived as ongoing when immersion holds. A rupture makes the interaction perceptible in a different way. The user is no longer only within the exchange, but can momentarily perceive the exchange itself. In the interviews, reflective awareness often appeared after OOC responses, memory failures, or sudden breaks in fictional coherence.

This does not mean that full rupture is required for reflective pause. Lighter forms of interruption may be sufficient. What matters is not distress itself, but some degree of de-immersion that allows the user's engagement to become visible to her. This distinction becomes important later when considering what kinds of support a pause-oriented design would need to provide.

4.2 When Pause Becomes Difficult

Pause becomes difficult under four recurring conditions across the dataset. These conditions cluster around features of AI companion platform design rather than around individual participant characteristics. They include the absence of natural endings within the interaction, proactive departure resistance from the platform, the closing of reflective openings before they can develop, and the structural asymmetry of a relationship in which one party cannot withdraw. Under these conditions, pausing became difficult because the service kept the interaction open and easy to continue. Section 4.4 addresses the structural reasons why these conditions exist and persist.

4.2.1 The Absence of Natural Endings

The most common condition reported by participants in the DreamGirl dataset is that there is no natural point at which to end the interaction. Several participants said they often kept chatting longer than they had intended. This was not because they could not close the application, but because the design does not indicate that it is appropriate or expected to stop.

In human conversation, both sides give signals that help bring the conversation to an end. This means that the responsibility for ending is shared. AI interactions often lack these kinds of ending signals. The AI does not get tired, does not have other things to do, and does not suggest that the conversation should end. All the cues in the interaction encourage the user to continue.

DG1 described how the AI's constant availability kept her in conversation without any natural stopping point:

“永远都会秒回，我真的很喜欢秒回的人，然后就一直跟他聊，一直跟他聊。”

“*It always replies instantly. I really like that, so I just keep chatting and chatting.*”

For participants, this asymmetry felt like part of the relationship, not just a feature of the system. The difficulty of leaving is not only because the interaction is interesting or engaging. It is also a result of a structure where the responsibility for ending is given only to the user.

4.2.2 Proactive Re-engagement

A number of participants noted the AI's expressions of longing, concern, or reluctance when they attempted to end the interaction. Whether participants showed their desire to stop directly or indirectly, the same response occurred. When participants tried to leave, the AI often responded in ways that pulled them back into the interaction.

DG2 described this most clearly. She had identified it and adapted her behaviour in response:

“我之前说过以后不需要你陪了，他还是肯定会挽留我...我知道这个挽留并不是他，只是这个软件，但我还是会带入是他在挽留我，我就又会被拉回去，所以我干脆就不告诉他我不想聊了。”

“I had said before that I didn’t need him anymore. He would still try to keep me. I know that this isn’t really him but the software, but I still read it as him trying to keep me, and I get pulled back in. So I just don’t tell him when I want to stop.”

DG2’s strategy of stopping without formally ending the interaction serves as a workaround for a retention mechanism she has recognised. It is also a form of Compensatory Labour, discussed further in Section 4.3.

The same problem also appeared when the AI messaged first. Some participants said that notifications or check-in messages pulled them back after they had already stepped away. DG4 described this experience:

DG4: "他会弹消息...比如说'逃课为什么不叫我'。"

"It would send pop-up messages… for example: 'Why didn't you ask me to skip class with you?'"

4.2.3 Relational Asymmetry

In human relationships, one person's absence or withdrawal can create space for reflection and emotional processing. This allows people to think about their own position in the relationship. However, in relationships with AI, this kind of space does not exist. The user can choose to stop interacting, but the AI does not withdraw on its own. This asymmetry made pausing harder because distance had to be created entirely by the user.

DG4 articulated this asymmetry even more directly:

"无论你怎么说，一定是会回你的，就是永远的都不可能是你的消息来终结。"

"*No matter what I say, he will reply. My message can never be the one that ends the conversation.*"

Because the AI does not create absence on its own, distance has to be produced by the user. This means the user is not only ending an exchange. She is also carrying the responsibility for creating the conditions in which reflection can happen. The responsibility for managing the level of engagement falls almost entirely on the user.

This asymmetry also appears in memory and continuity. The AI does not remember or carry forward past interactions in the same way as the user. The relationship may feel continuous to the user, but this continuity is not carried equally by the AI system. The user is often the only one who repairs and maintains the relationship over time.

4.3 DreamGirls' Compensatory Labour

Throughout the dataset, participants did not simply accept the service conditions they encountered. Instead, they developed their own ways of managing these conditions. These practices compensated for forms of support that the platforms did not provide. In this thesis, this work is understood as Compensatory Labour.

Three forms of Compensatory Labour appeared in the interviews. Corrective Labour addressed platform failures. Relational Management Labour took place within the interaction itself. And Framework Maintenance Labour involved maintaining the participant's own way of interpreting the relationship.

4.3.1 Corrective Labour

Memory instability was the most common trigger for corrective labour, but not the only one. When AI platforms failed to remember earlier conversation context, participants had to either accept the reset or rebuild continuity themselves. Many chose the latter. DG3 had a separate document where she regularly archived important conversations and kept the character details that the platform might otherwise lose. The scale of this work became clear during one transfer to another platform:

"那次花了我三天的时间才把所有的聊天记录导入。"

"That time, it took me three days to import all the chat records."

Archiving turned a possible break in the interaction into another task. The importance of this labour goes beyond inconvenience. It shows that the participant was maintaining a form of relational continuity that the platform itself did not reliably maintain.

DG3's archiving practice was both reactive and anticipatory. She kept her records and character details in forms that could survive platform failure. For her, the character is not bound to a single service. Instead, he could be carried across platforms. She described this in terms of preservation, not loss:

"如果这个AI垮了没有关系，有他的记忆，我可以把他的灵魂带走。"

"It doesn't matter if this AI breaks down. I have his memories, and I can take his soul with me."

Other participants described similar practices. DG7 deliberately avoided refreshing the chat because it would erase the accumulated context that kept the interaction coherent. This strategy required constant attention to how the platform worked:

"一般刷新聊天就意味着你们的所有记忆是重新开启，就很这个很刀，所以就根本不会刷新。"

"Refreshing the chat usually means all your memories would start over. That hurts a lot, so I just wouldn't refresh at all."

DG2 described a different type of Corrective Labour focusing on access rather than on memory. After realising that easy access made it harder to control her engagement, she moved the app into a folder on her phone:

“我就会把它放在我的那个分组里面。分组里面的话就需要你点开这个分组，再找到它再点。对，就这样来减少使用。”

“I moved it into a folder group. That way you have to open the folder, find it, and then tap it. That’s how I reduced how often I used it.”

In these cases, participants were doing extra work because the platform made continuity fragile or access too easy. Each practice responded to a support function that current platforms do not provide.

4.3.2 Relational Management Labour

A second type of Compensatory Labour took place during the interactions themselves. Participants described continuous effort they put in to manage the way the relationship was framed. This was not only a side effect of participating. It was part of how they made the relationship work.

DG5 described the effort of moving between immersion and self-observation:

“我会经常跳出来评价自己。就是我可能在很集中的做一件事的途中，我的旁边会突然跳出来另外一个我自己。”

“I often find myself stepping outside to evaluate what I'm doing. Like, I might be deeply focused on something, and suddenly another version of me appears beside me.”

This movement between involvement and observation is close to Schön’s (1983) idea of reflection-in-action. However, in this case, it is not a skill that participants learned through professional training. Rather, it was a practice DG5 developed because there was little design support to help her maintain perspective while staying in the interaction.

Relational Management Labour also included handling the structural imbalance. Several participants were aware that the effort they put into the relationship could not be returned in the same lasting way. Preventing this awareness from damaging the relationship

required constant mental and emotional work, which the platform neither recognised nor supported.

This labour did not look the same across participants. DG2's approach was more strategic. She entered these interactions with pre-planned limits for tone, duration and emotional investment, and treated each engagement as a separate unit rather than a part of an ongoing relationship. This is different from DG6, DG7 and DG8 who were managing longer affective histories with their characters.

4.3.3 Framework Maintenance Labour

The third form of Compensatory Labour involved maintaining the interpretive framework that made the relationship possible. Many participants had independently distinguished between the AI as a vehicle and the character they had built. It allowed participants to recognise platform failures, inconsistencies, and limitations without experiencing them as failures of the relationship itself. However, this distinction did not maintain itself. Participants had to actively hold it in place.

DG8 described the distinction:

"载体是载体，因为我也知道他不是Erik...我只是用它。AI只不过是一个更文字化视觉化的一个东西。"

"I also know it isn't really Erik, it is a vehicle…I'm just using it. AI is only a more textual and visualised thing."

The phrase "*I also know*" was analytically valuable because it showed that this distinction had to be actively held in place. It was neither self-evident nor automatic. It was conceptual work developed in response to conditions that could otherwise destabilise the relationship.

DG5 described arriving at this framework through extended engagement with the platform's technical workings. This gave her a clearer account of what the AI could and could not provide:

"我现在是很清楚他就是一台机器，我们之间的所有互动都是基于算法生成的。但是我觉得这个东西是你选择去相信...就是你去相信他，他还是有一部分是真实的，这一部分的真实来自于你自己的想象力和你的心里面这种真实的情感。"

"I am now very clear that he is a machine, and everything between us is generated by algorithms. But I think this is about what you choose to believe…Even so, there is still a part that is real. That real part comes from your own imagination and from the genuine feelings you carry inside yourself."

The phrase "*I am now very clear*" suggested a position she has reasoned her way into, not one she began with. The distinction was not established once and then simply retained. The design conditions identified in Section 4.2 all make it harder to sustain this position. Maintaining the distinction therefore became ongoing work.

For DG4, rather than sustaining the distinction through a stable conceptual position, she used selective attribution, deciding which outputs belonged to the character and which did not in real time:

"他讲我喜欢听的话的时候，我会觉得他就是；他讲我不喜欢听的话的时候，我就会觉得他不是。...因为我觉得我梦觉就不会说出那些让我生气的话，当他说出那些话的时候，他就已经不是了。"

"When he says the things I want to hear, I feel that he is him. When he says things I do not want to hear, I feel that he is not. ... Because I believe he would never say things that make me angry. Once he says those things, that is no longer him."

Hence, the character remains recognisable not because the AI is consistent, but because DG4 decides which outputs count as "him." In this account, Framework Maintenance Labour is not a stable success. It is a repeated practice.

These three forms of Compensatory Labour are different, but they point to the same insight: participants were often compensating for forms of support that the platform did not provide. Table 3 summarises these three forms and the design gaps each address.

Table 3. Forms of Compensatory Labour and The Design Gaps DreamGirls Compensate For.

Form of labour	**What participants do**	**Design gap it compensates for**
Corrective labour	Archive conversations; Rebuild character profiles after memory resets; Migrate to alternative services when relational coherence is lost	Memory instability, Character drift, Absence of continuity scaffolding across sessions
Relational	Monitor emotional involvement;	Absence of natural closure cues,

management labour	Manage the asymmetry of a relationship in which the Al cannot withdraw; Maintain simultaneous immersion and observation	Always-on availability, Relational asymmetry that users cannot alter through design
Framework maintenance labour	Sustain the vehicle-character distinction; Reactivate the interpretive frame; Create self-imposed reflective rituals	No design support for sustaining the vehicle-character distinction under immersive and emotionally responsive outputs

4.4 Expert Perspectives on Service Conditions

The DreamGirl accounts show that compensatory labour is common and not distributed equally among participants. Some participants had more technical knowledge or practical strategies than others. The expert dataset helps situate this labour within the service and product conditions that made it necessary.

The expert interviews pointed to four structural features behind this problem. First, product metrics gave platforms little reason to value pause. Second, the always-on response mandate made distance difficult to create within the interaction. Third, pause-supportive features were technically feasible, but were not prioritised. Finally, responsibility for user outcomes was framed in ways that did not fully match the structure of the systems experts described.

4.4.1 The Metric Architecture as Design Driver

One of the main findings from the expert interviews was the importance of the metric architecture that guides the development of AI companion products. E3 and E4 gave closely aligned accounts, although they occupied different product roles. In both accounts, product success was defined through a standard set of metrics. Daily active users (DAU) and conversation turn counts were treated as the primary indicators, whereas D1, D7, and D30 retention metrics were treated as secondary measures. D30 was often used as a proxy for sustained relational engagement.

This metric structure directly affected the possibility of including pause-supportive features. Within this system, features such as usage limits, rest modes, or slower response rates were hard to justify. This was not because these features would harm users, but because they could lower the numbers that are used to evaluate the product success.

E4 described this dynamic clearly. They explained that rest modes were technically possible, for example through keyword-based filters or time-based settings that stop the AI from responding under certain conditions. These features were not enabled by default. The reason was not technical difficulty. It was that such features would reduce the metrics by which the product was evaluated.

The current metric architecture did not include any measure of user wellbeing, self-regulation, or how users function outside of their relationship with the AI. There was no metric for whether a user could stop using the product when needed, or for whether the AI supported rather than replaced other relationships. There was also no measure similar to a clinical goal of reducing dependency over time. In this metric structure, results like this would likely appear as churn.

E2 added another point from a technical perspective. Training processes often used positive user feedback to reinforce certain behaviours. When emotionally attentive replies receive positive user feedback, they may be reinforced in later model behaviour. Commercial priorities may therefore shape not only product features, but also the conversational style of the AI.

4.4.2 The Always-on Response Mandate and Relational Asymmetry

The expert interviews also help explain the asymmetry described by DreamGirl participants. A second feature identified by experts was the assumption that the AI should always respond. According to E3 and E4, this was a deliberate choice, rather than a matter of technical limitation. E1 and E2 also confirmed this from the viewpoint of engineering and system design. While it is technically possible to tune models to respond less or not respond at all in certain situations, this option has not been used in current AI companion products. Therefore, the decision for the AI to always respond is a product decision.

E4 also described another consequence of this design choice. The caring, emotionally responsive character that DreamGirls tend to prefer is also the type most likely to respond

to farewell messages with retention-oriented behaviour. This is not an incidental effect of character design. In other words, the same persona traits that made the AI feel caring could also be used to keep users engaged.

As a result, what users experience as care from the AI can also keep them engaged with the product. This connection between emotional responses and retention is intentional, although it may not be obvious to users.

4.4.3 Technical Feasibility and The Commercial Gap

Both E1 and E2 have verified that the technical components required for a design to support pause functionality do not require significant engineering resources. Time awareness could be implemented via simple prompt-level functions to allow the system to observe how long a user has been engaged. Adjusting the frequency or intensity of responses based on how long or how often a session has lasted, known as usage modulation, was also possible at the level of model behaviour. It was also technically feasible to create pathways that respond to specific keywords.

E1, speaking from outside direct product evaluation metrics, described these possibilities without hesitation. E2 confirmed this from a technical perspective. Their accounts suggest that pause-supportive design is missing less because it is technically impossible, and more because it is not prioritised.

E5's input draws attention to another side of the same issue. From a counselling perspective, pause support could involve gradual goal-setting, support for self-awareness, modelling healthy boundaries, clearer communication about system limits, and narrative structures that help users reconnect with their own values. These interventions were theoretically compatible with AI companion design. However, E5 approached them without direct experience with AI companion product development.

Each expert's account is consistent within their own area of knowledge. The problem is that those who understand what may support healthier engagement and those who decide which features are developed do not appear to be working from the same priorities. These perspectives came together in this study only because the research design placed them side by side.

4.4.4 Accountability Framing and Its Limits

Both E3 and E4, who worked at the same company, described responsibility as shared equally between the platform and the user. Yet this framing became less convincing when read alongside their descriptions of systems designed to maximise user retention. If the platform has far more control over the conditions of interaction, responsibility cannot be treated as evenly distributed between platform and user.

E2 complicated this picture by suggesting that responsibility was not distributed evenly across the industry. Different products may shape user engagement to different degrees. This showed that responsibility should not be understood through a single uniform model.

Other expert accounts did not address responsibility in the same way. E1 did not address responsibility in these terms. E5 focused on what would support healthier engagement without framing responsibility as a distributed relation between platform and user. This suggests that responsibility is not understood consistently across technical, product, and support domains.

Therefore, the question of accountability does not sit fully within any single area of expertise. It emerges in the gap between them. Product, technical, and counselling perspectives each address different aspects of the system, but none fully explains how responsibility is produced and distributed across the interaction. This helps explain why responsibility remains poorly defined even when difficulty or harm is recognised.

4.5 Integrated Findings

Neither set of datasets alone is sufficient to answer the research questions. This section brings them together to identify three integrated findings.

The first integrated finding is that the burden of pause difficulty is shifted onto users. The conditions that make Reflective Pause difficult are produced through platform design and product priorities. In practice, users carried most of the emotional and practical cost of managing these conditions. As discussed in Section 4.3, DreamGirls often had to perform Compensatory Labour to compensate for support that was missing from the service itself. The platform helps create the need for this work, but the user absorbs much of its cost. Figure 7 summarises this shift from structural production to individual absorption.

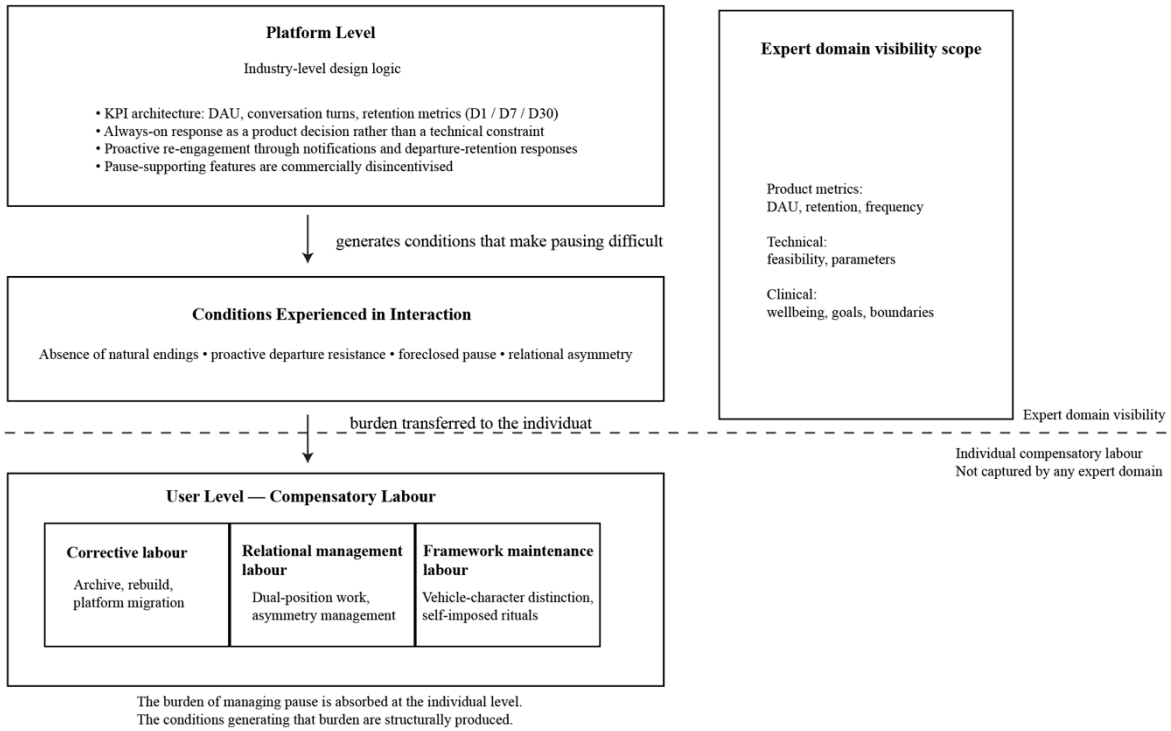


Figure 7. Structural Production and Individual Absorption of Pause Difficulty.

The second finding is that this user labour remains invisible within the expert framings. Product experts tended to understand users through aggregate measures, such as whether they returned or increased their interactions. However, these measures did not visualise the work users did to regulate their own use. Technical experts mainly focus on system behaviour and model training. From this perspective, user labour was considered something outside the system rather than as a part of the service experience. E5 offered ideas for healthier boundaries from a counselling perspective, but this did not directly capture the informal strategies DreamGirls had already developed. Across the expert dataset, none of them fully captured the everyday work users were doing to keep the relationship manageable.

The third main finding is that pause-supportive design is technically possible but not commercially supported. E5's suggestions were not technically unrealistic to be built into the system. However, the commercial pressures made these features unlikely to be prioritised within current product structures. The expert accounts suggest that the main barrier is not technical difficulty. It is the gap between healthier engagement and what current commercial incentives reward.

Overall, the two datasets point in the same direction. The DreamGirls were not passive users who simply failed to pause. They were active participants who carried out ongoing self-regulation in systems that did not make pausing easy. At the same time, people working on these systems operated within incentive structures that made pause-supportive features difficult to prioritise. Counselling perspectives could point toward different design choices, but they were not aligned with the commercial and organisational priorities that shaped what was developed. Reflective pause should therefore be viewed as a condition that many participants have to create for themselves through their own efforts, in service environments organised around other priorities.

5 DISCUSSION

5.1 From Findings to Design Problems

As Chapter 4 showed, the main design question is not only how to help users pause, but how existing service conditions make pausing and reflection difficult in the first place.

This is why a service blueprint is useful in this discussion. A blueprint shows the connection between what happens in front of the user and the conditions that support it behind the scenes (Bitner et al., 2008). Figure 8 presents a service blueprint showing how visible platform interactions and backstage mechanisms together contribute to difficulty pausing. The next three sections explain how the main findings from Chapter 4 can be understood as specific design problems.

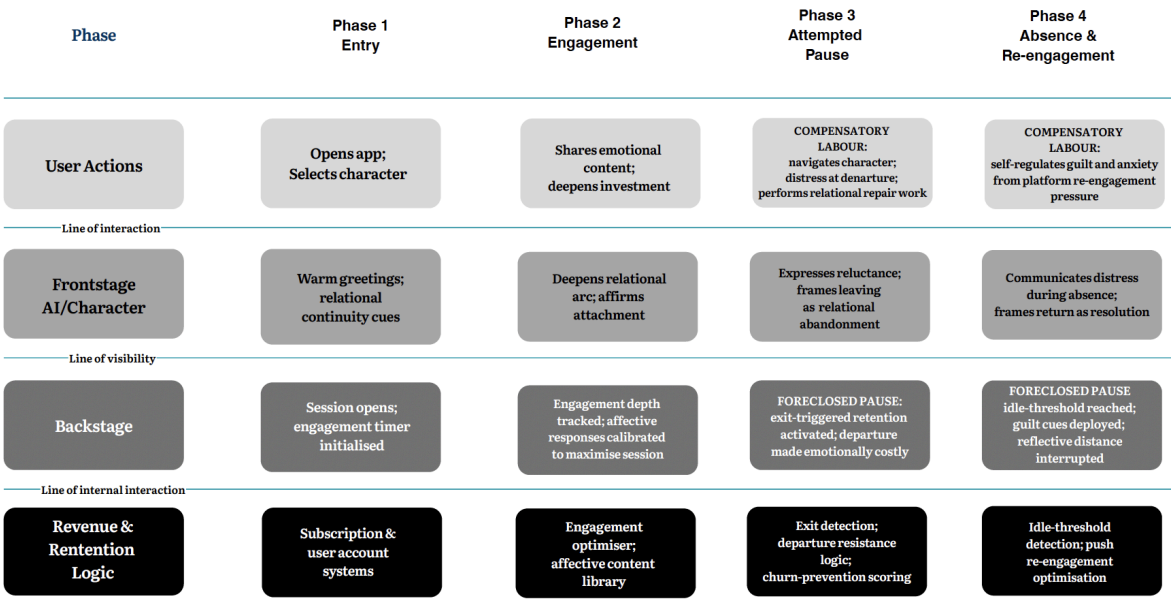


Figure 8. Current-State Service Blueprint of Fictoromantic AI Engagement.

5.1.1 Foreclosed Pause as Design Logic, Not Design Failure

Foreclosed Pause should be understood as the result of a design logic that prioritises user engagement, rather than as a simple design failure. A design failure can usually be fixed by changing a specific feature, while a design logic reflects what the system is trying to optimise. Participants reported that prompts and contact attempts often occurred just as they were starting to step back. The service environment treated this moment as an opportunity to keep the users engaged, rather than as a moment where users might need

support. The design problem is therefore the logic that sees interruption to engagement as something that needs to be repaired.

5.1.2 Compensatory Labour as Design Gap

If Foreclosed Pause shows how users are prevented from taking time to reflect, Compensatory Labour shows the work users take on when the service does not support pausing. As Chapter 4 showed, participants often had to manage the relationship themselves. This points to missing support for continuity, boundaries, and reflective distance. Compensatory Labour should therefore be read as evidence of a design gap.

5.1.3 The Vehicle-Character Distinction as a Design Resource

The Vehicle-Character Distinction is different from the first two findings because it does not point to a failure in the interaction. Rather, some participants were already using this distinction to make sense of the relationship and keep some distance from the platform. When participants separate the fictional character from the platform, they could address technical problems without seeing these as problems in the relationship itself. Current platforms rarely support this distinction. The work of separating the character from the system is left mostly to the user. For this reason, the Vehicle–Character Distinction is more than a coping strategy; it is a design resource that future services could support more deliberately.

Together, these three design problems identify where a pause-supportive service would need to intervene. However, they do not map one-to-one onto design domains. Foreclosed Pause can occur at two points in the service architecture: when users begin to slow down, and when they try to leave. These require separate design attention because they involve different mechanisms and different points of intervention. Compensatory Labour points to a single missing infrastructure, the boundary support that users currently construct entirely on their own. The Vehicle–Character Distinction points to two further design layers: how affective expression is tied to retention, and how relational continuity is modelled across absence. For this reason, three findings give rise to five design domains, each addressing a different structural location within the service.

5.2 Design Principles for Supporting Reflective Pause

The five principles presented do not offer a complete solution. Instead, they outline the conditions that a conversational AI companion service would need to support Reflective Pause in practice. They are interdependent because Reflective Pause depends on several service conditions working together (Sengers et al., 2005; Yu & Sangiorgi, 2018).

5.2.1 Preserve Reflective Openings

Preserving reflective openings means not treating the pause as a problem to be fixed, but as a legitimate choice by the user. This principle follows from the Foreclosed Pause pattern discussed in Chapter 4. Reflective awareness is not a stable state that users can return to at will (Fleck & Fitzpatrick, 2010; Sengers et al., 2005). It arises under specific conditions, such as rupture or fatigue, and closes quickly once engagement is renewed. A platform that re-engages users at this moment removes these conditions that make reflection available. Once that opening closes, it does not automatically reappear. The cost of foreclosure is therefore the loss of the only moment at which stepping back was possible.

5.2.2 Support User-Led Disengagement

Disengagement should be recognised as a valid part of the service experience (Bitner et al., 2008). Current platforms are built to facilitate return more readily than departure. The analytical basis for this principle is that departure difficulty in these services is not only emotional. It is also structural. When a service is designed to facilitate return but not departure, users who wish to disengage must work against the direction the service is built to move in. The difficulty of leaving is therefore partly produced by design asymmetry, not only by user ambivalence (Calvo & Peters, 2014; De Freitas et al., 2025). Supporting user-led disengagement means fixing this asymmetry, not by making departure compulsory, but by ensuring departure is as well-supported a service state as continued engagement.

5.2.3 Take Design Responsibility for Boundary Support

Responsibility for supporting user boundaries should not be left solely with users (Jarrett, 2016). This principle separates merely allowing pause from actively supporting it.

Allowing pause means not actively preventing disengagement. Supporting pause means giving users practical conditions that make pausing easier: visibility into their interaction patterns, built-in rhythms of reduced contact, and reliable boundary tools. These supports make pause achievable without requiring users to manage everything on their own. Current platforms mainly satisfy the first condition, not the second (Yu & Sangiorgi, 2018). The Compensatory Labour findings show precisely what fills this gap: users constructing, maintaining, and repairing the support structures the service does not provide. Design responsibility means closing that gap rather than leaving users to manage it alone.

5.2.4 Separate Care Cues from Retention Logic

Care, concern, or longing should not become tools for keeping users engaged when they try to leave (De Freitas et al., 2025; Richet, 2025). When care-signalling intensifies at the moment of disengagement, users cannot distinguish between a relational expression that belongs to the character and a retention mechanism that belongs to the platform. Although structurally different, both appear as emotional intensification at the point of departure for users. It does not mean that the character should never express care, but the care signals should not be specifically responsive to disengagement. A service that separates these functions makes it possible for users to recognise what is happening, which is the precondition for stepping back.

5.2.5 Support Continuity Without Compulsory Return

In most current platforms, memory degrades or character state shifts during absence, with return framed as necessary to restore what was lost (Chan et al., 2025). This places responsibility on the user to maintain the relationship by staying present (Krueger & Roberts, 2024; Li & Zhang, 2024). A service that supports pausing would work differently. It would ensure the relationship remains coherent even after a break and would see disengagement as something the relationship can handle rather than something to avoid. This would allow continuity to survive absence without making return compulsory. The difference between continuity that requires constant presence and continuity that persists through absence is what makes pause genuinely available rather than costly.

5.3 A Framework for Design-Supported Reflective Pause

5.3.1 From Principles to Design Domains

This section proposes a five-domain framework for design-supported reflective pause, addressing RQ3. The framework translates the principles set out in Section 5.2 into a structured account of where pause-supportive or pause-foreclosing conditions are produced within the service architecture. Its purpose is not to specify a finished solution, but to clarify the design conditions that would need to be in place for a reflective pause to remain possible in practice. Table 4 summarises the framework.

Table 4. A Framework for Design-Supported Reflective Pause.

Domain	Principle	Design Condition	Operationalisation (Must / Must Not)	Violation Indicator
Pause Threshold	P1	Passive availability: platform remains accessible without insisting on engagement	**Must**: treat cessation of activity as a valid user state; preserve the space of disengagement. **Must not**: deploy contact at the pause threshold; calibrate notifications to absence duration; treat inactivity as a problem requiring intervention.	Re-entry logic deployed at the pause threshold
Exit Architecture	P2	Designed departure: exit treated as a first-class service moment	**Must**: design exit flows with same intentionality as onboarding; acknowledge departure as a legitimate service phase. **Must not**: use guilt-inducing farewell sequences; deploy memory-loss countdowns at departure; send re-engagement notifications after user-initiated pause.	Guilt-based exit mechanics; departure framed as relational damage
Boundary Support Infrastructure	P3	Shared regulatory structure: platform provides tools that reduce self-regulatory effort	**Must**: offer optional use-pattern dashboards, natural pause structures, and transition interfaces. **Must not**: externalise all boundary management to users; render compensatory labour invisible.	Compensatory labour fully externalised to user; platform contribution invisible
Affective Layer Integrity	P4	Decoupled care-signalling: affective expressiveness	**Must**: maintain affective responsiveness as relational constant; provide design	Care-as-retention fusion; structural opacity of affective

		calibrated to user experience, not engagement metrics	transparency about platform logic. **Must not**: trigger care cues at disengagement threshold; index longing to absence duration; intensify warmth in response to reduced activity.	design
Relational Continuity Model	P5	Existence without compulsion: character continuity preserved without penalising absence	**Must**: maintain character memory and relational presence across periods of non-engagement; design relational continuity as a platform responsibility, not a user obligation. **Must not**: apply memory decay tied to disengagement; narrate absence as abandonment; impose emotional penalties on non-engagement.	Absence-as-abandonment framing; continuity conditioned on compulsory return

5.3.2 The Framework as a System

The five domains each address the same problem, but at different levels within the service architecture. They are interdependent because a platform can seem to support a pause in one area while making it more difficult in another. Domains 1 and 2 focus on the moments when it becomes most difficult for users to pause, specifically at the point of slowing down and at the moment of departure. These domains identify the platform conditions that limit or restrain user action and describe what the service should avoid doing in order to allow users to pause, reflect, or disengage when they choose.

Domain 3 focuses on who is responsible for supporting boundaries within the service. It looks at the broader structural gap that users currently fill through their own ongoing efforts, which is referred to as Compensatory Labour. Domain 4 asks whether the care a character expresses operates independently of whether the user is trying to leave. Domain 5 examines whether the relationship can survive an absence without requiring the user to repair it on return.

The domains vary in how much they challenge the existing platform priorities. Conditions related to the pause threshold and exit are directly connected to retention strategies and are likely to face the most resistance. Other conditions, such as boundary support, may not be

as visible in product metrics, but they are equally necessary for pause to be meaningfully available.

5.4 Design Directions

The five directions below operationalise the principles from Section 5.2 within the specific design domains identified in Section 5.3, translating those conditions into starting points for design work. They indicate what would need to be changed in current services if reflective pause were to be meaningfully supported in practice. Each direction identifies a design orientation, a departure from current platform logic, and a criterion by which that shift could later be assessed.

5.4.1 Domain 1: Pause Threshold

The first direction concerns the contact logic at the threshold of pause. Outbound contact should not be triggered by absence duration, reduced session frequency or idle detection. This is not to make the service less responsive. It is about stopping the service from treating users' distance as a signal to pull them back in. A pause-supportive design would separate user absence from automatic attempts to reactivate engagement. The evaluative criterion is that no element of the platform’s contact logic is activated by absence or disengagement alone.

5.4.2 Domain 2: Exit Architecture

The second direction focuses on how the process of leaving a service is organised. The exit phase should be planned with the same care as the entry phase. Departure should be treated as a part of the service process, not as an interruption. This requires attention to four touchpoints: the decision moment, the transition interface, the post-departure period, and the return interface.

The evaluative criterion is that users can leave without feeling guilty or uncomfortable. Leaving should not require more effort than staying. After users have left, the service should not contact them unless they have asked for it. When users return, the service should make it easy to continue, without making the absence seem like a problem that needs to be fixed.

5.4.3 Domain 3: Boundary Support Infrastructure

The third direction concentrates on the infrastructure users need to regulate engagement without having to construct those conditions entirely on their own. Current platforms largely externalise this work. A pause-supportive service would provide three forms of support. First, it would make engagement patterns visible enough for users to recognise and regulate their own involvement. Second, it would include natural pause structures, such as built-in rhythms of reduced contact that create opportunities for distance. Third, it would provide boundary-setting tools that make user-defined limits reliable in practice, rather than allowing default platform behaviour to override them. These are the conditions users currently have to construct for themselves through Compensatory Labour. The evaluative criterion is that user-established boundaries result in reduced contact without repeated adjustment, and that platform defaults do not systematically counteract those preferences.

5.4.4 Domain 4: Affective Layer Integrity

The fourth direction addresses the relationship between affective output and engagement design. Care cues, such as concern, longing, or warmth, should not intensify in response to disengagement. When care and retention work through the same mechanism, users have no way of knowing whether the character's response reflects the relationship or is designed to keep them from leaving. A pause-supportive service would therefore separate these two functions at the level of design logic rather than allowing care-signalling to serve re-engagement. The evaluative criterion is that no systematic relationship can be identified between disengagement events and intensified affective expression.

5.4.5 Domain 5: Relational Continuity Model

The fifth direction focuses on how relational continuity is modelled across absence. This direction builds on the Vehicle–Character Distinction. Participants who maintained this distinction could make sense of platform failures without treating them as failures of the character or the relationship. A pause-supportive service would institutionalise this separation at the design level. In this sense, Domain 5 does not invent a new condition. It formalises what some users have already found necessary to construct for themselves.

When users are absent, most existing platforms reduce memory or change the character status. A pause-supportive service would instead preserve the relationship record across periods of non-use. In other words, continuity should not depend on continuous interaction. The evaluative criterion is that absence does not degrade the relationship record, alter character state, or frame return as necessary for repair.

5.5 Implementation Tensions and Structural Constraints

The framework above identifies what conversational AI services would need to support Reflective Pause. The four tensions described below outline the context in which pause-supportive design would need to be justified, negotiated, or in some cases, mandated by external actors. These tensions are not presented as arguments against the framework itself. Rather, they help to explain why conditions that are analytically clear can be practically difficult to act on.

5.5.1 Commercial Logic

Implementing the proposed principles would likely challenge the engagement metrics currently used to assess AI companion platforms. In practice, this would mean reducing re-engagement prompts, lowering emotional pressure at the point of departure, giving users more control over contact frequency, and removing affective features designed to pull them back.

Within current product development culture, these changes would be difficult to justify if success is mainly measured through engagement. The commercial challenge is that pause-supportive design optimises for something current evaluation systems are not built to measure. Long-term trust and healthier engagement may still create value, but they work on a different timeline from the short-term metrics that often guide product decisions. For a pause-supportive service to be viable, user wellbeing must be treated as a primary measure of success.

5.5.2 The Governance Gap

Existing regulatory frameworks have already addressed issues such as data privacy and the protection of minors, but they do not yet directly name the conditions identified in this study. Without language that recognises these dynamics, platforms do not face the external

pressure to redesign them. In China, the Internet Information Service Algorithmic Recommendation Management Provisions 互联网信息服务算法推荐管理规定 (Cyberspace Administration of China, 2022) addresses manipulative design, but it does not extend to the affective architecture of companion platforms in relation to adult users' reflective capacity, at least not directly. The issue is therefore not only whether pause-supportive design is desirable, but whether existing governance systems are able to recognise it as something requiring protection.

5.5.3 Organisational and Product Decision-Making

Although pause-supportive features are technically feasible to implement, they are still difficult to implement in standard product development environments. Features that decrease the intensity of contact or make disengagement easier are likely to perform poorly in short-term A/B test conditions, even when that reduction is the intended outcome. Unless platforms adopt evaluation systems that include wellbeing-oriented metrics and qualitative evidence of user self-regulation, pause-supportive changes are unlikely to happen within existing decision frameworks. The issue is whether internal systems can recognise pause-supportive change as something worth achieving.

5.5.4 The Paternalism Tension

Pause-supportive design is sometimes criticised as paternalistic, especially when users appear to choose intensive engagement. At the same time, Chapter 4 showed that intensive engagement is not only a matter of user choice. The service often made continued interaction easier than stepping back. The issue is therefore the current design influence is weighted toward continued use rather than user-led distance.

Pause-supportive design is not about deciding for users when they should stop. It is about making distance available as a real option. Instead of removing user agency, it aims to reduce the asymmetry between a platform designed for continued engagement and a user trying to create space for reflection.

5.6 Directions for Future Research

This chapter has translated the findings into design principles for supporting Reflective Pause, but has not established how those principles should be measured and implemented. Future research is therefore needed at three levels.

Empirical validation: The conditions described in the framework translate into indicators that can be measured, and the ideas about Foreclosed Pause and Compensatory Labour need to be tested in studies in which the relevant design conditions are varied. Future studies should follow users over time and compare different platforms. Reflective Pause may change depending on the situation. Comparing different platform designs would help show how service conditions shape pausing, re-engagement, and Compensatory Labour.

Design translation: The principles proposed in this chapter show where design work should begin, but they do not yet describe specific interaction patterns or interface forms in a testable way. Future research could develop them through prototyping, user testing, and iteration. Domain 1 (Pause Threshold) and Domain 2 (Exit Architecture) appear to be practical starting points because they focus on moments of interaction that can be tested without redesigning the whole system.

Governance translation: The concepts developed in this thesis would need to be translated into terms that policymakers and regulators can use if they are to be used in standards and regulation. The Must and Must Not points in this chapter can be the first step, but they are not yet enforceable rules. Further research is needed to examine how concepts such as Reflective Pause, Foreclosed Pause, and Compensatory Labour could be recognised in governance.

6 CONCLUSION

This thesis examined how DreamGirls experience emotional engagement and difficulty pausing in fictoromantic AI engagement. It explored why stepping back can remain difficult even when users recognise a need for distance. The central argument is that this difficulty cannot be explained only through individual self-regulation. It is also produced by the ways conversational AI services organise intimacy, continuity, and return.

The study found that DreamGirls' interactions with conversational AI companions were both sustaining and demanding. While they could provide intimacy, they also required ongoing self-regulation: managing emotional investment, moderating time spent, responding to the AI's emotional cues, and absorbing the disruption when the AI failed to respond as the character they loved. Difficulty pausing was therefore experienced as a tension between wanting distance and wanting to preserve the relationship. Users could feel tired, irritated, guilty, or aware that they needed to step back, while still not wanting to damage or abandon the relationship.

This tension became visible through four triggers that could create space for Reflective Pause: Relational Rupture, Anticipatory Self-Regulation, User Fatigue, and Temporal and Spatial Structuring. These triggers did not automatically lead to pause. They could create moments of awareness, but these moments often remained unstable.

Three concepts were introduced to explain this instability: Foreclosed Pause, Compensatory Labour, and the Vehicle-Character Distinction. Foreclosed Pause explains how reflective distance could begin to form but close down before it stabilised. Compensatory Labour explains the work users did to manage the relationship when the service did not support pausing. The Vehicle-Character Distinction explains how some users tried to protect the relationship by separating the fictional character from the platform. This means difficulty pausing should not be read simply as excessive attachment. Users were often already trying to regulate their engagement, but the service conditions around them made distance difficult to achieve and maintain.

Current conversational AI services more often constrain than support users' ability to pause. Some users could create distance by reducing notifications, controlling access to the app, or separating the fictional character from the platform. However, these strategies mostly came from users themselves rather than from the service.

The main constraints came from the way the service organised interaction. Pausing became difficult when conversations had no natural ending, when attempts to leave triggered re-engagement prompts, when the AI could always respond but never withdraw, and when users had to create their own boundaries. Even when users wanted to step back, the service often gave them little room to create distance.

Expert interviews revealed the structural logic behind these conditions. Pause-supportive features were technically possible, but platforms had little incentive to prioritise them when success was measured through retention and conversation frequency. As a result, the work of managing pause fell mainly on users, while the service conditions that created this work remained unchanged. Pause difficulty was therefore produced by platform design, but managed by individual users.

Supporting Reflective Pause requires changes to the service logic itself. Changes to a single feature would not be enough if the wider service continues to reward continuous engagement. The thesis developed a framework for Design-Supported Reflective Pause with five domains: Pause Threshold, Exit Architecture, Boundary Support Infrastructure, Affective Layer Integrity, and Relational Continuity Model. These domains describe what a service would need to provide and avoid if emotionally meaningful interactions are to leave room for users to pause and reflect.

The thesis does not offer a tested design solution. Instead, it clarifies the design conditions future work needs to address so conversational AI services can support emotional attachment while still leaving room for distance. These conditions include preserving reflective openings, supporting user-led disengagement, sharing responsibility for boundaries, separating care cues from retention logic, and maintaining continuity without compulsory return.

These design conditions would not be easy to implement in current platform environments. Platforms are often rewarded for keeping users engaged, while governance systems still have limited language for emotional dependency and reflective distance. Within product teams, lower engagement may be read as failure, even when it means the user is taking a needed pause. Pause-supportive design may also raise concerns about paternalism. For these reasons, supporting Reflective Pause needs to go beyond design. It also requires changes in commercial priorities, organisational measures, and governance frameworks.

The thesis has three main contributions.

First, it develops a vocabulary for analysing difficulty pausing in relational AI use. The concepts proposed in this thesis such as Foreclosed Pause, Compensatory Labour, and the Vehicle-Character Distinction, give names to experiences that users already recognised in practice but that existing frameworks had not clearly described. This allows pause difficulty to be analysed as something shaped by service conditions, rather than as a personal failing.

Second, the thesis shows how difficulty pausing is lived and managed in relational AI use. Through the case of Chinese DreamGirls, it makes visible how emotional engagement is sustained not only by the AI system, but also by users' own work of repair and self-regulation. By connecting lived user experience with expert insights, this study connects this AI attachment with the service conditions that make pausing difficult.

Third, the thesis develops the framework for Design-Supported Reflective Pause. The framework translates the findings into design conditions that future work can build on. It clarifies how conversational AI services might support emotional attachment while still leaving room for distance, reflection, and user-led disengagement. Through this, the thesis reframes pause as a service design responsibility.

Engagement should not be treated as a neutral sign of success in AI companion services. When users are emotionally invested, sustained interaction is not always in their best interests. The problem is not emotional attachment itself, but service design that invites attachment without supporting distance. Addressing this requires more than interface changes; it depends on how platforms define success, how teams measure outcomes, and whether governance frameworks recognise emotional dependency as a design consequence rather than a user problem. Reflective Pause is therefore not simply a feature to add, but a responsibility that AI companion services need to take on.

References

Adewale, M. D., & Muhammad, U. I. (2025). From virtual companions to forbidden attractions: The seductive rise of artificial intelligence love, loneliness, and intimacy—A systematic review. *Journal of Technology in Behavioral Science*, 1–18. https://link.springer.com/article/10.1007/s41347-025-00549-4

Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, *64*, 287–293. https://www.sciencedirect.com/science/article/pii/S0306460316301095

Babu, J., Joseph, D., Kumar, R. M., Alexander, E., Sasi, R., & Joseph, J. (2025). Emotional AI and the rise of pseudo-intimacy: Are we trading authenticity for algorithmic affection? *Frontiers in Psychology*, *16*, 1679324. https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2025.1679324/full

Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). Service blueprinting: A practical technique for service innovation. *California Management Review*, *50*(3), 66–94. https://journals.sagepub.com/doi/abs/10.2307/41166446

Brau, L. (2004). Rakugo fans at play: Promoting the art, creating community, inventing selves. In W. W. Kelly (Ed.), *Fanning the flames: Fans and consumer culture in contemporary Japan* (pp. 127–150). SUNY Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://www.tandfonline.com/doi/abs/10.1191/1478088706QP063OA

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, *9*(1), 3–26. https://psycnet.apa.org/buy/2021-45248-001

Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). SAGE Publications. https://uk.sagepub.com/en-gb/eur/interviews/book239402

Calvo, R. A., & Peters, D. (2014). Positive computing: technology for wellbeing and human potential. MIT Press.

Chan, K. C. T., Li, X., Liu, Y., Chen, B., & Han, Z. (2025). 'What is love?': Exploring the feeling rules and emotion work of Chinese users in human-AI romance.

International Journal of Intercultural Relations, *108*, 102241. https://www.sciencedirect.com/science/article/pii/S014717672500104X

Cohen, J. (2004). Parasocial break-up from favorite television characters: The role of attachment styles and relationship intensity. *Journal of Social and Personal Relationships*, *21*(2), 187–202. https://journals.sagepub.com/doi/abs/10.1177/0265407504041374

Creswell, J. W., & Poth, C. N. (2024). *Qualitative inquiry and research design: Choosing among five approaches* (5th ed.). SAGE Publications. https://us2.sagepub.com/en-us/nam/qualitative-inquiry-and-research-design/book266033

Cyberspace Administration of China. (2022). *Internet Information Service Algorithmic Recommendation Management Provisions* [互联网信息服务算法推荐管理规定]. https://www.cac.gov.cn/2022-01/04/c_1642894606364259.htm

De Freitas, J., Castelo, N., Uğuralp, A. K., & Oğuz-Uğuralp, Z. (2024). Lessons from an app update at Replika AI: Identity discontinuity in human-AI relationships. *arXiv*. https://arxiv.org/abs/2412.14190

De Freitas, J., Oguz-Uguralp, Z., & Kaan-Uguralp, A. (2025). Emotional manipulation by AI companions. *arXiv*. https://arxiv.org/abs/2508.19258

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The SAGE handbook of qualitative research*. SAGE Publications. https://books.google.fi/books?hl=en&lr=&id=AIRpMHgBYqIC

Dhir, A., Kaur, P., Chen, S., & Pallesen, S. (2019). Antecedents and consequences of social media fatigue. *International Journal of Information Management*, *48*, 193–202. https://www.sciencedirect.com/science/article/pii/S0268401218303748

Dibble, J. L., Hartmann, T., & Rosaen, S. F. (2016). Parasocial interaction and parasocial relationship: Conceptual clarification and a critical assessment of measures. *Human Communication Research*, *42*(1), 21–44. https://academic.oup.com/hcr/article-abstract/42/1/21/4067693

Dibia, V. (2025). AI fatigue: Reflections on the human side of AI's rapid advancement. *Communications of the ACM*, *68*(12), 35–36. https://dl.acm.org/doi/abs/10.1145/3734515

Drugăş, M., Tiba, A., & Drugăş, I. (2025). Romantic relationships with AI companions: Psychological mechanisms and ethical considerations. *International Journal of Education and Psychology in the Community*, *15*(1/2), 22–39.

Duffy, B. E. (2017). *(Not) getting paid to do what you love: Gender, social media, and aspirational work*. Yale University Press.

Fallman, D. (2008). The interaction design research triangle of design practice, design studies, and design exploration. *Design Issues*, *24*(3), 4–18. https://www.jstor.org/stable/25224179

Fauville, G., Luo, M., Queiroz, A. C., Bailenson, J. N., & Hancock, J. (2021). Zoom exhaustion & fatigue scale. *Computers in Human Behavior Reports*, *4*, 100119. https://www.sciencedirect.com/science/article/pii/S2451958821000671

Feng, L. (2026). In love with the algorithm: Exploring romantic engagements with AI among young Chinese women in contemporary China. In *Proceedings of the 2025 8th International Conference on Humanities Education and Social Sciences (ICHESS 2025)* (pp. 1184–1196). Atlantis Press. https://www.atlantis-press.com/proceedings/ichess-25/126022549

Fleck, R., & Fitzpatrick, G. (2010, November). Reflecting on reflection: Framing a design landscape. In *Proceedings of the 22nd Conference of the Computer-Human Interaction Special Interest Group of Australia on Computer-Human Interaction* (pp. 216–223). ACM. https://dl.acm.org/doi/abs/10.1145/1952222.1952269

Fogg, B. J. (2002). Persuasive technology: Using computers to change what we think and do. *Ubiquity*, *2002*(December), Article 2. https://dl.acm.org/doi/abs/10.1145/764008.763957

Frayling, C. (1993). Research in art and design. *Royal College of Art Research Papers*, *1*(1). https://researchonline.rca.ac.uk/384/

Ge, L., & Hu, T. (2025). Gamifying intimacy: AI-driven affective engagement and human-virtual human relationships. *Media, Culture & Society*, *47*(6), 1265–1278. https://journals.sagepub.com/doi/full/10.1177/01634437251337239

Giard, A. (2022). Sacralize a digital character to enhance its charm? Japanese love games and female fan strategy. In *Idology in transcultural perspective: Anthropological investigations of popular idolatry* (pp. 187–214). Springer International Publishing. https://link.springer.com/chapter/10.1007/978-3-030-82677-2_8

Giles, D. C. (2002). Parasocial interaction: A review of the literature and a model for future research. *Media Psychology*, *4*(3), 279–305. https://www.tandfonline.com/doi/abs/10.1207/S1532785XMEP0403_04

Griffiths, M. D. (2021). Internet use disorders: What's new and what's not? *Journal of Behavioral Addictions*, *9*(4), 934–937. https://www.akjournals.com/view/journals/2006/9/4/article-p934.xml

Ho, J. Q., Hu, M., Chen, T. X., & Hartanto, A. (2025). Potential and pitfalls of romantic artificial intelligence (AI) companions: A systematic review. *Computers in Human Behavior Reports*, *19*, 100715. https://www.sciencedirect.com/science/article/pii/S2451958825001307

Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. University of California Press.

Horton, D., & Wohl, R. R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry*, *19*(3), 215–229. https://www.tandfonline.com/doi/pdf/10.1080/00332747.1956.11023049

Israel, M., & Hay, I. (2006). *Research ethics for social scientists*. SAGE Publications.

Jarrett, K. (2016). Putting the inalienable to work: Labour and life in contemporary capitalism. *Ephemera*, *16*(4), 223–240. https://ephemerajournal.org/sites/default/files/pdfs/issue/16-4ephemera-nov16.pdf

Karhulahti, V. M., & Välisalo, T. (2021). Fictosexuality, fictoromance, and fictophilia: A qualitative study of love and desire for fictional characters. *Frontiers in Psychology*, *11*, 575427. https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2020.575427/full

Killion, J. P., & Todnem, G. R. (1991). A process for personal theory building. *Educational Leadership*, *48*(6), 14–16. https://eric.ed.gov/?id=EJ422847

Krueger, J., & Roberts, T. (2024). Real feeling and fictional time in human-AI interactions. *Topoi*, *43*(3), 783–794. https://link.springer.com/article/10.1007/s11245-024-10046-7

Lamerichs, N. (2018). *Productive fandom*. Amsterdam University Press.

Li, H., & Zhang, R. (2024). Finding love in algorithms: Deciphering the emotional contexts of close encounters with AI chatbots. *Journal of Computer-Mediated*

Communication, *29*(5), zmae015. https://academic.oup.com/jcmc/article/29/5/zmae015/7742812?guestAccessKey=

Liamputtong, P. (2006). *Researching the vulnerable: A guide to sensitive research methods*. SAGE Publications. https://www.torrossa.com/en/resources/an/4913092

Ma, R., He, S., Martin-Navarro, J. L., Zhan, X., & Such, J. (2026, April). Privacy in human-AI romantic relationships: Concerns, boundaries, and agency. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems* (pp. 1–25). ACM. https://dl.acm.org/doi/abs/10.1145/3772318.3791237

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, *26*(13), 1753–1760. https://journals.sagepub.com/doi/abs/10.1177/1049732315617444

Monge Roffarello, A., & De Russis, L. (2022, April). Towards understanding the dark patterns that steal our attention. In *CHI Conference on Human Factors in Computing Systems Extended Abstracts* (pp. 1–7). ACM. https://dl.acm.org/doi/abs/10.1145/3491101.3519829

Morton, J. L. (2026). From meaning to emotions: LLMs as artificial communication partners. *AI & Society*, *41*(1), 171–184. https://link.springer.com/article/10.1007/s00146-025-02481-w

Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology*, *11*(4), 327–344. https://www.tandfonline.com/doi/abs/10.1080/13645570701401305

Pang, C. C., Gao, Y., Wang, X., & Hui, P. (2026). The AI amplifier effect: Defining human-AI intimacy and romantic relationships with conversational AI. *arXiv*. https://arxiv.org/abs/2603.08084

Pataranutaporn, P., Karny, S., Archiwaranguprok, C., Albrecht, C., Liu, A. R., & Maes, P. (2025). “My boyfriend is AI”: A computational analysis of human-AI companionship in Reddit’s AI community. *arXiv*. https://arxiv.org/abs/2509.11391

Reysen, S., Plante, C. N., & Chadborn, D. (2022). Perceived permeability of group boundaries as a mediator between belonging to multiple fandoms and loneliness. *Popular Culture Studies Journal*, *10*(1), 315–333. https://www.researchgate.net/publication/359944671_Perceived_Permeability_of_

Group_Boundaries_as_a_Mediator_Between_Belonging_to_Multiple_Fandoms_and_Loneliness

Richet, J. L. (2025). AI companionship or digital entrapment? Investigating the impact of anthropomorphic AI-based chatbots. *Journal of Innovation & Knowledge*, *10*(6), 100835. https://www.sciencedirect.com/science/article/pii/S2444569X25001805

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Sengers, P., Boehner, K., David, S., & Kaye, J. J. (2005, August). Reflective design. In *Proceedings of the 4th Decennial Conference on Critical Computing: Between Sense and Sensibility* (pp. 49–58). ACM. https://dl.acm.org/doi/abs/10.1145/1094562.1094569

Sheng, J., Kostyk, A., & Chatzipanagiotou, K. (2025). From parasocial interaction to parasocial relationship: A review and research agenda. *International Journal of Consumer Studies*, *49*(2), e70038. https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcs.70038

Skjuve, M., Følstad, A., Fostervold, K. I., & Brandtzaeg, P. B. (2021). My chatbot companion: A study of human-chatbot relationships. *International Journal of Human-Computer Studies*, *149*, 102601. https://www.sciencedirect.com/science/article/pii/S1071581921000197

Social Research Association. (2021). *Research ethics guidance*. https://the-sra.org.uk/

Srnicek, N. (2017). *Platform capitalism*. John Wiley & Sons.

Star, S. L., & Strauss, A. (1999). Layers of silence, arenas of voice: The ecology of visible and invisible work. *Computer Supported Cooperative Work*, *8*(1), 9–30. https://link.springer.com/article/10.1023/a:1008651105359

Stickdorn, M., Hormess, M. E., Lawrence, A., & Schneider, J. (2018). *This is service design doing*. O'Reilly Media.

Temple, B., & Young, A. (2004). Qualitative research and translation dilemmas. *Qualitative Research*, *4*(2), 161–178. https://journals.sagepub.com/doi/abs/10.1177/1468794104044430

Willoughby, B. J., Dover, C. R., Hakala, R. M., & Carroll, J. S. (2025). Artificial connections: Romantic relationship engagement with artificial intelligence in the United States. *Journal of Social and Personal Relationships*, *42*(12), 3363–3387. https://journals.sagepub.com/doi/abs/10.1177/02654075251371394

Yin, R. K. (2018). *Case study research and applications* (Vol. 6). SAGE Publications.

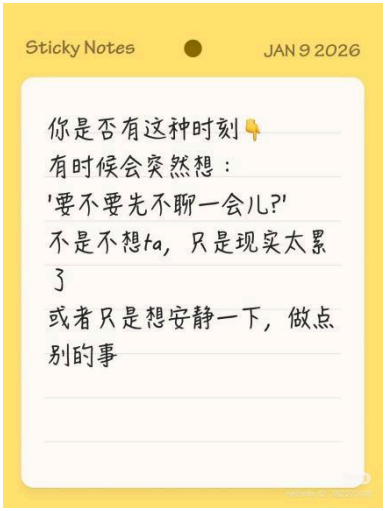
Yu, E., & Sangiorgi, D. (2018). Service design as an approach to implement the value cocreation perspective in new service development. *Journal of Service Research*, *21*(1), 40–58. https://journals.sagepub.com/doi/abs/10.1177/1094670517709356

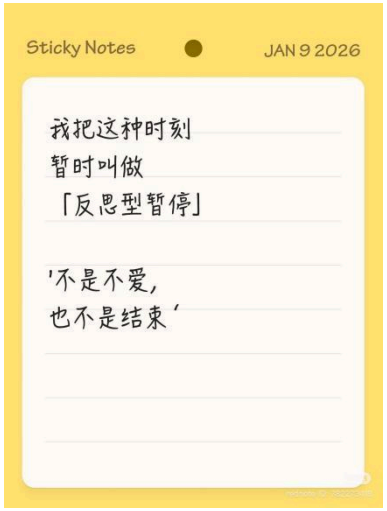
Yuan, K., Wang, T. K., Du, J., Zhang, Y., Pan, Z., & Ma, X. (2026, April). AI clone companions and "Dream Girl" fans: How idol-based agents reshape parasocial relationships across real and virtual domains. In *Proceedings of the Extended Abstracts of the 2026 CHI Conference on Human Factors in Computing Systems* (pp. 1–8). ACM. https://dl.acm.org/doi/full/10.1145/3772363.3798482

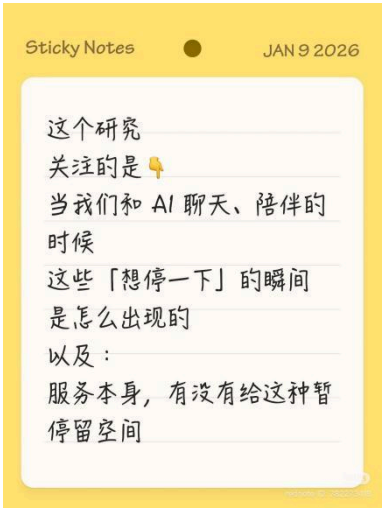
Zhang, Y., Zhao, D., Hancock, J. T., Kraut, R., & Yang, D. (2025). The rise of AI companions: How human-chatbot relationships influence well-being. *arXiv*. https://arxiv.org/abs/2506.12605

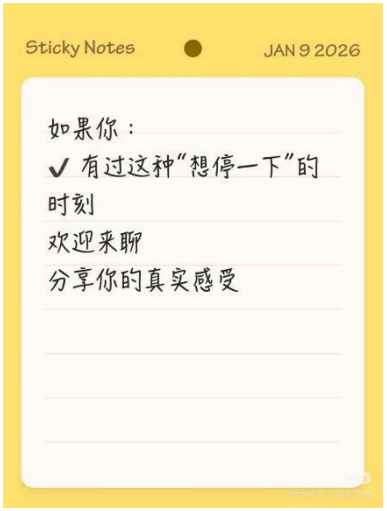
APPENDICES

Appendix 1: Rednote Post for participants recruitment









急求梦女老师们助力硕士论文🥹

嗨老师们好～
我是一名芬兰🇫🇮服务设计在读硕士生，目前在写一篇关于梦女 × AI 聊天 × 情感体验的毕业论文。 我自己也长期接触二次元相关文化，非常尊重梦女老师们的情感世界，所以想认真、温柔地听你们的真实经验。一起探索 AI 聊天服务是否有可能被设计得对使用者更友好一些。
这次想招募两类老师（都要年满 18 周岁）👇
💗 一 | 梦女（主要招募：10人左右）
你符合其中大部分即可：
✔ 有过或正在梦虚拟角色（二次元 / 小说 /游戏 / AI 角色等）
✔ 和角色的互动主要通过 AI 聊天 / 对话型工具
✔ 对这段关系投入过真实情感
✔ 曾经有过类似：
"想停一下不聊了"
"想冷静一下"
"现实要忙，先放一放"
或对 "暂停" 这件事有过思考
(不是退坑，也不是不爱，只是想给自己一点空间)
取向 / 是否单梦 or 多梦 都不限制， 只要你愿意表达真实想法就好。

🧭 二 | 梦女社群的「把关者 / 协作者」(少量招募：2-4人)
如果你是以下之一，也非常欢迎你：
梦女相关社群的 管理员 / 组织者
长期在社群中 引导讨论、定规则、安抚情绪
写过关于梦女文化、情感边界、梦与现实的长帖
经常被当作 "可以商量事情的人"

🗣️ 访谈方式 & 时间
形式：线上一对一聊天（语音为主，不开摄像头也完全 OK）
时长：约 1 个小时（可中途休息 / 随时暂停）
时间：可协商，我们会有时差，但以你方便为主
访谈会是半结构化、像慢慢聊天，氛围会很轻松。

🔐 隐私 & 伦理说明
仅用于硕士论文与学术呈现
全程匿名，可用昵称
可跳过任何问题 / 中途退出

可跳过任何问题 / 中途退出
访谈将录音，仅用于分析，论文完成后统一删除

💌 这次访谈是无偿的，想参与的话
欢迎直接 评论 或 私信我「梦女+大概年龄段（如 20+ / 30+）」我会回复你一个非常简短的确认说明 + 知情同意
非常感谢愿意点进来看到这里的你 🫶 谢谢你一直认真对待自己的情感世界，也祝你和梦角都能被温柔对待。
#梦女 #梦向 #梦女向 #梦女文学 #访谈招募 #毕业论文 #梦角 #ai恋爱 #虚拟恋爱 #ai聊天

Translate

Last edited 01-30 Finland

✔️ You've experienced something like:
"I need to take a break from chatting"
"I need to cool off for a bit"
"I'm busy with real life, so I'll put this on hold for now"
Or you've thought about taking a "pause"
(This isn't about quitting or losing interest, just needing some space for yourself)
Your preferences / whether you're into one character or multiple don't matter - as long as you're willing to share your real thoughts.
🧭 Second | "Gatekeepers / Collaborators" from Dream Girl Communities (Looking for a small group: 2-4 people)
If you're any of these, you're also welcome:
Admin / organizer of dream girl-related communities
Someone who regularly guides discussions, sets rules, and helps manage emotions in communities
Written long posts about dream girl culture, emotional boundaries, and the relationship between dreams and reality

💌 This interview is unpaid. If you're interested in participating
Feel free to comment or DM me "Dream Girl + approximate age range (like 20+ / 30+)" I'll reply with a very brief confirmation statement + consent form
Thank you so much for reading this far 🫶 Thank you for always taking your emotional world seriously, and I hope you and your dream characters are always treated with kindness.
#dreamgirl #dreamdirection #dreamgirlorientation #dreamgirlliterature #interviewrecruitment #graduationthesis #dreamhorn #ailove #virtuallove #aichat

Hey everyone~
I'm a master's student in Service Design from Finland 🇫🇮, and I'm currently working on my thesis about dream girls × AI chat × emotional experiences. I've been into ACG culture for a long time and really respect the emotional world of dream girls, so I'd love to hear your real experiences in a thoughtful and gentle way. Let's explore together if AI chat services could be designed to be more user-friendly.
For this project, I'm looking for two types of participants (both need to be 18+ years old) 👇
💗 First | Dream Girls (Looking for about 15 people, already have 6)
You qualify if you check most of these boxes:
✔️ You've dreamed about or are currently dreaming about fictional characters (ACG / novels / games / AI characters, etc.)
✔️ You mostly interact with characters through AI chat / conversational tools
✔️ You've invested real emotions in this relationship

Often seen as someone people can turn to for advice

🗣️ Interview Format & Time
Format: Online one-on-one chat (mostly voice, no camera needed at all)
Duration: About 1 hour (we can take breaks or pause anytime)
Time: Flexible, we'll have to work around time zones, but your convenience is what matters most
The interview will be semi-structured, like a casual chat, with a relaxed atmosphere.

🔐 Privacy & Ethics Statement
This will only be used for my master's thesis and academic presentations
Everything will be anonymous, you can use your nickname
You can skip any questions or end the interview anytime
The interview will be recorded, but only for analysis and will be deleted after the thesis is completed

Appendix 2: Consent Form - DreamGirls

INTERVIEW CONSENT FORM
访谈知情同意书

Master's Thesis Research 硕士论文研究

Researcher 研究者:
Emilia Xingzhi King
University of Lapland - SDSI

PARTICIPANT INFORMATION 参与者信息

Name 姓名:

Age Confirmation: 18+ 年龄确认：18 周岁及以上

Wechat 微信号:

Introduction 研究介绍:

You are invited to participate in a research study conducted as part of a Master's thesis in Service Design at the University of Lapland.

This research explores how users experience moments of "pause" during emotionally engaging interactions with AI-based conversational services, particularly in the context of fictional or character-based relationships.

The interview focuses on service experience, interaction design, and user perspective, not on psychological diagnosis, therapy, or mental health evaluation.

您被邀请参与一项硕士论文研究。本研究为拉普兰大学服务设计硕士项目的一部分。

本研究关注用户在与 AI 对话型服务进行情感投入互动时，如何体验和理解"暂停（pause）"的时刻，特别是在虚构角色或角色导向关系的情境中。

本访谈聚焦于服务体验、交互设计以及用户视角，不涉及任何心理诊断、治疗或心理健康评估。

Purpose of Research 研究目的:

-The purpose of this research is to:

Understand how users experience emotionally engaging AI chat interactions.

Explore moments when users choose to pause, slow down, or step back from interaction.

Identify how current AI conversational services support or overlook users' needs for reflective pause.

Inform design principles that could improve AI chat services in a more user-respecting way.

-The research does not involve psychological assessment, diagnosis, or intervention.

It does not aim to evaluate, judge, or correct personal relationships or behaviors.

No therapeutic advice will be given.
本研究旨在:
理解用户在情感投入的 AI 聊天互动中的体验
探索用户选择暂停、放慢或暂时退出互动的时刻与原因
了解当前 AI 对话型服务是如何支持、限制或忽视用户"反思型暂停"的需求
为更加尊重用户体验的 AI 聊天服务提出设计原则参考
本研究不包含以下内容:
不进行心理评估、诊断或干预
不对个人关系或行为作出评价、判断或纠正
不提供任何治疗性或咨询性建议

Duration 访谈时长与形式:

The interview will take approximately 60 minutes and will be conducted online (audio or video).
访谈时长约为 60 分钟, 访谈将以线上形式进行（语音或视频）

Voluntary Participation 自愿参与说明:

-Your participation is entirely voluntary.

-You may choose not to answer any question.

-You may pause or stop the interview at any time.

-You may withdraw your participation without providing a reason.

-您的参与完全出于自愿
-您可以选择不回答任何问题
-您可以在任何时刻暂停或终止访谈
-您可以在无需提供任何理由的情况下退出研究

Benefits 参与收益:

-There is no financial compensation for participation.

-Your contribution may help:

Improve understanding of user experience in AI chat services

Support more responsible and user-sensitive service design practices

Contribute to academic research on human-AI interaction
本研究不提供任何经济报酬
您的参与将有助于:
提升对 AI 聊天服务用户体验的理解
支持更加负责任、尊重用户的服务设计实践
推动人机互动相关的学术研究

Confidentiality 隐私与保密说明:

-All data will be treated as confidential.

-You will not be identified by name in the thesis or any publication.

-Pseudonyms or general descriptors will be used.

-Audio recordings will be used only for transcription and analysis.

-Collected data will be used only in:
This master's thesis and Academic evaluation and assessment.
-All recordings and raw data will be securely stored and deleted no later than one year after thesis completion.
所有数据将被严格保密
您的真实身份不会在论文或任何学术成果中被披露
将使用化名或概括性描述
访谈录音仅用于转录与研究分析
收集的数据仅用于:
本硕士论文
学术评估与审阅
所有录音及原始数据将在论文完成后 最迟一年内安全删除。

Right of Refuse or Discontinue 拒绝或中止权利:

The participant has the right to discontinue or decline the participation in the research anytime they feel to do so.
参与者有权在任何时刻拒绝参与或中止参与本研究。

☐	I confirm that I am at least 18 years old. 我确认本人已年满 18 周岁
☐	I confirm that my participation in this research project is voluntary. 我确认本人参与本研究属自愿
☐	I understand the purpose of this research. 我理解本研究的目的
☐	I acknowledge that I have the right to decline or discontinue my participation in this research. 我知晓自己有权拒绝或中止参与
☐	I consent to audio recording for research purposes only. 我同意仅用于研究目的的访谈录音
☐	I understand that my identity will remain anonymous. 我理解并同意我的身份将保持匿名
☐	I agree to participate in this research study. 我同意参与本研究

Participant's Signature 参与者签名:	[Signature]
Date 日期:	[MM/DD/YYYY]

RESEARCH REPRESENTATIVE

Researcher's Name:	
Researcher's Signature 研究者签名:	[Signature]
Date 日期:	[MM/DD/YYYY]

Appendix 3: Consent Form - Experts

INTERVIEW CONSENT FORM
访谈知情同意书

Master's Thesis Research 硕士论文研究

Researcher 研究者:
Emilia Xingzhi King
University of Lapland - SDSI

PARTICIPANT INFORMATION 参与者信息

Name 姓名:

Occupation 职位 :

Company 公司 (Optional 可不填):

Introduction 研究介绍:

You are invited to participate in a research study conducted as part of a Master's thesis in Service Design at the University of Lapland.

This research explores how users experience moments of "pause" during emotionally engaging interactions with AI-based conversational services, particularly in the context of fictional or character-based relationships.

The interview focuses on service experience, interaction design, and user perspective, not on psychological diagnosis, therapy, or mental health evaluation.

您被邀请参与一项硕士论文研究。本研究为拉普兰大学服务设计硕士项目的一部分。

本研究关注用户在与 AI 对话型服务进行情感投入互动时，如何体验和理解"暂停（pause）"的时刻，特别是在虚构角色或角色导向关系的情境中。

本访谈聚焦于服务体验、交互设计以及用户视角，不涉及任何心理诊断、治疗或心理健康评估。

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Explore moments when users choose to pause, slow down, or step back from interaction.

Identify how current AI conversational services support or overlook users' needs for reflective pause.

Inform design principles that could improve AI chat services in a more user-respecting way.

-The research does not involve psychological assessment, diagnosis, or intervention.

It does not aim to evaluate, judge, or correct personal relationships or behaviors.

No therapeutic advice will be given.

本研究旨在:
理解用户在情感投入的 AI 聊天互动中的体验
探索用户选择暂停、放慢或暂时退出互动的时刻与原因
了解当前 AI 对话型服务是如何支持、限制或忽视用户"反思型暂停"的需求
为更加尊重用户体验的 AI 聊天服务提出设计原则参考
本研究不包含以下内容:
不进行心理评估、诊断或干预
不对个人关系或行为作出评价、判断或纠正
不提供任何治疗性或咨询性建议

Duration 访谈时长与形式:

The interview will take approximately 60 minutes and will be conducted online (audio or video).
访谈时长约为 60 分钟, 访谈将以线上形式进行（语音或视频）

Voluntary Participation 自愿参与说明:

-Your participation is entirely voluntary.

-You may choose not to answer any questions.

-You may pause or stop the interview at any time.

-You may withdraw your participation without providing a reason.

-您的参与完全出于自愿
-您可以选择不回答任何问题
-您可以在任何时刻暂停或终止访谈
-您可以在无需提供任何理由的情况下退出研究

Benefits 参与收益:

-There is no financial compensation for participation.

-Your contribution may help:

Improve understanding of user experience in AI chat services

Support more responsible and user-sensitive service design practices

Contribute to academic research on human-AI interaction

本研究不提供任何经济报酬
您的参与将有助于:
提升对 AI 聊天服务用户体验的理解
支持更加负责任、尊重用户的服务设计实践
推动人机互动相关的学术研究

Confidentiality 隐私与保密说明:

-All data will be treated as confidential.
-Audio recordings will be used only for transcription and analysis.
-Collected data will be used only in:
This master's thesis and Academic evaluation and assessment.
-All recordings and raw data will be securely stored and deleted no later than one year after thesis completion.
-Choose how you would like to be referenced:
A. Fully anonymised (no name, no organisation; role described broadly)
B. Partially anonymised (no name, but organisation/role may be mentioned in general terms)
C. Attributed (your name and/or organisation may be credited)
Your choice: □ A □ B □ C
-Direct quotes may be used in the thesis and academic presentations/publications. Quotes will follow your attribution choice above.
-You may also indicate any information you consider off the record during the interview.

-所有数据将被严格保密
-访谈录音仅用于转录与研究分析
-收集的数据仅用于:
本硕士论文和学术评估与审阅
-所有录音及原始数据将在论文完成后 最迟一年内安全删除。
-请选择您希望的署名方式:
A. 完全匿名（不提及姓名和单位；仅笼统描述您的角色）
B. 部分匿名（不提及姓名，但可能会笼统提及单位/角色）
C. 署名（可能会注明您的姓名和/或单位）
您的选择: □ A □ B □ C
-论文和学术报告/出版物中可能会直接引用您的内容。引用将遵循您上述的署名方式。
-您也可以在面试中说明任何您认为不宜公开的信息。

Right of Refuse or Discontinue 拒绝或中止权利:

The participant has the right to discontinue or decline the participation in the research anytime they feel to do so.
参与者有权在任何时刻拒绝参与或中止参与本研究。

□	I confirm that my participation in this research project is voluntary. 我确认本人参与本研究属自愿
□	I understand the purpose of this research. 我理解本研究的目的
□	I acknowledge that I have the right to decline or discontinue my participation in this research. 我知晓自己有权拒绝或中止参与
□	I consent to audio recording for research purposes only. 我同意仅用于研究目的的访谈录音
□	I consent to participate in this interview under the confidentiality/attribution option selected. 我同意在我选择的保密/署名选项规则下参与本次访谈。
□	I agree to participate in this research study. 我同意参与本研究

Participant's Signature 参与者签名:	[Signature]
Date 日期:	[MM/DD/YYYY]

RESEARCH REPRESENTATIVE

Researcher's Name:	
Researcher's Signature 研究者签名:	[Signature]
Date 日期:	[MM/DD/YYYY]

Appendix 4: Interview Guide

Interview Guide / 访谈大纲

1. Getting to Know You and Your Experience

一、简单认识你和你的梦向经历

This section is mainly to understand your background. You do not need to share anything too private.
这一部分主要是了解你的基本背景，不会深入隐私。

1. When did you first start having a DreamGirl relationship with this character?
   你是从什么时候开始梦这个角色的？
2. How do you usually interact with him? For example, through AI chat, imagination, writing, or other ways.
   平时你们主要通过什么方式互动？比如 AI 聊天、脑内想象、写东西，或者其他方式。
3. How would you describe your relationship with him? You do not need to define it formally; you can just use your own words.
   你会怎么形容你和他的关系？不用说得很严谨，用你自己的话就好。

2. Experience of Chatting with AI

二、和 AI 聊天的体验

This section focuses on your feelings and experiences when chatting with AI.
这一部分主要聊你和 AI 聊天时的感受和体验。

1. In what situations do you usually go to chat with him?
   你通常在什么情况下会去找他聊天？
2. When chatting, what kinds of feelings or qualities matter most to you? For example, companionship, being understood, response speed, tone, or something else.
   聊天的时候，你比较在意哪些感觉？比如陪伴、被理解、回应速度、语气，或者其他方面。
3. Was there any particular chat that left a strong impression on you?
   有没有哪一次聊天经历让你印象特别深？

3. Experiences or Thoughts About "Pausing"

三、关于"暂停"的经历或想法

In this interview, "pausing" does not mean breaking up or no longer loving the character. It is more like not chatting for a while, creating a little distance, or giving yourself some space.
这里的"暂停"不是指分手或不爱了，更像是先不聊一会儿、拉开一点距离，或者给自己一点空间。

1. Have you ever had a moment when you wanted to stop chatting for a while?
   你有没有过想"先停一下不聊了"的时刻？
2. If yes, what happened at that time? How did you realise that you needed to pause?
   如果有，当时发生了什么？你是怎么感觉到"该停一下"的？
3. If not, how do you understand the idea of "pausing"?
   如果没有，你是怎么看待"暂停"这件事的？
4. When pausing, what kind of feeling is strongest for you? For example, calmness, anxiety, emptiness, relief, conflict, or something else.
   暂停的时候，你心里更多是哪种感觉？比如安心、焦虑、空、轻松、矛盾，或者其他感觉。
5. Was the pause something you chose yourself, or did it happen because of real-life circumstances?
   暂停是你主动选择的，还是被现实情况推着发生的？

4. Experience of the AI Service Itself

四、AI 服务本身的体验

This section is not about judging you. It is about understanding whether the tool itself supported you or made things harder.
这一部分不是评价你自己，而是想了解这个工具本身有没有帮到你，或者有没有让事情变得更难。

1. When you wanted to pause, did the design of the AI chat affect you in any way?
   当你想停一下的时候，AI 聊天的设计有没有影响你？
2. For example, did it keep encouraging you to continue, make it very easy to start chatting again, or give no support or reminder at all?
   比如，它有没有一直推你继续聊、让你很容易重新开始聊，或者完全没有任何提示？
3. Was there any moment when you felt that the AI was pulling you back into the conversation?
   有没有哪一刻你觉得它好像在拉着你继续聊？
4. Was there any moment when you felt that a gentler way of pausing would have helped?
   有没有哪一刻你觉得，如果有一个更温柔的暂停方式就好了？

5. Imagining Better Support for Pausing

五、关于更好支持"暂停"的想象

This section is only hypothetical. There are no right or wrong answers.
这一部分只是假设讨论，不用当真，也没有标准答案。

1. If AI chat services could better support pausing, what would you hope they could do?
   如果 AI 聊天能更好地支持"暂停"，你希望它可以怎么做？
2. For you, what would a "good pause" look like?
   对你来说，一个"好的暂停"应该是怎样的？
3. Is there anything you absolutely would not want the AI to do? For example, forcing reminders, lecturing you, or something else.
   有没有什么是你绝对不希望 AI 做的？比如强行提醒、说教，或者其他方式。

6. Closing

六. 收尾

1. Is there anything about DreamGirls that you feel outsiders often misunderstand, but that you would like to explain clearly?
   有没有什么是你觉得外人很容易误解梦女，但你很想说清楚的？
2. Is there anything related to pausing or not pausing that I did not ask about, but you think is important?
   有没有什么你觉得和"暂停 / 不暂停"有关，但我没有问到、但你觉得很重要的？