Objects of Affection: Kissing Games on Mobile Devices

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ABSTRACT

This brief paper provides general context in the emerging mobile space of affection games. Affection games require players to flirt, hug, or kiss to meet their goals in the game. To date, the largest subset of those games, are kissing games. The paper provides a topographic analysis of the 10 most widely distributed kissing games in 2013 and 2014, which account for more than 3,000,0000 mobile game installations. To add detail to the overview, two case studies are provided which exemplify non-digital, physical device kissing and virtual kissing in mobile games. The download activity, player comments, and history of the games are used to provide a simple overview of affection game characteristics as they relate to human-computer interaction and play. Such analysis provides a peek into the mildly taboo affection games and the ways in which mobile developers are effecting the genre.

Categories and Subject Descriptors

K.8.0 [Games]; K.4.2 [Social Issues]

General Terms

Design, Economics, Experimentation, Human Factors

Keywords

Affection games; digital affection; mobile games; Human Computer interaction; non-virtual game interactions, kissing games

1. INTRODUCTION

User relationships to the smart devices they carry have bounced between love and hate [18]. With their growing ubiquity, the nature of that relationship has changed. In many countries smart phones are no longer convenience, they are necessity. Whether used to pay parking meters or check in to flights, they function as daily assistants. With that growth, a fascinating change has occurred in the way we play on these phones. Beyond the 30-year history of casual games that have propagated varied versions of Snake, Pac Man, Angry Birds, and Flappy Bird – a new genre is rising in the mobile game community. The newly popularized Affection Game has arrived as a form of human computer interaction. Affection games require players to flirt, hug, kiss or make love to meet their needs [8]. Affection games are not dating simulations, as affection games don't focus on establishing

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relationships, simply on the act of affection.

It is not clear if the growth in these types of games is the result of shifting demographics or emerging patterns in the relationship between digital play and social interaction [11] [12]. It can be hypothesized that affection is yet another dimension of the social self that has been usurped into the digital paradigm. It could also be hypothesized that the low cost of such devices has widened the demographic, creating a demand for a wider variety of playable experiences. It might also be hypothesized that the fundamental human relationship to ubiquitous mobile devices has changed, potentially making the expression of affection through these devices less awkward.

This paper does not aim to answer such questions in the absolute, but instead provides an overview of such games and offers two case studies in affection games. To do so, the paper provides a simple background in affection games and reports on the most widely distributed kissing games. It then analyzes the primary source content, user comments, and historical play record of two popular affection games for mobile devices. The result is a detailed view, extending the previously published research conducted through broad content analysis [8] and social-cultural examination [10].

There has been little research into digital affection games. Historically, Brian Sutton-Smith's 1959 examination of physical kissing games provides some foundation [20]. In the research he expresses the social value of examining affection play. As Sutton-Smith explains, like the examination of other forms of play, affection provides an inroads into cultural phenomenon as well as providing demonstrative artifacts of taboo and standards. In short, affection games are yet another lens to understanding the meaning of human interactions. Surprisingly, there has been little research into the human-computer interactions of digital affection games. Given the rich gender typing, unique HCI, and confluence of techno-cultural attributes, such analysis seems overdue. Several researchers have investigated gender preference [15] and sexual representations in games. These include [3] and [4]. Others have looked at gender roles [16] or argued for more discussion of sex and HCI [22].

2. BACKGROUND

Affection games are produced by a variety of independent developers across the world. The dominant developers are based in the United States, the Netherlands, South Korea, China and Japan [8]. They are likewise consumed by a variety of international community members, as they are offered on clearinghouse websites and mobile retail stores worldwide. The characters and languages vary, but the general mechanics are largely the same, despite regional socio-cultural differences. When taboo and communication of affection varies between these

players, the digitally mediated affection games are largely unified [10].

By tallying search results and App Annie data it is estimated that at least 500 digital affection games were available in 2014. A 2013 comprehensive content analysis indicated 299 distinct kissing games, 78 flirting games, and 4 hugging games [8]. In the Google Play store, the largest mobile repository of affection games, a simple search for "kissing games" yields more than 250 apps. These include games depicting in game affection and games designed to facilitate such affection between two or more players. Admittedly, pinning down the number of affection games on mobile outlets is particularly problematic, as many games are delisted or discontinued daily (commonly for developer contract violations). They also tend to be short experiences, with an average level time of less than 3 minutes across kissing, hugging and flirting games [8]. Focusing solely on mobile play, the most compelling experiences for academic study in the affection game space are kissing games. They are the most widely distributed games in the genre that also commonly offer virtual and nonvirtual interactions.

2.1 Non-Virtual and Virtual Affection

In general, kissing games can be divided into two categories; non-virtual and virtual play. Non-virtual kissing games require players to kiss the screen of their mobile device to replicate kissing an onscreen character or object. Virtual games require players to manipulate their avatar and a non-player character to express affection. The player must either kiss literally (non-virtual) or kiss virtually. Virtual kissing games were the standard model for web-playable affection games. The ubiquity of touch sensitive screens has made non-virtual kissing games more practical.

Previously, non-virtual affection game experiences were limited to custom hardware solutions. These include the Kiss Controller [17], Big Huggin' [9] and Musical Embrace [13]. The growth of non-virtual affection games can be interpreted as offering new opportunities for human-computer and human-robotic interface.

3. Research Methodology Overview

To provide a general overview of affection games and extend previous research, this study analyzed the estimated 500 affection games provided on Google Play. Google Play was chosen because its game content restrictions support the dissemination of affection games. In contrast, Apple has explicit content and use restrictions that substantially limit affection game distribution on their platform. Apple has claimed that the human saliva potentially involved in kissing poses physical risk to the surface of Apple mobile devices. Apple's App store contains only 28 affection games. This difference in number of games available may reflect the techno-cultural stance the two companies have taken about such play.

Affection games are a relatively private type of human computer interaction. Few of these games are played in large groups or in public. Some players are reluctant to admit that they have played such games, as the affectionate interaction between human and computer is somewhat taboo across multiple cultures. Identifying and recruiting players of affection games is particularly troublesome for these reasons. Instead, this research uses third party aggregate data to provide a peek into the affection games space. Arguably, the benefit of such an analysis is that players provide candid responses through the Internet's relative

anonymity and far from the potentially imposing sterility of a research laboratory.

To provide an accurate and useful case study, two of the most popular kissing games were chosen for analysis. Their app activity as recorded on Google Play is analyzed as a way to understand the general character of affection.

4. Overview of Widely Distributed Kissing Games

The 10 most widely distributed affection games account for more than 3 million installations via Google Play's app store. This research tabulated distribution statistics trapped by the App Annie commercial analytics aggregator and corroborated through public data from the Google Play store.

Table 1 outlines the general characteristics of ten of the most widely distributed kissing games. Each of these games recorded more than 100,000 installations since their initial release date. All of the games are free, although 1 of them supports in-App purchasing. Analyzing the most popular games provides some insight into player interest.

Table 1. Characteristics of 10 widely distributed Kissing Games

Game Name	Non-virtual	Recorded Installs	Initial Release Date	Supports in -App Purchases
Kissing Test Prank	Yes	1,000,000+	2/23/2012	No
Mermaid Kiss	No	500,000+	2/9/2014	No
Give a Kiss	Yes	500,000+	12/6/2012	Yes
Summer Kiss Test	Yes	500,000+	7/20/2013	No
Kissing Games	No	500,000+	3/25/2014	No
Princess Kissing on Beach	No	100,000+	9/19/14	No
Kissing Game: First Date	No	100,000+	4/11/2014	No
Kissing Test (free)	Yes	100,000+	12/29/2009	No
Kiss Me! Lip Testing Game	Yes	100,000+	3/21/2014	No
Classroom Kissing	No	100,000+	8/8/2012	No

This data indicates a few commonly understood, but not explicitly proven characteristics of mobile kissing games. Non-virtual games are at least as popular as virtual kissing games, accounting for 50% of the top 10 or more than 2 million installs. This last observation is important, as the previous generation of kissing games, as web games, offered no opportunity for non-virtual kissing.

Installations are not the only important factor in understanding popular affection games. The developer profiles and ranks also provide insight into who makes such games. Table 2 illuminates two important observation, popular affection games are typically made by independent developers and these relatively niche games do rank in their respective categories. Missing from the list of the top affection game developers are the names of mobile game juggernauts like Rovio or Electronic Arts. Instead, the developers are app makers from with portfolio ranging from 5 to 528 products. This demonstrates the range of developers and the relative accessibility of the genre for independent game makers.

Examining the rankings also helps contextualize these games in the wider space of mobile play. Kissing Test (free) outshines all others in garnering a top 100 rank in more than 118 countries. The average game from this earned a top 100 rank in 20 countries. Admittedly, 2 of these widely distributed games have never spent a single day in a top 100 list.

Table 2. Overview of country ranking history and game developers

Name	Number of Top 100 country listings	Developer Name	Number of other Apps by Developer
Kissing Test Prank	15	Dexati	528
Mermaid Kiss	6	Abc Casual Games	6
Give a Kiss	3	Exa Mobile SA	67
Summer Kiss Test	7	Photo Editors and Picture Effects	30
Kissing Games	4	Enegon	28
Princess Kissing on Beach	2	mGamey	63
Kissing Game: First Date	0	Vizzgames	18
Kissing Test (free)	118	Bell Standard Inc	5
Kiss Me! Lip Testing Game	18	Top Trending Apps	24
Classroom Kissing	0	Girls Games 123	25

Notably, four of the top 10 selling games are rated for "everyone", while 3 are rated high maturity by the developers. These games receive an average of 9,738 reviews, ranging from as few as 1,483 for Classroom Kissing to as many as 68,121 for Kissing Test (free). The most popular games include 4 kiss testers. For these games, players kiss the device and receive a score reflecting the quality of the kiss. The other 6 games are conventional player character to non-player character affections. What's important to note however, while the mechanics are fairly straightforward the kissing scenarios are what differentiate the games. Players can kiss as a princess, a mermaid or in the classroom. These content cues help illuminate for whom these games are marketed.

Affection games are not a super-genre, like sports or simulation, but they do demonstrate an increase in popularity. The following section uses two typical, popular games, Summer Kissing Test and Princess Kissing as case to provide a more detailed understanding of content and player reception. Given that many of these games provide a kind of procedural rhetoric about the purpose and value of affection they are worthy of critical analysis.



5. CASE STScreenshot of Summer Kissing Test (left) and Princess Kissing (right)

5.1 Summer Kissing Test, Non-virtual Affection

Summer Kissing Test, like other mobile kiss testers, is a modern interpretation of the late 19th century convention of love testers. Players touch their lips to the screen and practice kissing to receive a score. The game's main attraction comes from its

description - "Are you a good kisser? Download this new kissing game for girls and boys and find out! [19].

Released on July 20th, 2013, to date the free game has received more than 500,000 downloads. Its highest ranking on Google's charts was on September 30th, 2013, when it ranked #44 of all personalization apps on Google Play in Spain. It has achieved a top 100 ranking in the personalization category in 7 countries. The highest daily ranks for the app were in Spain (#44), Greece (#68), Romania (#69), Hungary (#76), Finland (#80), Austria (#88) and Slovakia (#88). The app was also just short of that marker in Brazil (#109) and Portugal (#110). In terms of installs, a top 100 ranking places the app in the top 1% of downloads in its category. There are 87,378 apps in the personalization category [2]. 8% of those, or 6,918 have achieved more than 50,000 downloads [2]. It is also important to note that the app is not offered in a game category. Instead, it is offered as a personalization app, which may be the result of selective marketing, algorithm discovery sales choices or a nod to the rather personal interaction of this affection game.

Reviews for the game are typical for an affection game. Players either love or hate it, with a nearly even dichotomy between 5 start and 1 star reviews. The app has received 2,794 reviews. 1,179 players gave it 5 stars, 885 gave it one star and the 4 to 2-star ratings were divided evenly with a mean of 233. Historically, this balance of high and low ratings persists from the game's introduction. Of all months' the game was offered, December 2013 yielded the most reviews, with 48 5-star reviews, 7 4-star, 3-4 star, 10-2 star and 27 1-star reviews. December was also the month with the largest proportion of 5-star reviews. Through September 2014, the proportion of 5 to 1 star reviews has been even, although the proportion of 1-star reviews has been increasing since December 2013. Since its introduction, the app has experienced in a decline in average rating.

The 27 qualitative English language comments about the game were evaluated. Anecdotally, high ratings praise the game's ability to provide practice kissing. As one user wrote, "I love it me and my bf [boyfriend] did this then after we had our first ever kiss." Likewise another user claimed "I'm better" and "Me and my bf done love game so good." On the other end of the spectrum players complain about the concept entirely, noting "Grose [Gross]", "I hate it", "This is a stupid app!!!!!!". The developer of the app, named Photo Editors and Picture Effects, has 30 other titles on Google Play. None of the other apps are considered games. All their apps are initially free of charge.

5.1.1 Analysis

The love hate dichotomy of affection games is also important. Other games in the affection space, such as Kissing Games [5] share this split. Like Summer Kissing Test, affection games are rarely mediocre in the eyes of players; they are either worthy of high praise or high disdain. As the qualitative feedback indicates, this is often a result of player's comfort with the game experience. Players seem to either find the concept loveable or detestable.

It is worth noting the decrease in favorable reviews over time. The lower ratings may be the result of lost novelty, as the app itself has changed little in the nearly 1.5 years it was been available. It also may be a result of an experience bias, as new players approach the game with higher expectations. It's reasonable to expect, that like players of other game types, affection game players come to expect more from affection games

than they have in years prior. No matter the source, it is clear that Summer Kissing Test is tracking toward its season's end.

This decline is typical of many affection games, which tend toward short experiences, both in play and availability. The life of many affection games is short, lasting a summer at best. This pattern of love-hate and high intensity, if not short-lived excitement makes affection games more like flings of infatuation than the long term relationships common to genres like dating simulations.

6. CASE STUDY 2

6.1 Princess Kissing Virtual Affection

Princess Kissing's, kiss and evade mechanic makes it an appropriate case study. The player must kiss a non-player character, but avoid being caught by an authority forbidding their kiss. It also relies heavily on marketing decisions to propel its success. As demonstrated in its description, heavy use of keyword manipulation and questionable use of intellectual property substantially aids its discoverability.

"Princess Kissing – care game for girls in the hospital. It is one of the princess games for little girls! Help the princess in Barbie doll game ... Help the princess to return to her magic kingdom disney and live happy with fairy tale unicorns and ponies. Kiss the girl and the flying hearts will improve her mood and make her healthy... Are you ready?" [19]

The game ranks #1 for the keyword "princess kissing" and number 8 for "French kissing." The publisher is also not shy in using intellectual properties like "Barbie" and "Disney" to increase the app's ranking in search results. The result is the number 1 search in Google Play searches "Disney kiss" and the number 10 result for "Barbie princess game." This is important given that the developer does not seem to have any relationship to the Mattel Company, maker of Barbie dolls, nor Disney brands.

Introduced first in Canada on February 14th, and then widely on March 18th, 2014, Princess Kissing was an immediate download success. When it was internationally released it started as a top 100 game (of the 3,011 apps in the role playing category, 32% of which earned 50,000 installs). In its first day on Google Play, Princess kissing was ranked in the top 100 in Canada (#20), the Netherlands (#48), France (#52), Spain (#58), the United States (#70) and Great Britain (#78). The game has ranked in the top 100 Google Play charts in 45 countries, representing major markets on every continent [1]. The game has been a top 100 downloads in countries as different as Kuwait (highest rank #37), South Africa (highest rank #64) and India (highest rank #69) in role playing games.

The game has received 2,605 reviews. The average rating is 3.5 stars, with the somewhat characteristic dichotomy in scoring. 1,312 players gave the game 5 stars, 545 gave it 1 star. Other ratings include 322 4 star reviews, 216 3-star reviews and 210 two-star reviews.

The 404 qualitative reviews observations are more inconsistently matched to ratings than other affection games. One reviewer, for example, writes "Hate it! Hate it!" and provides the app a 5-star rating. Others offer relatively unrelated reviews such as "Hi Me and my boyfriend carlos are planning to kiss" or "I like you people." While some of these ratings are the result of automated bot rating and mis-steps in rating user interfaces, they remain noteworth.

Dislike of the game was clearer. Players complained about interface, "It keep the temp.in the samespot and didn't move" and "it is designed for phones and it won't let me play it on my tablet." They also complained about complexity "Because you can only play 3 levels" and "DON'T GET IT. This game sucks all you do is make them kiss .you can't get past level 2 boooooooorrrriiiiiiiinnnnnnngggggg!" The term boring and all permutations of it (e.g. the aforementioned review) occur 9 times in the 131 1-star reviews. An estimated 80 of these 1 star reviews were English language, although because of typos, poor language, emoticon usage and other communication noise it was not always clear whether a review using an English character set was in the English language.

It's also worth noting that Princess Kissing is a clone of many other such games, most notably an app by the same name [14] which is a clear conversion of the web predecessor Barbie Healing Kiss [21]. The game seems to benefit from the overlap and ambiguity in search results. The maker of the app, has 63 apps on Google Play, all of which are initially free.

6.1.1 Analysis

The popularity of Princess Kissing is clearly buoyed by its clever, if morally questionably, marketing tactics. This is emblematic of a variety of web and mobile affection games that use celebrity likenesses and brands to promote their games. It is of course important to recognize that different countries and cultures have unique perspectives on the concept of intellectually property and representation of others. Since these games are made by developers all over the world, not all intellectual property violations are executed in earnest. It is clear, however, the Google Play does police such activities, offering reprimand for intellectual property violations (often delisting them).

Interestingly, no English language reviewers complained about the categorization of the game. The most popular role playing games are often a mobile version of their console based equivalents. A game like Princess Kissing is listed among the long lasting Final Fantasy franchise or Dragon's Quest games. Such play is an outlier in a well-established game category with a long standing set of tropes and expectations. Despite possessing few attributes of traditional role playing games, few reviewers complained about its authenticity as role play.

7. CONCLUSION

The most fundamental question is a reasonable one – what attracts players to affection games and what repels them from them? From the two case studies it is clear that players either love or hate the experience. There doesn't seem to be a mediocre affection game interaction. It is also clear that affection is somewhat marketed. Effective keywords, and the resulting discoverability, certainly buoys a top 100 affection game as evidenced by Princess Kissing. Intellectual property rights and the exploitation of resonant brands and celebrity figures also plays prominently into the successes of some such games. Most interestingly, these games have an international prominence when they do catch the attention of players. They rank among the most popular apps in a crowded app marketplace.

A few patterns are clear. Affection games, like many games in the mobile space do violate intellectual property to gain popularity. Whether it is the use of a celebrity's image or the use of disney (not the proper noun Disney) - there are clearly questionable moral uses. It's also clear that such games offer a love it or hate is

experience, with the minority in the middle. It's also clear that independent developers have bolstered this space, producing the largest set of the most popular titles.

This study may also start to reveal cultural differences between the nations that favor their play. Further research may expose cultural biases toward or against affection play. It's tempting to assume, for example, that cultures that are more commonly affectionate (e.g. kissing as a greeting) are also more apt to play affection games. Yet, it may also prove that games that have explicit taboos against such play inspire players to install such apps as release or revolt to the status quo.

There also remains some unanswered questions which have sociocultural resonance. How do these games enforce gender and racial stereotypes? Do they afford for play in the same ways that traditional affection games, as recorded by Brian Sutton Smith have done historically?

In short, affection games are ripe for more substantive analysis. It's important to note that a game as simple as Princess Kissing has ranked among the best selling role playing games on mobile devices. This seems to indicate that despite a well established tradition of role playing games, Princess Kissing and similar games are attractive to a large audience. If only for a single day, the fact that more people installed an affection game over a multimillion dollar franchise game indicates some novelty of the genre. At the least, affection games combat the stereotype of digital play as violent play, offering a make love, not war solution set unique to the emerging Affection Game genre.

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