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Gambling content in Facebook games: A common phenomenon?

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ABSTRACT

Some Facebook games are offered by developers who also offer gambling games, possibly indicating that gambling content (GC) could be found in their Facebook games. This study measures the presence of GC in Facebook games and documents their presentation. It verifies whether GC is more present in games offered by developers offering gambling games as well. The 100 most popular Facebook games were played for 10 min and recorded for content analysis purposes. GC was detected and classified into standard gambling simulation, non-standard gambling simulation, and gambling references. The results indicate that 54% of Facebook games present GC. The GC most often used alluded to slot machines (22%). Facebook games which offer GC are not associated with gambling game developers. However, when gambling references are found, they were most often in games offered by gambling developers. GC as a medium for familiarization with gambling is discussed.

1. Gambling content in Facebook games: a common phenomenon?

Gambling can be defined as a wager on an outcome that relies mainly on chance, in hopes of winning money (Ladouceur, Sylvain, Boutin, & Doucet, 2002). Gambling takes on different formats (e.g. cards, video lottery terminals, sports wagering) which are regulated in many countries by government agencies and made only available to adults (Gupta & Derevensky, 1998). However, online gambling demo games and some video games that are similar to gambling activities but have no real money component, are accessible to youth (Gainsbury, Hing, Delfabbro, & King, 2014; King, Delfabbro, Derevensky, & Griffiths, 2012; Sévigny, Cloutier, Pelletier, & Ladouceur, 2005).

Certain governmental agencies responsible for reviewing video games before commercialization and for classifying them according to age-appropriateness apprise the presence of gambling (New Zealand Office of Film and Literature Classification, 2012). For example, the Australian Office of Film and Literature Classification uses the notifications 'simulated gambling' or 'gambling references' to inform consumers of Gambling Content (King et al., 2012). To distinguish different types of GC, King et al. (2012) propose three categories (p. 235):

> (1) *standard gambling simulations*, a digitally simulated interactive gambling activity that is structurally identical to the standard format of an established gambling activity, such as blackjack or roulette; (2) *non-standard gambling simulations*, an interactive gambling activity that involves the intentional wagering of in-game credits or other items on an uncertain outcome, in an activity that may be partially modeled on a standard gambling activity but which contains distinct player rules or other structural components that differ from established gambling games; (3) *gambling references*, the appearance of non-interactive gambling material, such as gambling-related characters or storylines, or gambling-related paraphernalia within the context of the video game.

In a theoretical article on the different forms of money and non-money gambling, King, Delfabbro, and Griffiths (2010a) reviewed Australian commercial practices regarding the classification of video games, and subsequently concluded that GC in video games present potential risks of familiarization with gambling (King et al., 2012). The risk of familiarization to gambling may be expressed in different ways. According to the Cultivation Theory (McQuail &

Abbreviations: GC, Gambling Content.

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Windahl, 1993), the sum of media consumed by an individual determines the probability of adopting certain beliefs. Accordingly, video games constitute an additional media exposing consumers to gambling. Moreover, since demo gambling games have more favorable odds than games used when playing with real money (Downs, 2010; Sévigny et al., 2005), positive reinforcement associated with such demo games may lead the player to expect real rewards when gambling with real money (King, Delfabbro, & Griffiths, 2010b).

Although GC has been identified in video games for more than a decade (See Australian Office of Film and Literature Classification, 2001), its presence in social games has yet to be quantified (Gainsbury et al., 2014), even though these games are growing in popularity (Järvinen, 2009; Morgan Stanley, 2012). Shin and Shin (2011) define social games as games created to be playable within existing major social networking websites. Facebook, which is currently the social network with the greatest number of members (Banks, 2011; eBizMBA, 2015), offers several games that have attained phenomenal popularity (Chiang, 2010). For example, *Candy Crush Saga*, the most played game on Facebook, had more than 10 million active users in October 2015 (AppData, 2015).

Access to games on Facebook is made through any support connected to the Internet, such as mobile telephones, tablets, or computers (Björk, 2010). Within the context of great Internet accessibility, exposure to GC on Facebook games could contribute to familiarization with gambling. Gambling platform development employees even use certain Facebook groups to recruit consumers through ads and promotional publicities (Downs, 2010). Griffiths (2013a) expresses worry that some Facebook game developers also offer gambling games. For example, Zynga is the developer of *Farmville* and *Cityville*, two Facebook games, and of *Zynga Poker Plus*, an online gambling platform (Zynga, 2015). For gamers, it might become difficult to differentiate gambling games from regular online games since both are offered by the same developers (Gainsbury et al., 2014). According to Griffiths (2013b), gambling game developers are aware of the effect of familiarization with GC and use this knowledge to increase their gaming clientele. Within this perspective, Facebook games could be a gateway to gambling.

To date, no empirical study has addressed these aspects of GC utilization in Facebook games. Before investigating reasons why Facebook game developers would include GC in their Facebook games, a first step would be to quantify this phenomenon and the way in which GC is presented in Facebook games.

The main objective of this study is to determine the number of games presenting GC among the 100 most popular games on Facebook, and describe this GC according to its visual presentation and functions. The second objective is to verify the existence of a link between gambling games offered by Facebook game developers and the presence of GC in these games. The third objective is to verify whether there is a link between GC classification (standard gambling simulations, non-standard gambling simulation and gambling references) and whether these gambling game are offered or not by game developers.

The following hypotheses are put forth: (1) developers offering gambling games are proportionally more numerous to present GC in their Facebook games than developers not offering gambling games; (2) for games with GC, the GC classification (standard gambling simulations, non-standard gambling simulation and gambling references) will differ according to whether the developers offer gambling games or not.

2. Method

2.1. Sample

The one-hundred ($N = 100$) most popular Facebook games as of the 3rd of February 2014 according to the GameChitah (2014a) rankings, a website that compiles information from the Facebook database, constitutes the initial study sample. Games are included according to the following criteria: (1) offered in French or English, (2) can be played on a computer or mobile device, (3) is free, and (4) is operational at the time of the gaming session data collection. Of the initial sample, six games did not meet inclusion criteria and were replaced through random selection among those of the top list at the time when experimentation was being completed, that is the 16th of March2014[1] (GameChitah, 2014b). In doing so, it was possible to have a final sample of $N = 100$.

Of the 100 Facebook games studied, 16 are offered by developers that also offer gambling games (FG&G) and 84 are offered by developers that do not offer gambling games (FG). Also, 13 of the Facebook games' main themes are Casino-like activities and are therefore analyzed separately.

2.2. Material

Two computers operated under Windows 7 and an iPod touch model MC544C working under the iOS 6.1.6 operating system were used during experimentation. Screenshot captures were conducted using *Paint* software for Windows 7. Each gambling session was recorded on a computer using the *Blueberry Flashback Express Recorder* software. For games that could only be played on mobile devices, *iTools* software was used to display the gambling session on the computer screen to enable it to be recorded.

2.3. Measurement instruments

All of the measurement instruments were developed for the current study.

2.3.1. Gameplay observation sheet

Thirty-four items were used to evaluate (1) context, (2) the game's description and (3) the GC's description. The first section compiles factual information such as the coder's name, date, and game name and number. The second part has 12 items used to report data from the game's application page, its Facebook category (e.g., Adventure and Action, Simulation, Sport) and for Casino games, the gambling game it refers to. The third section has 18 items which evaluate GC presence, and, when appropriate, a description of the GC (see description in Table 1).

From the information compiled using this observation sheet, the following dependent variables are identified:

2.3.1.1. Gambling content. A game element that visually refers to the gambling game theme or to a result that depends mostly or entirely on chance, in order to offer a bonus to the player. Before consensus, the inter-rater agreement rate for GC identification is 92.1% (Cohen's Kappa).

2.3.1.2. GC classification. The distinction between standard gambling simulation, non-standard gambling simulation and gambling reference, inspired by the classification provided by King et al. (2012), was made possible through moves that could be made

[1] On the 16th of March 2014, 10 new games were on the top 100 list, as compared to that of the 3rd of February 2014.