

Moving the margins: Setting up pathway research studying adolescent video gaming, simulated gambling and monetary engagement

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EXTENDED ABSTRACT

During the past years, the lines between video games and monetary gambling have been blurring, a trend that has often been coined “simulated gambling”. As a result, concerns have been voiced about gambling elements within video games, such as loot boxes and social casino games, possibly providing teenagers a gateway into monetary gambling (King 2018). Although there has been some research done on this concept of simulated gambling (see for example: Zendle 2020; Zendle & Cairns 2018), there is a strong plea for longitudinal designs and research into the effects of this trend on young people (Lawn et al. 2020). Moreover, since paid-for loot boxes are qualified as gambling in Belgium (Belgian Gaming Commission 2018), the country makes for an interesting and unique case. Research on this specific topic within Belgium is, however, even more scarce. Lastly, studies on different types of simulated gambling activities, on top of loot boxes, are called upon (Zendle, 2020). In order to fill these gaps, we are conducting a

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longitudinal three-wave panel survey amongst Flemish (= the Dutch speaking part of Belgium) teenagers (winter 2021, 2022, and 2023).

The first wave was performed in winter 2021 and early 2022. A survey containing questions on video gaming, simulated gambling, and monetary gambling was distributed among Flemish teenagers (ages 10-19) across 13 high schools. In total, 2289 teenagers filled out the questionnaire. Around half identified themselves as female (53.1%), 45.4% as male, and 1.5% as “other”. Respondents were on average 14.1 years old (SD = 1.45).

Most respondents (82.3%) indicated to play video games. Almost all boys (96.2%) played video games, while seven out of ten (70.3%) girls, and 82.4% of respondents in the category “other” did so. On average, teenagers spent around one and a half hours (M = 1.55, SD = 1.86) playing video games on weekdays, and over three and a half hours on weekend days (M = 3.54, SD = 3.11). Boys spent significantly more time gaming than girls, while otherwise-gendered respondents did not significantly differ from either boys or girls regarding their gaming time. On average, video game players scored 7.89 (on a score of 0 to 36, SD = 6.27) on the Gaming Disorder Scale for Adolescents (GADIS-A) (Paschke et al. 2020). According to the aforementioned scale, 2.5% of respondents were ranked as suffering from problematic video gaming.

Next, involvement in simulated gambling was assessed. More specifically, respondents were asked to indicate how much they had participated in a variety of simulated gambling activities in the past twelve months, on a scale from 1 (“never”) to 7 (“daily”). Most respondents (76.9%) had participated in at least one of ten differentiated simulated gambling activities. In order to avoid confusion, a definition of each activity was provided. Over half of respondents (51.5%) had opened a free loot box in the past twelve months, while around one in four (24.8%) had paid for a loot box in that period. Since paid-for loot boxes have been considered as gambling in Belgium since 2018, this is a surprising result. Answers to an open follow-up question in the survey (“How do you access these paid-for loot boxes?”) offered insight in respondents’ tech-savviness. Respondents appeared to be very creative and bypass-savvy when it comes to accessing these paid-for loot boxes, for example by using a VPN or by simply changing their location to the Netherlands. Some teenagers even tried to make money out of these loot boxes, with 14.6% of respondents admitting they had sold items from loot boxes. In addition, the results revealed that esports betting ((in which 9.3% of respondents took part) and spending money in social casino games (8.6%) was far from being non-existent among this young age group.

Lastly, correlations between video gaming, simulated gambling, and online monetary gambling were calculated. Respondents’ total score on the GADIS-A showed a significant positive correlation both with their total score across all simulated gambling activities ($r = 0.408$, $p < 0.001$), and their total score on online monetary gambling activities ($r = 0.275$, $p < 0.001$). In addition, time spent playing video games (averaged over weekdays and weekend days) correlated positively with simulated gambling ($r = 0.320$, $p < 0.001$) and online monetary gambling ($r = 0.164$, $p < 0.001$). Simulated gambling and monetary gambling were quite strongly correlated as well ($r = 0.487$, $p < 0.001$).

As is clear from this survey, simulated gambling is linked to problematic video gaming and monetary gambling, confirming results from previous studies (Veselka et al. 2018; Zendle et al. 2019). However, it is important to (1) define the direction of this relationship by connecting results from the first wave of our study (winter 2021) with results of wave two (winter 2022-early 2023), and (2) to assess the differences between a variety of simulated gambling activities, in order to advance the understanding of the

relationship between video gaming, simulated gambling and (illegal) monetary gambling among adolescents.

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