

Designing a Questionnaire for Tabletop Gaming Motivations

Mehmet Kosa

Department of Cognitive Science and
Artificial Intelligence, Tilburg
University
Netherlands
m.kosa@tilburguniversity.edu

Pieter Spronck

Department of Cognitive Science and
Artificial Intelligence, Tilburg
University
Netherlands
p.spronck@tilburguniversity.edu

ABSTRACT

Previous research has investigated motivations of video game players, but motivation of tabletop game players has not been studied yet. The goal of the research project presented here is to determine what motivates tabletop game players. To accomplish this goal, a questionnaire has been designed which measures tabletop gaming motivations of players along multiple dimensions. The questionnaire is based on video game motivation questionnaires which have been used in the past. We submitted our questionnaire to over 1000 tabletop game players, the data of which are currently being analyzed using exploratory factor analyses. In this brief overview we provide theoretical background for our work and present the method of the study; we also give some preliminary results.

CCS CONCEPTS

• Human-centered computing → Interactive systems and tools

KEYWORDS

Motivation for tabletop games, motivation for non-digital games

ACM Reference format:

M. Kosa, and P. Spronck. 2018. In Proceedings of the International Conference on the Foundations of Digital Games, Malmö, Sweden, August 2018 (FDG' 18), 2 pages.

1 INTRODUCTION

We define tabletop games as physical artifacts which are a sub-genre of the broader category of games, which are played on a tabletop, using physical game components which are dominantly made from cardboard, wood and/or plastics (Figure 1). In general, tabletop games are designed as entertaining social experiences which let humans interact with each other.

The tabletop game industry is growing at a steady pace [1]. In recent years, the share of tabletop games on crowdfunding sites such as Kickstarter has grown considerably [2]. The rising popularity of tabletop games now also attracts researchers, who wish to gain an understanding of the interaction of players with these artifacts. At present, however, research results into motivation for tabletop gaming are almost non-existent. Therefore, this study aims to provide a tool which allows

investigating motivations of tabletop players, by delineating the factors which contribute to these motivations.

We decided to initially base out tabletop gaming motivation model on the literature of video game motivations. Our model is was mainly built on study of Tekofsky et al. [3], which integrates the seminal works of Yee [4], Hilgrad et al. [5] and Sherry et al. [6]. Tekofsky's model consists of 13 dimensions: Customization, Escapism, Relationships, Completion, Story, Socializing, Loss Aversion, Fantasy, Competition, Arousal, Autonomy-Exploration, Challenge and Teamwork. Despite the fact that we foresee that not all these dimensions are relevant for tabletop games, we decided not to make any assumptions in this respect and leave them all in. However, we also wished to acknowledge that for many tabletop players the look and feel of their games constitutes a major motivation [7]; we therefore added an Aesthetics dimension to our model. Thus, the final model consists of 14 dimensions. The items for each dimension of the developed model were generated by adapting the corresponding items from the original studies. In most cases, we could simply transfer the original items; however, occasionally an item had to be rephrased slightly as it was referring directly to "video games."



Figure 1: The Tabletop Game: Merlin (2017)

2 METHOD

2.1 Procedure

After the questionnaire was developed, it was uploaded to Qualtrics. We announced our study at boardgamegeek.com and shutupandsitdown.com, which are the two major websites which are used by tabletop game players. Our announcement briefly explained our goals and provided the Qualtrics link. The participants were presented with the questionnaire after they have agreed the informed consent. The data collection took place between the 13th of February 2018 until the 17th of March 2018.

2.2 Participants

1038 tabletop players participated in the study. 149 of them were female, 704 were male, 2 were “other” and 183 preferred not to state their sex. Average age was 39.13 with a standard deviation of 11.27. More than half of the participants (52.2%) resided in the United States, followed by the United Kingdom (11.0%), Canada (9.1%), Netherlands (5.6%) and Australia (3.7%). In total, participants came from 53 different countries.

More than half of the participants (52.7 %) were college graduates and most of the participants were employed full time (71.0 %). 38.8% of the participants rated their status as middle class, 29.3% of the participants as upper-middle class and 17.8 as lower-middle class.

On average, participants stated that they were playing tabletop games 1.82 days per week ($SD = 0.79$), and had been playing for 3.15 years ($SD = 1.70$). 542 of the participants provided their boardgamegeek username for further analyses.

2.3 Measures

The main part of the questionnaire consisted of 42 items, namely 3 per dimension. Cronbach's alpha (α) of the whole scale was 0.85. The items consisted of statements which the participants had to rate on a 7-point scale, from 1 (strongly disagree) to 7 (strongly agree). The reliabilities of the dimensions are listed in Table 1.

Table 1: Reliabilities of the dimensions

	Cronbach's Alpha (α)
Customization	0.71
Escapism	0.92
Relationships	0.81
Completion	0.59
Story	0.81
Socializing	0.64
Loss Aversion	0.75
Fantasy	0.79
Competition	0.69
Arousal	0.69

Autonomy-Exploration	0.60
Challenge	0.59
Teamwork	0.49
Aesthetics	0.84

We have also measured presence ($\alpha = 0.80$), positive word of mouth ($\alpha = 0.80$), intention to purchase ($\alpha = 0.67$) and perceived enjoyment ($\alpha = 0.81$), which are tied to another research project.

3 DISCUSSION AND FUTURE WORK

The reliabilities show that not all the dimensions have sufficient reliability for further analysis. 7 of them fall within the acceptable range ($\alpha > 0.70$, [8]), and 2 more are very close to the acceptable range. One possible explanation is that some of the dimensions are simply not sufficiently relevant for tabletop gaming; however, that does not seem to be a reasonable explanation for the low result on Socializing, as we surmise that socializing is at the core of the attraction of tabletop games. Further analyses (such as an exploratory factor analysis) need to be performed to conclude if the resulting questionnaire is reliable and valid, and if not, which dimensions need to be adapted. This work is currently in progress. We will analyze the motivations of tabletop players, and also how different motivations interact. If the access that we have to the player details on boardgamegeek.com provides us enough data on tabletop game collections, we will also try to link motivations to particular games and game genres.

REFERENCES

- [1] Duffy, O. (2017, December 12). Board games' golden age: sociable, brilliant and driven by the internet. Retrieved from <https://www.theguardian.com/technology/2014/nov/25/board-games-internet-playstation-xbox>
- [2] Wong, J. I. (2016, May 20). Old-fashioned board games, not tech, are attracting the most money on Kickstarter. Retrieved from <https://qz.com/688843/old-fashioned-board-games-not-tech-are-attracting-the-most-money-on-kickstarter/>
- [3] Tekofsky, S., Miller, P., Spronck, P., & Slavin, K. (2016, June). The Effect of Gender, Native English Speaking, and Age on Game Genre Preference and Gaming Motivations. In International Conference on Intelligent Technologies for Interactive Entertainment (pp. 178-183). Springer, Cham.
- [4] Yee, N. (2006). The demographics, motivations, and derived experiences of users of massively multi-user online graphical environments. *Presence: Teleoperators and virtual environments*, 15(3), 309-329.
- [5] Hilgard, J., Engelhardt, C. R., & Bartholow, B. D. (2013). Individual differences in motives, preferences, and pathology in video games: the gaming attitudes, motives, and experiences scales (GAMES). *Frontiers in psychology*, 4, 608.
- [6] Sherry, J. L., Lucas, K., Greenberg, B. S., & Lachlan, K. (2006). Video game uses and gratifications as predictors of use and game preference. *Playing video games: Motives, responses, and consequences*, 24(1), 213-224.
- [7] Rogerson, M. J., Gibbs, M., & Smith, W. (2016, May). I Love All the Bits: The Materiality of Boardgames. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (pp. 3956-3969). ACM.
- [8] Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.