TEACHER'S PERCEPTIONS OF THE USEFULNESS OF BOARD GAMES IN ELEMENTARY SCHOOL

Pierre Cès[1,2], Mathilde Duflos[1], Anne-Lise Doyen[2], & Caroline Giraudeau[1]
[1]PAVeA Lab, EA 2114, Department of Psychology, University of Tours (France)
[2]ERCAE Lab, EA 7493, INSPE Centre Val de Loire, University of Orléans (France)

Abstract

Playing games at school can have a positive impact, particularly regarding student's motivation and learning efficiency. Various types of games are employed by teachers, including board games. Board games are defined as games with limited playing time, simple themes, and rules. They require a physical medium (e.g., a board, cards, dice), and are played by two or more players. While the educational value of games is widely recognized in the literature, few studies have delved into elementary school teachers' perceptions regarding playing board games at school, even though they are the ones encouraged to use them. The aim of this study is to address the following research questions: According to elementary school teachers, what's the interest of board games in the school context? Why elementary school teachers use (or don't use) board games in their class? In order to better understand teachers' perceived usefulness of board games in the school context, we conducted 3 focus groups (with three to five participants per group, 13 participants in all) with elementary school teachers teaching from first grade to fifth grade. The results of the thematic analysis conducted on Nvivo highlighted three relevant themes regarding our research questions: (1) Board games for academic learning, (2) Board games for emotions, social life, and coexistence and (3) Teachers' motivation, roles and rights. Indeed, teachers believe that the use of board games, as suggested by scientific literature, can benefit student learning (e.g., language, mathematics, geography...) but teachers believe that board games can also be an interesting tool from a social and emotional perspective, both for students and teachers. While studies on games in school often focus on children, this research provides insight into teachers' perspections on board games in elementary school. Exploring teachers' perceptions of board games may help us better understand why board games are or are not used in the school context.

Keywords: Board games, elementary school teachers, focus groups, perceptions.

1. Introduction

Play promotes mental health in childhood and allows them to develop skills that are essential for academic success and everyday life (Whitebread et al., 2017). Moreover, playful activities, such as group games, symbolic play and creative activities support the skills needed for future learnings. Several researches have showed the effectiveness and the value of incorporating play-based learning in schools (Mardell et al., 2019). Some studies also showed that playful pedagogies are more effective for fostering learnings and are more likely to provide a deeper understanding compared to more traditional pedagogical approaches (Parker & Thomsen, 2019). Different types of games are used by teachers in elementary school, including board games (BG) (Koh et al., 2012). BG are defined as games with limited playing time, simple themes, rules, require a physical medium (e.g., a board, cards, dice), and are played by two or more players (Gobet et al., 2004). Two recent systematic reviews by Gauthier et al. (2019), and Noda et al. (2019) highlighted the benefits of BG in educational settings: they have beneficial effects on health-related behavior and education at all ages, facilitate social interactions between participants, which in turn can enhance learning opportunities (Gauthier et al., 2019; Noda et al., 2019).

Although we already have some information on teachers' perceptions regarding the use of games in schools, most of the studies used a broad concept when defining "games". Indeed, some studies have looked at teachers' perceptions of digital games (Huizenga et al., 2017), but to our knowledge there is very little information on teachers' perceptions of BG specifically, even though they frequently used by them (Koh et al., 2012). Furthermore, there is data on teachers' perceptions of play base learning at school but mainly on preschool or kindergarten teachers (Bubikova-Moan et al., 2019) and a limited number of

studies have investigated elementary school teachers (EST) perceptions. Thus, to fill the gap in the literature concerning EST perceptions of BG at school, we conducted three semi-structured focus group with 3 different public schools (13 teachers in all). Each focus group was composed of participants teaching between the first and fifth grades as well as the director of the establishment.

2. Design

Three focus groups were carried out, each one with three to five participants (13 participants in all). The focus groups lasted between 50 minutes and 1 hour 32 minutes. Demographic questions were first collected (i.e., age, gender, status, education, teaching experience, teaching grade and board games habits, see table 1 for participants characteristics). Open-ended questions focused on teachers' perceptions of BG in the school context (e.g. What do you think about the use of BG in elementary school? In your opinion, should BG be part of children's school experience?). The aim of our qualitative study is to explore EST perception of using BG at school and to address the following research questions:

RQ1: According to elementary school teachers, what's the interest of board games in the school context?

RQ2: Why elementary school teachers use (or don't use) board games in their class?

The qualitative data obtained during the interview were analyzed using thematic analysis (Braun & Clarke, 2006) on Nvivo.

Table 1. Participants characteristics.

	All participants	Teachers	Teachers/ directors
N	13	10	3
Age M	42.2	41.4	45
Years of teaching (M)	11.8	10.5	16.3
How many teachers or teachers/directors (%) have given lessons in...			
First grade	76.9	80	66.6
Second grade	92.3	100	66.6
Third grade	69.2	70	66.6
Fourth grade	84.6	80	100
Fifth grade	84.6	80	100
How many teachers or teachers/ directors (%) use board games			
In their teaching practice	69.2	80	66.6
In their personal life	92.3	100	66.6

3. Results

The results of the thematic analysis conducted on Nvivo revealed three themes of interest regarding the research questions mentioned above: (1) Board games for academic learning, (2) Board games for emotions, social life, and coexistence and (3) Teachers' motivation, roles and rights.

Concerning the first theme, (1) Board games for academic learnings, thematic analysis revealed that elementary teachers believe that the use of board games can benefit student learning. Indeed they all evoke the potential of BG for various academic learnings: *"I think board games are a fun way to teach children skills. I'm thinking mainly of mathematics, but it could also be French" (Pauline, 30).* Moreover, according to teachers, using BG can be beneficial for students with learning difficulties: *"It's another way of learning; I know that sometimes there are students who struggle with difficult exercises, and sometimes they shine a bit more with games because it's more playful" (Mélanie, 27).*

The second theme, (2) Board games for emotions, social life, and coexistence, highlighted teacher's perceived potential of board games for social and emotional competencies: *"It's crucial because the frustration they experience can be very challenging. Unfortunately, at home, parents make their children win to keep them happy and make it enjoyable" (Françoise, 57)* allowing children to experience social life through board games. Teachers also believe that board games are a genuine way for children to get to know each other *"Having to play with others, it forces the child to see what others can give, what they can reveal about themselves" (Nathalie, 31).*

In the third theme, (3) Teachers' motivation, roles and rights, teachers reported their personal interests, motivations in using board games in their class. Indeed, some of them reported that using board games enabled them to create a different bond with their student, to discover them in a different way, *"I like it because it creates a link, it changes, you see the students differently" (Fabienne, 31)* and to change their teaching methods and be more in an observational role *"Playing means accepting that you can learn in a different way, and being convinced that it brings something to the students. [...] It allows us to observe because we're not part of the game" (Clarisse, 47).*

4. Conclusion

Our results are in line with the existing literature. The board game interest for academics' learnings is widely recognize among scholars, nevertheless, this study also provides a new insight regarding elementary school teachers perceptions of board games. Indeed, this qualitative study provide new data regarding the teachers' perceived interest from an emotional and social perspective. Moreover, the qualitative analysis provides us new information about teacher's motivations for using board games in their classroom both for students and teachers. Indeed, while the existing literature focuses on the academics benefit of board games, few studies have highlighted the social and emotional interest of board games at school, especially in elementary school. Furthermore, research on games in schools often focuses on children; thus, this study offers the teachers' point of view on board games in elementary school.

Despite the results presented above, this study nevertheless have some limitations. As this research was carried out in a French context, it would be interesting to extend it to other cultural contexts to gain a more global view of teachers' perceptions of board games. This study only involved three focus groups, more participants are needed to generalize the result. However, gaining insight into teachers' perceptions on board games could enhance our comprehension of the educational, social, and emotional benefits that board games might offer, both for teachers and students.

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Bubikova-Moan, J., Næss Hjetland, H., & Wollscheid, S. (2019). ECE teachers' views on play-based learning: A systematic review. *European Early Childhood Education Research Journal, 27*(6), 776-800. https://doi.org/10.1080/1350293X.2019.1678717

Gauthier, A., Kato, P. M., Bul, K. C. M., Dunwell, I., Walker-Clarke, A., & Lameras, P. (2019). Board Games for Health: A Systematic Literature Review and Meta-Analysis. *Games for Health Journal, 8*(2), 85-100. https://doi.org/10.1089/g4h.2018.0017

Gobet, F., Retschitzki, J., & de Voogt, A. (2004). *Moves in Mind: The Psychology of Board Games.* London: Psychology Press. https://doi.org/10.4324/9780203503638

Huizenga, J. C., ten Dam, G. T. M., Voogt, J. M., & Admiraal, W. F. (2017). Teacher perceptions of the value of game-based learning in secondary education. *Computers & Education, 110*, 105-115. https://doi.org/10.1016/j.compedu.2017.03.008

Koh, E., Kin, Y. G., Wadhwa, B., & Lim, J. (2012). Teacher Perceptions of Games in Singapore Schools. *Simulation and Gaming, 43*(1), 51-66. https://doi.org/10.1177/1046878111401839

Mardell, B., Lynneth Solis, S., & Bray, O. (2019). The state of play in school: Defining and promoting playful learning in formal education settings. *International Journal of Play, 8*(3), 232-236. https://doi.org/10.1080/21594937.2019.1684157

Noda, S., Shirotsuki, K., & Nakao, M. (2019). The effectiveness of intervention with board games: A systematic review. *BioPsychoSocial Medicine, 13*(22). https://doi.org/10.1186/s13030-019-0164-1

Parker, R., & Thomsen, B. S. (2019). Learning through play at school: A study of playful integrated pedagogies that foster children's holistic skills development in the primary school classroom. *Student learning processes, 22*. https://research.acer.edu.au/learning_processes/22

Whitebread, D., Neale, D., Jensen, H., Liu, C., Solis, S. L., Hopkins, E., Hirsh-Pasek, K., & Zosh, J. (2017). *The role of play in children's development: A review of the evidence*. Retrieved from https://cms.learningthroughplay.com/media/esriqz2x/role-of-play-in-childrens-development-review_web.pdf