

Students' perceptions and usability of playing AcadS, a board and card sentence building game
Zuraina Ali, PhD

Abstract

The innovation; Academic Sentence Board and Card Game; abbreviated to AcadS, extends the uses of the two games in language learning. Traditionally, card and board game are played separately and people may view that playing these games are merely for entertainment. However, existing research recognises the critical role played by board and card games. This study, therefore, attempts to investigate students' views of AcadS and its usability in assisting them to build sentences. The study, employing quantitative data inquiry, involved 32 students at tertiary level and secondary schools. The results of the study revealed that there was only difference in the mean views towards AcadS between male and female. Results of other research questions produced no significant differences. The findings have several implications in that it enhances our understanding that conventional games are still relevant in the academia. Although technology is used widely in this millennium era, conventional methods combining board and card games should not be seen as obsolete methods for learning.

Keyword: game, AcadS, board, card, conventional method

Introduction

Playing while learning is an approach to promote enjoyable learning atmosphere to learners. This concept is familiar to young learners, yet it may seem to be useful for adult learners also as Rapeepisar, Wong, Fung and Depickere (2006) assert that having a too safe environment for the latter in learning is boring. Several studies have documented the approach; learn and play, in helping learners to excel in their academic achievement. Yet, the preceding discussions focus on studies related to card and board games only since AcadS combines the features of the two games.

The Highway Code is a board game that may educate learners to become safe drivers. Findings from the study revealed that the game taught learners road safety and seemed relevant if it was to replace the theory examination to obtain a driving licence in the United Kingdom (Gray, Topping & Carcary, 1998). Number board game; the Great Race, enabled pre-schoolers to learn numbers. Ramani, Siegler and Hitti (2012) found that the Great Race game can be used by the group of learners for a small group learning activity in classrooms. With the help of paraprofessionals; players who were trained to play the game before research was conducted, it seemed that the former eased the transmission of knowledge to the young learners. The PHARM Game is a board game that teaches pharmaceutical employees or students concerning the field. Results from the study indicated that adult learners found that the game assisted them to retain materials relevant for their field compared to attending lecture or doing library assignment (Cruz, 2005).

Meanwhile, a card game namely Conversation Game, can be used to teach discussion skills among English as a Second Language (ESL) learners. A study conducted by Reese and Wells (2007) found that the game improved students' conversation skills when they were able to use new expressions engaging in debates with their class mates. Mubaslat (2012) employed various card games; Triple Pelmanisms and Revision card, to help primary school students in their English language achievement. It was shown that using card games produced positive

effects in improving the achievement of the school children since the game promoted interactive environment to the players.

Having to discuss past studies on board and card games, it seemed that no research has been found to explore the potential of combining card and board games to maximise students' learning and improve their language skills. This study, therefore, sets out to investigate the usefulness of AcadS – a game that merges board and card games that may assist learners in building sentences. Two major constructs i.e. views and usability are measured in the study and they are framed into six research questions.

1. Is there a significant difference in the mean views towards AcadS scores for male and female?
2. Is there a difference in the mean views towards AcadS scores across students' ages?
3. Is there a significant difference in the mean views towards AcadS scores across students' academic level?
4. Is there a significant difference in the mean usability of AcadS scores for male and female?
5. Is there a difference in the mean usability of AcadS scores across students' ages?
6. Is there a significant difference in the mean usability of AcadS scores across students' academic level?

Methodology

Sampling

A total of 32 students were involved in the study. In terms of age, four (4) of them are between 15 to 16 years old, two (2) students are between 17 to 18 years old, 13 students are between 19 to 20 years old, 10 students are between 21 to 22 years old and finally three (3) students are between 23 to 24 years old. On the other hand, majority of them are Malays which constitute to more than 70 percent of the total portion of the students involve in the study. Others are Chinese (12.5%) and the remaining are students from other races (9.4%). The students also are studying in various institutions. The bulk of the students are from University Malaysia Pahang (43.8%) while 9 percent are studying in FELDA Prodata and four (4) percent of them are secondary school students.

Instruments

Questionnaire

The study uses a questionnaire to collect its data. It consists of three (3) parts. The first part concerns with Personal Data. The second part is on Views towards AcadS. Finally, the third part pertains to Usability of AcadS. There are five (5) items in the second and third part of the questionnaire. The questionnaire is undemanding to the students viewing the time and location when they are instructed to answer the items in the questionnaire. In terms of reliability, the cronbach alpha reliability coefficient score is .79. Although a maximum alpha value of 0.90 has been recommended, the current score obtain in the study is acceptable to ensure the reliability of the questionnaire (Tavakol & Dennick, 2011). On the other hand, the content validity of the questionnaire is established by having it reviewed by lecturers teaching in University Malaysia Pahang.

Research Material: AcadS

AcadS is a language game that combines card and board games. In playing the game, players are required to structure sentences based on the cards they obtained. Players may construct simple, compound or complex sentences depending on the cards obtain after they are shuffled. The words use in AcadS are selected from Academic Word List (AWL). To assist

students in building sentences, cards also contain Parts of Speech. Players construct sentences by figuring out appropriate sentences from these group of words. AcadS enables users in general, and language learners in particular, to assist them in learning how to build sentences in enjoyable and entertaining ways. It is hoped that by playing AcadS, the players may be exposed to real learning opportunities as it encourages, entertains and teaches players to build sentences in and outside classrooms. Last but not least, AcadS fosters literacy and language skills as it enables language learners to focus and expand their attention span in completing the game (Blank, 2012).

Data Collection Procedure

There are three locations in which the questionnaire was distributed - at a research competition, English classes and a training session in FELDA. In any of the locations that students were required to fill in the questionnaire, they were in the first place, instructed to play AcadS for about 20 to 30 minutes. Later, the questionnaire was distributed to all of them. They took about five to seven minutes to fill-in the questionnaire.

Data Analysis

The data was analysed using SPSS Version 21. T-test and Anova were employed to answer the research questions of the current study. The former was used to answer Research Question 1 and 4 while ANOVA was employed to answer the remaining research questions.

Results

1. Is there a significant difference in the mean views towards AcadS scores for male and female?

An independent-samples *t*-test was conducted to compare the views of AcadS’ scores for males and females. It was evident that there was a significant difference in scores for males ($M= 1.29, SD= 0.27$) and females [$M= 1.12, SD= 0.17; t(30)=2.13, p=.04$].

Table 1: Views of Acads between gender

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
ScorePercep	Equal variances assumed	1.555	.222	2.133	30	.041	.17412
	Equal variances not assumed			2.198	26.704	.037	.17412

2. Is there a difference in the mean views towards AcadS scores across students’ ages?

A one-way between-groups analysis of variance was conducted to explore the impact of age on students’ views towards AcadS. They were divided into five groups according to their ages. It was evident that there was no statistically significant difference at the $p<.05$ level in views scores for the five age groups [$F(4, 27)=.93, p=.46$].

Table 2: Views of AcadS across students’ ages

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.222	4	.055	.927	.463
Within Groups	1.613	27	.060		
Total	1.835	31			

3. Is there a significant difference in the mean views towards AcadS scores across students' academic level?

A one-way between-groups analysis of variance was conducted to investigate students' views towards AcadS according to their academic levels. It was found that there was no statistically significant difference at the $p < .05$ level in views scores for all the levels [$F(3, 28) = 2.2, p = .11$].

Table 3: Views of AcadS across students' academic level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.350	3	.117	2.196	.111
Within Groups	1.485	28	.053		

4. Is there a significant difference in the mean usability of AcadS scores for male and female?

An independent-samples t-test was conducted to compare the usability of AcadS scores for males and females. There was no significant difference in scores for males ($M = 1.106, SD = 0.246$) and females [$M = 1.04, SD = .08; t(30) = .99, p = .33$].

Table 4: Usability of AcadS between gender

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Mean Usability	Equal variances assumed	2.799	.105	.987	30	.332	.066
	Equal variances not assumed			1.039	19.992	.311	.066

5. Is there a difference in the mean usability of AcadS scores across students' ages?

A one-way between-groups analysis of variance was conducted to explore the usability of AcadS across students' ages. It was identified that there was no statistically significant difference at the $p < .05$ level in the usability of AcadS scores among the students' ages [$F(4, 27) = .714, p = .59$].

Table 5: Usability of AcadS across students' ages

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.105	4	.026	.714	.590
Within Groups	.995	27	.037		

6. Is there a significant difference in the mean usability of AcadS scores across students' academic level?

A one-way between-groups analysis of variance was conducted to explore the usability of AcadS across students' academic level. From Table 6, it was evident that there was no statistically significant difference at the $p < .05$ level in the usability of AcadS scores across the students' academic level [$F(3, 28) = .992, p = .41$].

Table 6: Usability of AcadS across students' academic level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.106	3	.035	.992	.411
Within Groups	.994	28	.036		

Discussion

The investigation concerning the views and usability of AcadS has shown that there was only difference in the mean views towards the game between genders. The results of other research questions produced no significant differences. The finding of the former suggest that in general, both genders had different opinions when they were instructed to play AcadS. Results showed that male students were more positive compared to female students in playing AcadS. Such finding enhances our understanding that different approaches need to be used in class to promote positive learning environment to students in the course of their learning. Therefore, it is crucial for a class teacher to relate both genders' learning aptitude with his/hers as to ensure positive learning attitudes using a particular teaching tool is materialised (Ali, Mukundan, Baki & Ayub, 2012). Last but not least, the study implies that conventional approach as in playing board and card games is never obsolete to teach language skills to learners although technology may establish positive impact on students' learning (AlAmmary, 2012).

Reference

- AlAmmary, J. (2012). Educational Technology: A Way to Enhance Student Achievement at the University of Bahrain. *Procedia-Social and Behavioral Sciences*, 55, 248-257.
- Ali, Z., Mukundan, J., Baki, R., & Ayub, A. F. M. (2012). Second language learners' attitudes towards the methods of learning vocabulary. *English Language Teaching*, 5 (4), 24-36.
- Blank, J. (2012). Fostering Language and Literacy Learning: Strategies to Support the Many Ways Children Communicate. *Dimensions of Early Childhood*, 40 (1), 3-12.
- Gray, A. R., Topping, K. J., & Carcary, W. B. (1998). Individual and group learning of the Highway Code: comparing board game and traditional methods. *Educational Research*, 40(1), 45-53.
- Mubaslat, M. M. (2012). The Effect of Using Educational Games on the Students' Achievement in English Language for the Primary Stage. *Online Submission*.
- Ramani, G. B., Siegler, R. S., & Hitti, A. (2012). Taking it to the classroom: Number board games as a small group learning activity. *Journal of educational psychology*, 104(3), 661.
- Rapeepisarn, K., Wong, K. W., Fung, C. C., & Depickere, A. (2006, December). Similarities and differences between learn through play and edutainment. In *Proceedings of the 3rd Australasian conference on Interactive entertainment*, 28-32. Murdoch University.
- Reese, C., & Wells, T. (2007). Teaching academic discussion skills with a card game. *Simulation & Gaming*, 38(4), 546-555.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.

Vigil-Cruz, S.C. *Research on Comparative Effectiveness of The PHARM Game® and other Teaching Tools*, University of Connecticut, School of Pharmacy, 2005.