

Effectiveness of the Theory of Reinforcement and Punishment for Engaging Students' Towards Arabic Vocabulary: Case of the Arabiyatuna Board Game

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Abstract:

This study explores the effectiveness of the “Arabiyatuna” board games as a pedagogical tool for enhancing students' vocabulary acquisition and engagement with the Arabic language and culture. The research was conducted with a sample of 30 students at Universiti Islam Antarabangsa Tuanku Syed Sirajuddin (UniSIRAJ) previously known as Kolej Universiti Islam Perlis (KUIPs) who participated in playing the Arabiyatuna board game sessions designed to introduce and reinforce Arabic vocabulary which involved experimental and control groups. Pre-and-post-intervention assessments were administered to measure the mastery of vocabulary based on the Mecca Common Vocabulary List. The students must observe the instructions in the punishment card as the research adopted the theory of Reinforcement and Punishment to strengthen the students' memorization of the chosen vocabulary. The result indicates a significant improvement in students' vocabulary acquisition and a heightened interest in Arabic vocabulary. Qualitative feedback from participants also suggests that the interactive and enjoyable nature of board games fosters a positive learning environment, encouraging active participation and sustained interest. These findings support the integration of board games into language learning curricula as an effective strategy for engaging students and enhancing their linguistic and cultural competencies.

Keywords: Arabiyatuna, Reinforcement and Punishment, Board Game, Learning Language

Introduction:

Using board games for gamification is both user-friendly and visually engaging. As players interact with the game, their brains actively process and retain the information presented. Scholars agree that gamification involves using game-based

mechanics, aesthetics, and thinking to engage individuals, motivate action, facilitate learning, and solve problems (Kapp, 2012; Taspinar et al., 2016).

Board games are cost-effective to produce and relatively simple to design. They foster inclusivity

Theory of Reinforcement and Punishment:

Arabiyatuna Board Game incorporated with the theory of Reinforcement and Punishment in the game whereby the experts have argued that effectivity of the theory of reinforcement and reward method decisively influences behaviour (Langa, 2014), but it is not clear whether these factors exert similar or qualitatively differentiated behavioural effects (Thorndike,1927) also known as One-Factor Theories. In this view, reinforcement increases the frequency of behaviour, punishment reduces behaviour performance, and the amount of these two effects is equal, but with opposite signs. By contrast, two-factor theories view them as qualitatively distinct influences on actual behaviour (Yechiam et. al, 2013).

Method:

Participants and procedure:

This study using the sample of 60 students from Universiti Islam Antarabangsa Tuanku Syed Sirajuddin (UniSIRAJ) as the research focuses on foundation level. This study employed purposive sampling based on Krejci & Morgan (1970) sampling table. 30 of the students were placed in the control group (n=30) while the remaining were

putted in the experimental group (n=30). The researchers only used the experimental group to portray the result as the control group is not experiencing playing the "Arabiyatuna" board game.

Instrument:

The reaches used the Google Form to gather the feedback of the students after they experienced playing with "Arabiyatuna" board game. The questions were divided into 3 different questions using 5 points-Likert scale; Question 1 concerning about the implementation of reinforcement while question 2 regarding about the punishment method may help to improve incorrect vocabulary and question 3 concerning about the frequency of punishment in the game.

Data analyse:

Collected data was analyzed using Winstep program,the Rach model. Descriptive Statistic was used for Statistical technique.

Discussion:

Do you think that the reinforcement method in the game "Arabiyatuna" enhances the vocabulary in Arabic?

Table 1: Belief that reward enhances vocabulary learning

No	Item	Frequency (f)	Percentage (%)
1	Strongly Disagree	0	0.0
2	Disagree	2	6.66
3	Neutral	4	13.32
4	Agree	10	33.33
5	Strongly agree	14	46.62
	Total	30	100

The survey results in Table 1 indicates a strong belief among respondents that rewards enhance vocabulary learning. Out of 30 participants, a

significant majority (79.95%) either agree or strongly agree with this statement, with 33.33% agreeing and 46.62% strongly agreeing. A smaller

portion of the respondents remain neutral (13.32%), while only a minimum of 6.66% disagree, and no one strongly disagrees. This suggests that most participants view rewards as a positive reinforcement tool in vocabulary acquisition. These figures reflect strong support

for the statement among learners, with a small percentage of opponents and neutrals; the Mean value is 4.4, the standard deviation is 0.7, which leads to the due estimate is high.

Do you think the punishment method helps improve incorrect vocabulary?

Table 2: Belief that reward enhances vocabulary learning

No	Item	Frequency (f)	Percentage (%)
1	Strongly Disagree	0	0.0
2	Disagree	2	6.66
3	Neutral	4	13.32
4	Agree	11	36.63
5	Strongly agree	13	43.29
	Total	30	100

Table 5.3.49 indicated a strong belief that rewards enhance vocabulary learning using the theory of reinforcement and punishment. Out of 30 respondents, a substantial majority (79.92%) either agree or strongly agree with this statement, with 36.63% agreeing and 43.29% strongly agreeing. A smaller portion remains neutral (13.32%), while only 6.66% disagree, and none strongly disagree. This data reinforces the idea

that most participants view rewards as an effective tool for improving vocabulary acquisition. These figures show strong support for the statement among learners, with a small percentage of opponents and neutrals; the Mean value is 4.4, the standard deviation is 0.7, which leads to the due estimate is high.

What punishment did you inflict throughout the game?

Table 3: Frequency of Punishment throughout the Game

No	Item	Frequency (f)
1	Research in the dictionary	6
2	Star Jumpping	23
3	Squatting	17
4	Repetition by speaking out the word	5
5	Clapping hands	9
6	Writing the incorrect word in the book	15

The table 3 summarizes the frequency of different punishments used throughout a game. The most common punishment is "Star Jumping," with 23 occurrences, followed by "Squatting" with 17 occurrences. "Writing the incorrect word in the

book" is also relatively frequent, happening 15 times. Other punishments include "Clapping hands" (9 times), "Research in the dictionary" (6 times), and "Repetition by speaking out the word" (5 times). This data highlights the variety and frequency of punishments applied during the game

Conclusion:

The Arabiyatuna board game is suitable for Arabic language learners globally and can be utilized by all - students, university-level students, and Arabic teachers and lecturers. It serves as a convenient and effective tool for teaching and learning purposes.

The potential for commercializing the Arabiyatuna Board Game is undeniable. The public can fully utilize the board to learn Arabic at a basic level. Additionally, the ministry may consider the board as an additional educational tool, and lecturers can adopt the board as a supplementary tool in the classroom.

The data from the three tables provide a comprehensive view of participants' beliefs about the role of rewards in vocabulary learning and the frequency of various punishments used in a game setting. The first two tables consistently show a strong belief among respondents that rewards enhance vocabulary learning, with a significant majority (around 80%) agreeing or strongly agreeing with this statement. This indicates a positive perception of rewards as an effective tool for vocabulary acquisition.

The third table, which details the frequency of different punishments, reveals that "Star Jumping" is the most commonly used punishment, followed by "Squatting" and "Writing the incorrect word in the book." These punishments are more frequently applied compared to others like "Clapping hands,"

"Research in the dictionary," and "Repetition by speaking out the word."

Overall, the data suggest that while rewards are viewed favourably for playing the "Arabiyatuna" enhancing vocabulary learning, a variety of punishments are also employed to reinforce learning through different physical and cognitive activities. This combination of rewards and punishments reflects a balanced approach to vocabulary acquisition, leveraging both positive reinforcement and corrective measures.

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