GRAMMAR-RELATED AUTONOMOUS SUPPORTIVE PRACTICE (GRASP) VERSION 2: A LANGUAGE LEARNING GAME FOR IMPROVEMENT OF ENGLISH GRAMMAR COMPREHENSION AND MEMORY RETENTION

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Abstract: It is fundamentally important to use effective techniques in learning a language since language learning is not easy work and efforts made for this purpose must be retained over time (Wright, Betteridge & Buckby, 2006). Upon realizing this issue, an English learning tool, Grammar-Related Autonomous Supportive Practice (GRASP) was invented. GRASP is a board game whose central objective is to strengthen grammar comprehension involving several language components namely, "nouns", "pronouns", "adjectives", "adverbs", "verbs", "tenses", "prepositions", and "conjunctions". As GRASP is an acronym created to represent the meaning of the English word, "grasp", the game is intended to improve learners' understanding and memory of English grammar via playing it. The game also involves various aspects that make it more interesting, specifically the visual stimuli like the graphics on grammar question cards and a colorful board; the determination of the winner based on who is able to answer the most grammar questions correctly as well as who is the fastest to arrive at the finish box; the penalty for a wrong answer; mystery rewards; and many other fun elements. Being made of affordable light materials like papers andplastic, GRASP is easily produced and marketable for the reach of many potential users.

Keywords: Grammar-Related Autonomous Supportive Practice (GRASP), grammar learning, grammar understanding, memory retention

1. Introduction

Chrystal (2004) claims that grammar is the structural foundation that determines our capability in expressing ourselves with a language and the more humans realize how grammar functions, the more they can appraise the effectiveness of their use of the language. Despite there are many other language board games such as "Scrabble", "Upwords", "Bananagrams", "Catch Phrase" and "Balderdash" which are rated as among the top ten board games for English as a Second Language (ESL) classes (Zakhareuski, n.d), the present study aims to highlight the issue of grammar learning with respect to using a board game specially designed for learning this component of language which is called, "Grammar- Related Autonomous Supportive Practice" (GRASP). The findings pertaining to the respondents' views towards the employment of GRASP in learning grammar can determine if it can be another learning tool that should be introduced to the public for more people to benefit from.

2. Problem Statement

In a review of nine board, card, and digital games by Cunningham (n.d), a game called, "Balderdash" (a trivia bluffing game where players try to guess the correct definition of a word read by the Dasher), despite this game having the strongest socialization element as it engages players in conversations, this game encourages players to employ trickery on opponents. Obviously, this game focuses on English conversational aspect and negatively promotes the art of deception. Compared to GRASP, truth is promoted in the form of one correct and acceptable answer of all the choices to be given by players. Wright, Betteridge and Buckby (2006) claim that the sense of competition that exists in a game can be encouraging for some learners. However, it can also be destructive for players of the game as they can be apprehensive as a result of being the losers in the game since they are likely to categorize themselves as "not good" compared to the winners (Wright, Betteridge & Buckby, 2006). Based on this argument, the present study intends to discover if GRASP can function as an effective language game or not with respect to it being a tool for improving grammar comprehension and memory retention of grammar rules.

3. Objectives Of The Study

The present study aimed to achieve two objectives as follows:
1. To explore UiTM students' perception on GRASP as a grammar learning tool for improvement of English grammar understanding.
2. To investigate UiTM students' perception on GRASP as a grammar learning tool for preservatioNof English grammar memory.

4. Research Questions

The research questions of this study are as follows:
1. What is UiTM students' perception on GRASP as a grammar learning tool for improving English grammar understanding?
2. What is UiTM students' perception on GRASP as a grammar learning tool for preserving English grammar memory?

4. Significance of the Research

The present study can serve as a source of information about grammar learning, particularly with regard to learning grammar through board games. The findings about GRASP as the board game studied can perhaps contribute to more insights about the effectiveness of using board games as compared to other learning methods in learning English grammar.

5. Literature Review

5.1 Grammar Learning And The Nature Of Games

Lewis (1999) claims that grammar can refer to learning a different language structure than that of the learner's first language. Lewis (1999) further explains that learners deal with the grammar of a new language by learning the rules or discovering them. Learning grammar can take place either by reading about grammar rules or by being taught about them by someone. It is undeniable that the term, "grammar" can supply negative connotations to some individuals since it basically involves reciting language rules and correctly applying them (Lewis, 1999). According to Wright, Betteridge and Buckby (2006), it is vital to use effective techniques for learning a language as language learning is not easy work and effort in learning it must be retained over time. According to Schrier (2014), "Games, whether digital, hybrid, virtual, analog, online, offline, console, web-based, text-based, graphics-intensive, or mobile are, at their core, games. Human beings have been playing games, and learning from games, since the start of humankind" (p. 1). The nature of games is also described by Stelovsky (2001) as having a series of tasks that players need to complete and normally they are measured based on their scores. Lucas (2017)argues, "If games have their own identity in the teaching/learning process, the game is a resource that complements in a powerful way the game itself" (p. 911).

5.2 Using Games For Enhancing Comprehension Of Target Language

With regard to the benefits of using games in terms of language understanding, according to Petrovic (2014), by playing games, learners will manage to obtain a sense of comprehension for their second language in a playful method that this can encourage them to continue learning the language as well as provide a push forward in their learning. In a study conducted by Korkmaz (2013) regarding the perceptions of young learners and practicing teachers towards learning a language through games, 81 (9%) of the respondents believed that children were able to understand English better when they were playing listening game, and 81 of them also admitted that when children read English texts as a game, they could understand better. Besides, the respondents (81) agreed that children liked to play games when learning grammar structures.

5.3 Using Games for Memory Retention of Target Language

With respect to learning tools, Haldfield (1999) mentions that games can be utilized as a memory aid and at all stages of learning either at the controlled stage or autonomous one. Luu and Nguyen (2010) claim that students will remember better the language they have learned when it is experienced more vividly in a game. According to Gunn and McCallum (2005), games are another strategy to help learners learn, review, and internalize a variety of grammar structures. Games place emphasis on the meaning in language learning, resulting in learners better remembering the language they have learned better (Tuan & Doan, 2010).

6.0 Methodology

6.1 Research Design

The present study employed a descriptive and quantitative research design using a questionnaire survey. Besides that, there was no hypothesis postulated and tested.

6.2. Participants

All the respondents were university students pursuing their diploma. In terms of gender, a majority of the respondents were male (56%) as compared to female respondents. The study involved 114 diploma students of UiTM Pulau Pinang. There were 64 male and 50 female students aged between 19 to 20 years old who were taking English courses at the selected university, volunteered to participate in the study.

7. Instruments

7.1. GRASP Game and Procedure of Playing it

GRASP is an English board game that concentrates on parts of speech of English language such as "nouns", "pronouns", "adjectives", "adverbs", "verbs", "tenses", "prepositions", and "conjunctions". To test the effectiveness of GRASP as a board game in terms of grammar understanding improvement and grammar memory retention, the respondents (114 students) were assigned in groups of four members each to play the game. Each player was assigned his or her turn to roll a dice in the sequence of Player A, B, C and D (the students were determined to be Player A, B, C or D prior to rolling the dice on a consensus). The dice was rolled to see the number and color each player would get. If the dice rolled by Player A showed number 3 (number 3 was of orange color), then the leader (who was assigned prior to playing GRASP) would pick a question card from the box that contained question cards that were orange in color. The orange color meant that Player A would need to answer a question about conjunctions. If Player A was able to answer the question on the card correctly, he or she could roll the dice in the next round. If he or she failed to answer the question correctly, he or she would need to be penalized where he or she would lose one opportunity to roll the dice in the next round and had to wait for another round (round 3) to roll the dice again. This would slow down his or her "journey" to get to the finish box and indirectly this would encourage the players to try to answer the questions correctly. Next, Player B would roll the dice, and then Player C and finally Player D. The same process and rules were also applied for these players.

The description of the colors presented on the game board is as follows:
1. Blue = questions related to verbs and tenses
2. Pink = questions related to adjectives and adverbs
3. Yellow = questions related to nouns and pronouns
4. Orange = questions related to conjunction
5. Green = questions related to preposition
6. Red = discussion or grammatical description by a player
7. Black = a player has to restart the game at the Start box
8. White = a player has to move 2 steps from the current position
9. Purple = mystery card ("rewards" or "punishments")

GRASP board

GRASP question cards

7.2 Questionnaire

The instrument used in the study was a questionnaire administered to each respondent involved in the study. The questionnaire consisted of 23 self-reporting statements. Each statement was measured using 5-point Likert Scale where a numerical value was assigned to each level of agreement or disagreement and a state of being unsure: Strongly disagree= 1, Disagree= 2, Undecided= 3, Agree= 4, and Strongly agree= 5.

7.3 Research Procedure and Data Collection

Each group played the game within 1-2 hours. After they were finished, they were given a questionnaire that was composed of some questions about GRASP with respect to GRASP as a tool for grammar understanding improvement and grammar memory retention for them to complete. The participants answered the questionnaire within 30 minutes after some explanation about the questionnaire and the purpose of administering it was given.

7.4. Data Analysis

The data collected from the questionnaires submitted by the participants was entered into the Statistical Package for Social Sciences (SPSS) version 21. The quantitative data of this study was later analyzed and there was no test-retest involved in this study as the data was collected in one stage only for the main study.

8. Findings And Analyses

8.1 Cronbach's Alpha Reliability Coefficient for the Instrument

N= 30

Reliability Statistics for All Items		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.910	0.911	12 (item 1-12)
0.928	0.929	11 (item 13- 23)

Table 1

N= 114

Reliability Statistics for All Items		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.963	0.963	23

Table 2

A pilot study was conducted with 30 respondents to identify whether the items in the questionnaireused were reliable. This study had no issue with the data entry as well as missing values. The Cronbach's alpha value was 0.910 for items concerned with Research Question 1 (item 1-12), while for Research Question 2, the value obtained was 0.928. These values showed they were acceptable values that indicated the items in the questionnaire were reliable as to be utilized for the present research. As for the main test with 114 respondents, the alpha coefficient value generated for the 23 items was 0.963. This suggests that the items possess relatively high internal consistency. It is a standard yardstick that a reliability coefficient of 0.7 or higher (alpha value) is considered acceptable (Nunnaly, 1978) and this is the rule of thumb for interpreting an alpha value.

8.2 Descriptive Statistics Of The Data On The Respondents' Perception Towards Grasp As A Tool For Grammar Understanding Improvement

N=14

Item	Min	Max	Mean	Std. Dev	Skewness		Kurtosis	
						Std. Error		Std. Error
	Stats	Stats	Stats	Stats	Stats	Error	Stats	Error
1. I enjoy playing GRASP as it is easier for me to understand English grammar by playing it.	2	5	4.28	4.28	-0.561	0.226	0.197	0.449
2. I like to play GRASP since it is a game that is able to strengthen my comprehension of English grammar.	3	5	4.28	0.631	-0.302	0.226	-0.643	0.449
3. I am confident that GRASP is able to help me improve my comprehension of English grammar.	3	5	4.37	0.584	-0.284	0.226	-0.690	0.449
4. While playing GRASP, I always pay attention to the English grammar discussed and this has strengthened my comprehension of English grammar.	2	5	4.23	0.580	-0.341	0.226	1.076	0.449
5. The question-and-answer aspect of GRASP is able to improve my comprehension of English grammar.	3	5	4.37	0.584	-0.284	0.226	-0.690	0.449
6. GRASP has strengthened my comprehension of English grammar.	3	5	4.35	0.532	0.086	0.226	-0.906	0.449
7. The grammar rules used for testing English grammar comprehension in GRASP are able to improve my comprehension of the grammar.	3	5	4.32	0.572	-0.140	0.226	-0.631	0.449
8. GRASP is a game for strengthening English grammar comprehension that is easy to play.	3	5	4.43	0.564	-0.321	0.226	-0.843	0.449
9. I will recommend my friends to play GRASP for strengthening their English grammar comprehension.	3	5	4.32	0.631	-0.384	0.226	-0.656	0.449
10. Apart from playing for the sake of being a winner in GRASP game, at the same time I can also strengthen my comprehension of English grammar.	3	5	4.34	0.529	0.118	0.226	-0.876	0.449
11. The types of English grammar questions included in GRASP have managed to strengthen my comprehension of English grammar.	3	5	4.18	0.541	0.112	0.226	0.031	0.449
12. After playing GRASP, my comprehension of English grammar has become better.	3	5	4.18	0.632	-0.166	0.226	-0.559	0.449

Table 3

This section describes the data generated from the SPSS for the analyses of the responses (see Table 3 and Table 4) regarding the research questions investigated that were provided by the 114 respondents for the main study. Besides answering the research questions, this study also assessed the normality issue of the data. Therefore, two normality tests were conducted, namely, skewness and kurtosis. The well-known rule of thumb for skewness and kurtosis is the value should be within ±2 (Burns& Burns, 2008). It was discovered that there was no issue with skewness since all items were within the recommended values.

With regard to answering Research Question 1 ("What is UiTM students' perception on GRASP as a grammar learning tool for improving English grammar understanding improvement?"), most of the respondents (M= 4.28, SD= 4.28) agreed with item 1 ("I enjoy playing GRASP as it is easier for me to understand English grammar by playing it"). Also, most of the respondents revealed that they favoured GRASP due to its ability to improve their grammar comprehension (item 2: M= 4.28, SD= 0.631). The respondents in majority were confident with GRASP's ability to assist them with their grammar understanding strengthening (item 3: M= 4.37, SD= 0.584). There were some features of GRASP that were claimed by the majority of the respondents could contribute to the improvement of their grammar comprehension such as grammar discussion as part of the game (item 4: M=4.23, SD= 0.580), questions and answers of the grammatical rules included (item 5: M= 4.37, SD= 0.584), the grammar

rules selected for GRASP (item 7: M= 4.32, SD= 0.572), and the types of questions asked in the game (item 11: M= 4.18, SD= 0.541). Also, the respondents (M= 4.34, SD= 0.529) mostly agreed that apart from struggling to be a winner when playing GRASP, they could also strengthen their grammar comprehension while playing GRASP (item 10).

4.3 Descriptive Statistics of the Data on the Respondents' Perception towards GRASP as a tool for Grammar Memory Retention

N= 114

Item	Min	Max	Mean	Std. Dev	Skewness		Kurtosis	
						Std. Error		Std. Error
	Stats	Stats	Stats	Stats	Stats	Error	Stats	Error
13. Using GRASP makes it easy for me to remember things related to English grammar.	2	5	4.27	0.669	-0.558	0.226	0.093	0.449
14. The graphics of GRASP represent specific symbols that make it easy for me to recall things related to English grammar.	2	5	4.32	0.602	-0.528	0.226	0.781	0.449
15. The use of colored cards in GRASP makes it easy for me to remember the English grammar rules learnt earlier.	2	5	4.25	0.607	-0.429	0.226	0.715	0.449
16. My memory of the English grammar rules has improved after playing GRASP games.	2	5	4.21	0.587	-0.341	0.226	0.994	0.449
17. I am more confident with my memory of English grammar understanding after playing the GRASP game.	2	5	4.25	0.632	-0.462	0.226	0.428	0.449
18. The types of questions included in GRASP manage to enhance my understanding of English grammar.	2	5	4.30	0.579	-0.413	0.226	1.035	0.449
19. The requirement to answer the grammar questions correctly in order to avoid the penalty when playing GRASP can influence me to try to recall the English grammar learnt earlier.	3	5	4.32	0.569	-0.112	0.226	-0.609	0.449
20. I feel confident to use English with proper grammar after playing GRASP.	2	5	4.24	0.642	-0.463	0.226	0.313	0.449
21. My understanding of English grammar is getting better after playing GRASP.	2	5	4.28	0.631	-0.517	0.226	0.459	0.449
22. I would suggest playing GRASP to my friends as one of the ways to revise English grammar for a limited time, such as during the final preparation for the exam.	2	5	4.25	0.649	-0.501	0.226	0.256	0.449
23. The questions in GRASP are challenging and they suit my level as a university student.	2	5	4.39	0.619	-0.731	0.226	0.753	0.449

Table 4

Table 4 presents the answer to the Research Question 2, "What is UiTM students' perception on GRASP as a grammar learning tool for preserving English grammar memory retention?" The majority of the respondents agreed that the use of GRASP had made it easy for them to remember things related toEnglish grammar (item13: M= 4.27, SD= 0.669). They were in the opinion that GRASP graphics (item 14: M= 4.32, SD= 0.602) and coloured cards (item 15: M= 4.25, SD= 0.607) had improved their memory of the rules (item 16: M= 4.21, SD= 0.587). With regard to GRASP questions, the types of questions asked on the cards were claimed to have enhanced the respondents' grammar understanding (item 18: M= 4.30, SD= 0.579). The respondents thought that the questions were challenging but they were suitable for their level as university students (item 23: M= 4.39, SD= 0.619) and the GRASP's requirement to answer these questions correctly had helped to influence them to recall the English grammar learnt (item 19: M= 4.32, SD= 0.569). GRASP game was believed to have made the respondents more confident of their memory of English grammar rules (item 17: M= 4.25, SD= 0.632), increased their understanding of English grammar rules (item 21: M= 4.28, SD= 0.631) and made them more confident to use English properly (item 20: M= 4.24, SD= 0.642). Given all the benefits the respondents believed to have gained, they agreed to recommend playing GRASP to their friends (item 22: M= 4.25, SD= 0.649).

9. Discussion And Conclusion

According to Malaysia Education Blueprint 2013-2025 (Preschool to Post-Secondary Education), language mastery has become an important focus in the process of transforming the national education system due to the fact that students who can use a certain language confidently and fluently are able to increase their marketability and maximize their career opportunities in the working world. With amazing proficiency of English, graduates produced by local universities will have a higher chance of being employed, thus contributing to overcoming the problem of unemployment among local fresh graduates.

To realize this mission of producing graduates who are competent English users, the techniques used in the classroom need to be varied, so that students' experiences with regard to the use of the language can be maximized apart from exploiting students' own independent effort when learning outside of the classroom. In a study conducted by Cohen (2009) on Second Grade students about these students' experience with Image Creation Intervention which involved a dual coding method which referred to an index card with a picture depicting the word that was presented to the students, it was revealed that "most of the students said that the interventions that used images, image creation and/or dual coding, had been the most helpful in aiding them with the memorization of the vocabulary words" (p. 20). According to Rodilla (2012), "Game play (and more specifically, board game play) is the most accurate form of play in the standard EFL classroom setting" (p. 9). Thus, the use of games such as GRASP in classroom for grammar learning is a worthy effort to be added to the existing teachers' pedagogical repertoire. As seen from the findings of this study, GRASP has many attractive elements, mainly fun, excitement and most importantly, knowledge to assist learners in improving their knowledge, understanding, and memory of English grammar.

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