Revolutionizing Children's English Vocabulary Acquisition: The Power of Games "My Talking Tom"

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ABSTRACT

This study examines how interactive digital games, particularly "My Talking Tom," can transform how children acquire English vocabulary. By focusing on this popular virtual pet game, the research assesses its effectiveness in combining entertainment with educational benefits. Using a descriptive qualitative case study approach grounded in Skinner's theory, data were collected through direct observation. , the study investigates how the game's features—such as its dialogue, character interactions, and context-based language—aid in vocabulary learning. The results indicate that "My Talking Tom" captivates children and enhances their vocabulary skills through engaging and practical language exposure. The study highlights the potential for digital games as innovative educational tools, suggesting a shift in traditional language learning methods through technology.

Keywords: *English Vocabulary; Children; Language Acquisition; Educational Games; My Talking Tom*

INTRODUCTION

Gaming has become widespread across different age groups, especially among children. Beyond entertainment, games have proven effective in expanding foreign language vocabulary, particularly English, due to the frequent use of English as the instructional language in games. Mastery of English vocabulary is fundamental for reading, writing, listening, and speaking proficiency. A rich vocabulary enhances overall language comprehension, particularly in English. Various methods exist for learning English vocabulary, with educational games being a notable avenue. These games expose participants to new vocabulary in an incidental and engaging manner. For individuals with limited exposure to English, these games provide an initial platform for encountering and familiarizing themselves with English vocabulary. Alqahtani (2015) defines vocabulary as a collection of words that convey meaning, acquired both consciously through structured learning and subconsciously through exposure and environmental factors. Educational games exemplify the latter, facilitating implicit vocabulary acquisition.

Vocabulary acquisition is a complex and ongoing process that requires significant time and is characterized by unpredictability. Research in this area often focuses on word meanings and the frequency of word encounters. The current framework includes nine 'word knowledge' components, covering spelling, morphology, semantics, grammar, and collocations. Psycholinguistics, the study of language use and acquisition, delves into these aspects, as noted in Schmitt's work (2019). Psycholinguistics explores language use and acquisition, examining the interaction between language and cognitive processes, especially in speech production and comprehension. The field originated in the 20th century and addresses three main areas: language acquisition, the relationship between language knowledge and use, and the processes involved in speech production and comprehension (Arifin, Hermoyo & Ridlwan, 2023).

Language acquisition, a rapidly evolving field within psycholinguistics, has gained prominence due to changing perspectives on language teaching and learning and the universal concepts in language acquisition (Aprilia, 2021). Language acquisition, including vocabulary mastery, differs between adults and children. Developing children acquire their first language naturally, influenced by their mother tongue. This process often involves learning multiple languages in bilingual environments, where children integrate two languages during their first language (L1) acquisition (Lestari & Maria, 2013). Children's inherent Language Acquisition Device (LAD) facilitates this process, enabling them to grasp L1 effortlessly. L1 acquisition in children encompasses various skills relevant to this research, such as Receptive Language, Simultaneous Command Understanding, Complex Sentence Repetition, and Game Rule Comprehension (Lestari & Maria, 2013). Aprilia (2022) emphasizes the importance of studying children's unique linguistic development, as it can provide insights into broader language acquisition theories. Mobile applications, particularly educational games, are powerful tools for language development. Research by Kacelt and Klimova (2019) highlights that these applications enhance language skills, especially vocabulary acquisition, and motivate children to learn through engaging interfaces combining visuals, audio, and text.

Educational games blend entertainment with learning, spanning genres like shooting, adventure, role-playing, simulations, quizzes, and puzzles (Winarmi, Naimah, & Widiyawati, 2019). "My Talking Tom" was chosen for this research due to its classification as a simulation-based educational game with accessible vocabulary and visual cues that aid comprehension. This research employs B.F. Skinner's behaviorism theory examines children's vocabulary acquisition. Skinner's theory suggests that language skills develop through environmental stimuli and habit formation, influenced by exposure duration and stimulus-response and imitation principles (Huda, 2017). Extended gameplay can impact users positively and negatively, with one positive outcome being increased vocabulary in foreign languages, particularly English. Therefore, this research explores the vocabulary acquisition facilitated by "My Talking Tom" gameplay and its impact on children's English vocabulary proficiency.

Theoretical Framework

The 'My Talking Tom' mobile game was selected as the primary subject of investigation for this research endeavor. This study has been designed to rigorously examine how children acquire English vocabulary through online gaming media. Specifically, the research focuses on three children between the ages of 5 to 7 years as research subjects, denoted by the initials A (5 years old), K (6 years old), and S (7 years old). These children hail from distinct familial backgrounds, experience disparate family dynamics, and maintain varying nutritional profiles. The selection of research subjects is grounded in the author's consideration of language development stages. Within this framework, the author will utilize various words and sentences featured within the 'My Talking Tom' game as interrogative prompts during this research.

METHOD

This research adopts a qualitative, investigative approach to delving deeply into programs, events, activities, processes, or individuals. It also aimed to explore and understand the meaning individuals or groups ascribe to a social or human problem (Neisya, Aprilia, & Anita, 2023). Qualitative research seeks comprehension of social and humanitarian subjects through interviews, observations, and document analyses. This type of research is useful since the researchers need to know about an event, who was involved, and where it happened (Aprilia, Neisya, & Sonia, 2023). The outcomes of such research are not intended for generalization (Julianto, 2018). This research employs the Creswell case study method, entailing a comprehensive examination of a specific case (Levitt, Bamberg, Creswell, Frost, Josselson & Suárez-Orozco, 2018).

The selected medium of investigation for this research is the "My Talking Tom" game. The rationale behind opting for "My Talking Tom" as the research subject stems from its classification as an educational simulation game. Notably, "My Talking Tom" features a selection of readily comprehensible vocabulary to children. Furthermore, the game incorporates animations and visuals that align with the intended meanings of the vocabulary, facilitating a seamless understanding for young learners.

The research investigates how children acquire English vocabulary through interaction with this game. The study involves three female participants, aged 5-7 years, identified as A (5 years old), K (6 years old), and S (7 years old). These participants stem from distinct family backgrounds, varied upbringing approaches, and diverse nutritional habits. The vocabulary embedded within the "My Talking Tom" game was employed as the basis for interview questions. Participant selection aligns with the stages of language development, as outlined by Ramdhani and Amalia (2023). The Later Development phase, from 30 months of age into adulthood, involves the progression toward sophisticated grammatical structures and an expanded vocabulary repertoire.

Data collection comprises observation, wherein the researchers gauge the vocabulary acquired by the children while engaging with "My Talking Tom." For two

weeks, with frequent gameplay, the researchers attentively observe and take notes regarding the vocabulary mastered by the children during game sessions. Supplementary to direct observation, interviews are conducted, and the note-taking method is employed to ensure comprehensive documentation of key information. Interviews unveil the children's vocabulary comprehension from the "My Talking Tom" game. Drawing inspiration from Creswell, the data analysis process involves deciphering textual or visual data. The analysis journey encompasses data preparation, diverse analytical approaches, profound data comprehension, data presentation, and expansive data interpretation. In the analytical process, the following steps are followed: (1) Identifying words acquired through "My Talking Tom," (2) Classifying vocabulary as either easily comprehensible or not using the VocabKitchen vocabulary profiler, (3) Cross-referencing results from observations, (4) Employing a diary study to chronicle children's spoken words, (5) Drawing conclusions, based on vocabulary production at specific developmental stages. By adhering to this methodical approach, the research aims to unravel the nuanced intricacies of English vocabulary acquisition facilitated by the "My Talking Tom" game.

FINDINGS AND DISCUSSION

"My Talking Tom" stands as a virtual pet application introduced by the Slovenian studio Outfit7 on November 11, 2013. This game marked Outfit7's foray into smoother animations, showcasing the contemporary design of Talking Tom. The game's premise revolves around nurturing an anthropomorphic gray tabby cat named Tom, who can be renamed as per the player's preference. Players engage in Tom's care and guide him from kittenhood to adulthood, achieved by diverse interactions like feeding, attending to his bathroom needs, engaging in mini-games, and ensuring a comfortable resting place in his bed when tired. Tom can mimic spoken words for up to 25 seconds via the device's microphone, utilizing synthesized voices. Players can further personalize Tom with clothing, skins, and accessories through in-app purchases, adding a layer of customization.

The research at hand strategically selected "My Talking Tom" as the medium of investigation. The research is dedicated to comprehending how children absorb English vocabulary through online gaming media. Specifically targeting three children aged between 5 to 7 years old, denoted by initials A (5 years old), K (6 years old), and S (7 years old), the research intends to explore the vocabulary incorporated within the game through a series of questions posed to these subjects.

Drawing from the study's findings, the researchers illuminate the English vocabulary acquisition by children through educational games, grounded in Skinner's theory. This thoroughly examines how children absorb vocabulary in the context of "My Talking Tom." Furthermore, the research delves into elucidating the positive impacts of educational games on children's cognitive development. In essence, the research provides a comprehensive exploration of the vocabulary learning dynamics

within interactive online gaming, highlighting the unique attributes of "My Talking Tom" as a medium for linguistic development in children.

Table 1. The vocabulary found in the My Talking Tom game used for interviews

Vocabulary/Sentences	Age of children		
	5	6	7
Turn off the light	☑	☑	☑
Pet me, please	☑	☑	☑
Let's go to the bathroom	☑	☑	☑
I want to play, let's go to the living room	-	☑	☑
I'm sleepy, let's go to the bedroom	-	☑	☑
I have to pee	-	☑	☑
Drag food in my mouth	-	☑	☑
I'm hungry, let's go to the kitchen	-	☑	☑
Feed my belly	-	☑	☑
Customize your tom	-	☑	☑
Its toilet time	☑	☑	☑
Watch over me	-	-	-
Start	☑	☑	☑
Play	☑	☑	☑
Select	☑	☑	☑
Remove	☑	☑	☑
gray fur	☑	☑	☑
White fur	☑	☑	☑
Black fur	☑	☑	☑
Brown fur	☑	☑	☑

Orange fur	☑	☑	☑
Candy fur	-	-	☑
Rainbow fur	☑	☑	☑
Round glasses	-	☑	☑
Eye patch	-	☑	☑
Sunglasses	☑	☑	☑
Swimming mask	☑	☑	☑
Fairy googles	-	-	-
Police sunglasses	-	-	-
Green eyes	☑	☑	☑
Pink eyes	☑	☑	☑
Cat eyes	☑	☑	☑
Hungry potion	☑	☑	☑
Baby potion	☑	☑	☑
Max potion	-	☑	☑
Adult potion	☑	☑	☑
Balloons	☑	☑	☑
Spooky train	-	-	☑
Ice smash	-	-	☑
Level up	☑	☑	☑
Stickers	☑	☑	☑
Try it	☑	☑	☑
Total acquired vocabularies	26	36	39

Drawing from the outcomes of the observations and interviews detailed in the table mentioned above, it is evident that children can acquire and comprehend the English vocabulary embedded within the My Talking Tom game. These data further substantiate the notion that as a child ages, their vocabulary acquisition intensifies,

accompanied by a heightened capacity to grasp increasingly intricate vocabulary structures.

Table 2.The results of vocabulary classification using the vocabulary profiler

Vocabulary/ Sentences	A1	A2	B1	B2	C1	C2
Turn off thelight	of, the, light	turn				
Pet me, please	Pet, me, please					
Let's go to the bathroom	Go, to, the, bath,room	lets				
I want to play, let's go to the livingroom	I, want, to, play,go, to, room	lets		living		
I'm sleepy, let's go to the bedroom	I'm, go, to, the,bedroom	lets	sleepy			
I have to pee	I have, to				pee	
Drag food in my mouth	Food, in, my, mouth		drag			
I'm hungry, let's go to the kitchen	I'm, hungry, go, to, the kitchen	lets				
Feed my belly	My		feed		belly	
Customize your tom	your				customize	
Its toilet time	It's, toilet, time					
Watch over me	Over, me	watch				
Start	Start					
Play	Play					

Select			select		
Remove			remove		
Gray fur	Gray		fur		
White fur	White		fur		
Black fur	Black		fur		
Brown fur	Brown		fur		
Orange fur	Orange		fur		
Candy fur		candy	fur		
Rainbow fur			fur	Rainbow	
Round glasses		round			
Eye patch	Eye				patch
Sunglasses	Sun				
Swimming mask	Swimming			mask	
Fairy googles				goggles	fairy
Police sunglasses		police			
Green eyes	Green, eye				
Pink eyes	Eyes	pink			
Cat eyes	Cat, Eyes				
Hungry potion	Hungry				potion
Baby potion	Baby				potion
Max potion					
Adult potion	Adult				potion
Balloons		balloons			
Spooky train	Train				spooky
Ice smash	Ice			smash	

Level up	Up	level	
Stickers			stickers
Try it	It	try	

Based on the results of vocabulary classification using the CEFR (Common European Framework of Reference for Languages) with the vocabulary profiler, the explanation is as follows:

A1 : Beginner

Individuals at this level possess rudimentary English skills and can understand and utilize common vocabulary and simple sentence structures.

A2 : Elementary

Individuals with an A2 or elementary level proficiency can communicate in English, though their scope is limited to mastered subjects. For instance, they can comprehend brief narratives and discuss personal preferences like favorite songs.

B1 : Intermediate

Individuals can proficiently engage in passive and active English conversations at this stage. The range of topics they can discuss is broader than the previous level, spanning informal and somewhat formal settings. This may involve topics like personal goals, lifestyles, and even participating in job interviews in English.

B2: Upper intermediate

At the B2 level, individuals display English mastery across various contexts with relative ease. They adeptly understand and employ intricate English constructs. They are capable of composing texts on societal subjects, furnishing comprehensive explanations.

C1: Advanced

Proficiency at this level signifies the ability to utilize English for academic and professional ends. Individuals encounter minimal difficulties in understanding and applying English across diverse scenarios. Expressing ideas spontaneously, fluently, and confidently in both oral and written forms across varied subjects becomes second nature.

C2 : Proficient

Individuals who achieve a C2 level of proficiency are equivalent to native speakers. This implies the aptitude to wield English effortlessly across all scenarios and conditions (Karagoz & Cobanoglu, 2022). These CEFR levels provide a

comprehensive framework for gauging English language competency, highlighting the gradual progression from basic skills to near-native fluency.

Discussion

After conducting observations and interviews with the subjects described in the table above, Skinner's theory proves that language acquisition occurs through exposure, exemplified in examples such as playing the game "My Talking Tom". Vocabulary that is encountered repeatedly becomes embedded in memory, developing into a newlanguage that enhances English vocabulary.

Engaging with educational games represents a viable strategy for language acquisition. Such games serve not only as sources of entertainment but also as potent tools for learning. By incorporating language learning within the context of a game, individuals are more likely to remain motivated and less burdened when tackling what may be perceived asa complex linguistic endeavor. This heightened motivation, in turn, contributes to optimizing learning outcomes.

The amount of time users devote to playing these games plays a pivotal role in shaping their proficiency in the English language. The repetition of vocabulary within the game environment and consistent contextual usage bolsters their comprehension of the language. The substantial accumulation of vocabulary and the regular practice of English interactions foster a sense of familiarity and ease. Consequently, language skills encompassing listening, speaking, reading, and writing are poised to flourish. Analyzing the game "My Talking Tom" through vocabulary classification using a vocabulary profiler, it can be seen that the dominant vocabulary is included in level A1 (beginner), which is easy to understand. There are also elements from the A2 (basic) and B1 (intermediate) vocabulary groups. Acquisition of abundant vocabulary and frequent English interaction fosters user familiarity. Therefore, language skills, including listening, speaking, reading, and writing, will develop.

These learning media, which encapsulate educational games, encourage the creative use of language. Educational games encourage the communicative use of language, facilitating meaningful language contexts and thereby improving English comprehension.

This positively impacts a child's overall learning and English language proficiency, similar to in-school education. This confirmation is based on the results of observations and interviews conducted. Similar findings were also seen in the research by Hafifah, Adawiyah, and Putra (2022). Their study explored the influence of online games, such as Free Fire, Mobile Legends, Minecraft, and Roblox, on children aged 8 to 11 years. Their findings showed that children acquired new English vocabulary and understood its meaning through online games, which included terms such as ―error,‖ ―lag,‖ ―battle,‖ ―build‖ and more. Similar results were also corroborated in Putri, Susanto, and Nur's research (2022) outlined in their journal article. Their study tested the impact of YouTube game content on language acquisition in children aged 3 to 6 years. The research results highlight YouTube gaming content's positive and

significant impact on children's language acquisition, cultivating a diverse and broad vocabulary while improving language skills.

CONCLUSION

An educational game is a multimedia platform designed to consolidate knowledge, enhance user understanding, foster creativity, and stimulate cognitive faculties such as concentration and problem-solving. Most of these games employ English as the medium of instruction and communication, capitalizing on its status as an international language accessible to diverse audiences. Proficiency in English necessitates a robust vocabulary base. Among various methods, educational games stand out as a potent tool for vocabulary acquisition. Through these games, users indirectly assimilate novel vocabulary. In English language education, vocabulary is pivotal in honing linguistic aptitude. Proficiency in language skills like listening, speaking, reading, and writing hinges on a firm grasp of vocabulary. Inadequate vocabulary impedes the holistic development of language skills. Consequently, continuous vocabulary enrichment remains imperative. This premise aligns with prior research and the author's investigations, revealing the influence of educational games on English vocabulary acquisition. However, it's important to note that the efficacy of language acquisition in children varies based on factors such as gender, age, language proficiency, family dynamics, nutrition, experiences, game preferences, and learning objectives. As such, while educational games are powerful for fostering vocabulary growth, a comprehensive understanding of individual circumstances is essential to optimize their impact on language acquisition.

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