

Social Media with Language Acquisition Working Memory in Elementary School Students

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Abstract. This study aims to describe the role of social media in the acquisition of language of primary school age children. Language acquisition of children will be associated with the acquisition of words stored in working memory. Getting words can be stimulated by using social media. This study uses a quantitative approach. The research subjects were fourth grade elementary school students totaling 70 students. analysis of the study was carried out using the Pearson correlation coefficient and hierarchical regression performed. The results of the study show that social media has a role in acquiring languages from four classes in elementary school.

Keywords: social media, language acquisition, working memory, elementary education

1 Introduction

1.1 Social Media

In the past decade, social media culture has grown rapidly. Many fear the "different narratives" that require professional use of social media.[1]Because social media has become more influential both positive and negative.[2]–[6]In mid-2016, quickly searching for "social media" in popular job search engines produced more than 70,000 results. As noted mentioned popular platforms such as Facebook, Twitter, and LinkedIn that have claimed this reluctance are largely due to the prevailing cultural narratives about the nature of unprofessional social media.[4]Social media, especially with its cellphone capabilities, has made it easier for people to disseminate personal information to the public, to control the social media messages.[7]

The survey results prove the high popularity of YouTube on television. Professionals who chose YouTube as the second platform indirectly helped open YouTube's growing popularity over television.[8]He is the answer to a set of strengths inherent in YouTube which at the same time is a weakness for television. This phenomenon then becomes the basis of the researchers to conduct in-depth research and research on the reality created.

This potential is read by professionals who make YouTube a means of promoting the most ideal product or service. As a result, television station owners also positioned YouTube as the second platform for their programs originating from broadcast media, especially television. For every complicated mental task, people depend on working memory. Working memory capacity (WMC) is one of the predictors of success in learning. [9]Historically,

efforts to increase WM verbal through training have not been effective. This lesson provides elementary students with WM consolidation efficiency training to answer questions, Can reading comprehension be improved with WMC's strategic updates and utilization of episodic memory during reading? We report preliminary data from 10 grade 5 students who took three tests to measure the ability of 1 student to understand varying length sentences, 2) ability to decode English words, 3) capacity working memory.[10]Previous the research discusses the relationship between working memory and reading comprehension. [11][12]

1.2 Working Memory

Their definition of working memory is a multicomponent system for storing temporary information as it is processed.[13]Working memory has been recognized as one of the most important cognitive constructs associated with effective teaching and learning to emerge from cognitive psychology.[14]However, it remains difficult to achieve a single cohesive definition of working memory, by continuing to develop and debate its meaning and function. Many definitions of characteristic working memory are cognitive systems that are responsible for direct storage and manipulation of information.[12], [14]Although working memory is often presented the cognitive capacity that has component attention, it can also be conceptualized as a set of observable skills or strategies used by students to ensure effective cognitive and academic functions. [15]

2 Method

This study aims to describe the role of social media in the acquisition of language of primary school age children. Language acquisition of children will be associated with the acquisition of words stored in working memory. This study uses a quantitative research approach. This research was conducted as a survey using descriptive methods to ensure the correlation between social media and language acquisition associated with working memory. The sample in this study was fourth-grade students in elementary school, amounting to 70 students. the instruments in this study used a questionnaire before carrying out the structural equation model, whether the dataset met the hypotheses needed for the analysis of multiple variables was examined. Thus, the following cases are examined (i) whether the data is normally distributed or not (ii) is there a relationship between the variables examined. The research data set can be accessed in osf.io Open Science Framework.

3 Result and discussion

3.1 Result

The results of the research that have been carried out illustrate the role of social media stored in working memory. The test hypothesis is carried out to examine the relationship between social media (X1), and language acquisitionworking memory (Y). This research shows that social media (X1) has a relationship with working memory (Y). The initial calculation is done using the SPSS program to determine the correlation value between variables. The calculation results from the correlation of three variables can be seen in table 1 below:

Table 1. Calculate the variable X1 against Y

Variable	Koef: (b)	Std-Error	db	Count -t	t-table
X2	0.920	0.178	66	5.174	1.67

From table 1, it can be seen that the correlation value between X1 to Y is 0.826 and X2 to Y is 0.778 which is considered strong. To find out the hypothesis of each variable, the correlation coefficient will be calculated. Based on table 1 above, the regression equation is $Y = 5.174 + 0.920X1$. The R square coefficient or determination is 0.523, which illustrates that social media (X1) and working memory (Y) are 27.3%. From the results of the analysis presented in the table above, the price is obtained: $t1 = 5,500$; $db = 66$, $p\text{-value} = 0.00/2 = 0 < 0.05$, or H_0 is rejected. Thus, social media has a positive effect on working memory.

3.2 Discussion

The second working memory is the acquisition of a second language and its use. working memory is considered critical in enhancing capabilities in the second acquisition.[13][16]social media youtube or television if used in positive terms will help in acquiring children's language. Populer's current social media is youtube and the second is television. Work memory, important components or executive function indicators, are part of the basic function process. It helps to control components such as acquiring language, understanding language, reading skills, mathematics, and reasoning.[17]In addition, working memory requires information updating or manipulation.[18]

Thus, one function of working memory is to help detect differences between information sets. Given the sheer amount of information young people are responsible for integrating into academic settings, the ability to detect differences between information sets speaks directly why working memory is an integral part of academic benefits in children.[19]In addition, because it relates to specific educational outcomes, work skills need to be done to increase class involvement and complete classroom assignments from education to get initial instruction.[20]

Working memory is a prediction of school readiness especially for preschoolers with externalization of behavior problems. Working memory is also a prediction of social and academic achievements at the end of elementary school.[21]This the same study also found that working memory not only promotes development in other domains but can also offset deficits in mathematics and reading. In addition, the influence and importance of working memory increase with age.[22]In carrying out executive functions by giving children from 4 to 12 and suggesting that early executive function training can prevent greater performance gaps later. Together, these findings illustrate the clear relationship between work and indicative abilities of academic achievement from a young age. Although there is an established relationship between school achievement and working memory in children at the beginning of elementary school, this relationship in younger children is not very clear because of the lack of effective measurement of working memory in this young age group. Tasks that

are usually used to measure working memory in older populations involve reading digits or letters.[16]

In preschoolers, this is usually more difficult because the alphabet and numeric knowledge needed for these tasks cannot be learned. In addition, younger children have a further limited capacity for working memory compared to adults because this basic process is less developed at this point in their lives. [17]Previous research has shown that the word backward range can be used to effectively assess working memory in preschoolers.[23]

4 Conclusion

The findings in this study are that social media, namely youtube, and television, have a role in the effort to develop students' working memory in acquiring the second language of students. The implications of the second working memory are the acquisition of second language and its use. working memory is considered critical in enhancing capabilities in the second acquisition. It is necessary to optimize working memory in controlling components such as acquiring language, language comprehension, reading skills, mathematics, and reasoning in elementary school students.

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