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The Effects of Cartoons on the Use of Vocabulary Learning Strategies: A Case in Turkish EFL Classes

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Abstract

The impetus behind the design of this current research is to check the influence of cartoons on vocabulary learning strategies of students who have been exposed to three classics from English literature, *Treasure Island* by Robert Louis Stevenson, *Great Expectations* by Charles Dickens, and *Romeo & Juliet* by William Shakespeare. To that end, a vocabulary learning strategy test has been adopted in this quasi-experimental research which completely covers similar word units as in cartoons and hence aims to reveal favoured strategies of students besides clarifying the differences between the male and the female as well as three age groups, 10-19, 20-29 or 30 and elder. 20 randomly assigned participants working on extracts in plain texts without any comic strips were in control group, whereas 47 Turkish EFL students were in the experiment group reading cartoons in colour or black and white format. It was found out that the common vocabulary learning strategies that were used by the experimental group were determination and metacognitive strategies, whereas control group mainly adopted memory, social and metacognitive strategies. In terms of gender, the females practised determination and memory strategies, while the male students opted for social, metacognitive and cognitive strategies. Finally, 10-19 and 30 or elder subjects mostly utilized metacognitive and social strategies; however, the success of 20-29 year-old students centred around determination and memory strategies.

Keywords: Vocabulary Learning Strategies, Cartoons, Gender, Age

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Introduction

Due to the fact that vocabulary learning is not akin to skills or sub-skills, word system mainly brings individual items together by creating a rigorous discipline. So as to decipher how memory works, initially information processing needs to be illuminated. Field (2003) marks that it is made up of gradual and ensuing stages after knowledge is obtained. In order to apprehend, one has to go through these phases respectively:

> "identifying the words in the question, organising the words into a syntactic pattern, turning the question into a proposition (an abstract idea), searching his memory for information, retrieving the information, turning the information into words, and uttering the words" (Field, 2003, p.17).

Regardless of how many ready-made forms exist to be prompted in the brain, the fact that all those steps are performed even in less than a second is the magic behind the function of mind indeed. Thereby, a lot of scholars have searched for the hidden sight of this process in language learning to reveal permanence and retention of the information through some implementations along with cartoons (Ellman, 1979; Genç, 2004; Harris & Snow, 2004; Hutchinson, 1949; Liu, 2004; McDonald, 2009; Nyberg, 1998; Sones, 1944; Wax, 2002). Before introducing any related research about its adoption in the field, cartoon and its role in cognitive development is to be reviewed well.

Cognitive Development on the Bases of Cartoons

In the literature, initially behaviourism resolves learners' success and asserts the automaticity of learning, but on the other hand it underestimates the cognitive growth in mind. Therefore, behaviourism does pay insufficient attention to recognition of deep analysis. Accordingly, opposing this view, Chomsky (1959), a generative linguist, has set forth another rationalization by revealing the fact that there is no place to 'creation' in behaviourism theory and only through meaningless repetitions, it would be unfeasible for learners to attain vocabulary in the strict sense. Following this, cognitivists have appeared and hinged their notions on reasoning and interpretations via a rational concept. Afterwards, deriving from this counter-view and risks of that school of thought in terms of respecting observable behaviours which come into being with deep investigations, constructivism has subsequently originated and carved out its future in cognitive paradigm. First of all, Piaget (1965), a cognitive constructivist, has stressed the importance of learners' expansion of cognitive functions with mental processing, such as perceiving, remembering or reasoning (Brown, 2007). Bolton-Gary (2012), Singer and Revenson (1997) then correlate and formulate the strong liaisons of cartoons with cognitive development taxonomy by Piaget. Thereby, they aim to promote learners' curiosity, questioning, examining and utilization of symbols with mental images to pave for the prospective usage of cartoons by virtue of the fact that though cartoons actively operate in associating information, the collaborative and social encounter has been enriched with Piaget's theory to contribute to the

quality of learning. Thereafter, Vygotsky (1978) launches social constructivism dwelling particularly on the need of external help. He advocates the severity of social interaction in the establishment of cognitive and affective skills during problem-solving owing to the fact that it would lead social constructivist theory of learning.

In short, unlike behaviourism, cognitive models require information to be coded, processed, stored and organized. As for constructivism, firstly with cognitive then social aspects, the mental process is harmonized within social settings and interactions to acquire sociocultural values and gain information through group studies in addition to learning a new language. Furthermore, what constructivist scholars emphasize herein is that with the guidance of this new style rather than teacher's typical instructions, learner experiences will correspondingly accelerate cognition. This is to be managed by challenging their thoughts via exercises, which will then induce critical thinking, decision making process and social interactions. In reference to the identification of to the point supplementary materials to be adopted in class, such as cartoons, Jackson (2009) states the dynamism of lesson plans resting on a constructivist structure to improve higher order thinking skills, which would then increase cognitive, emotional as well as social values of learners. In fact, with those expressions, he intrinsically implies the profit of Bloom's taxonomy that he utilized as the primary recourse in his study. As is seen in Table 1, Bloom's taxonomy represents learners' cognitive skills in six categories and defines development stages with a view to getting learners to think about their own learning for the sake of gaining more independency.

Table 1. The Revised Version of Bloom's Taxonomy

lower order thinking skills → higher order thinking skills

remember	understand	apply	analyze	evaluate	create
recognizing (identifying) recalling (retrieving)	interpreting (clarifying, paraphrasing, representing, translating) exemplifying (illustrating, instantiating) classifying (categorizing, subsuming) summarizing (abstracting, generalizing) inferring (concluding, extrapolating, interpolating, predicting) comparing (contrasting, mapping, matching) explaining (constructing models)	executing (carrying out) implementing (using)	differentiating (discriminating, distinguishing, focusing, selecting) organizing (finding coherence, integrating, outlining, parsing, structuring) attributing (deconstructing)	checking (coordinating, detecting, monitoring, testing) critiquing (judging)	generating (hypothesizing) planning (designing) producing (construct)

Note. Adopted from *A taxonomy or learning, teaching and assessing A revision o Bloom's taxonomy o educational objectives*, by Anderson, L. & Krathwohl, D., 2001, p. 67-68, Copyright 2001 by Longman.

Table 1 also introduces that the more competent the learner is, the more challenging and tough steps he needs to overcome and outperform. For instance, only after succeeding the first two sections, could they conduct the 'application' through exercises or implementations. Particularly before 'analysing', enhancing and simplifying their 'gathered values' will facilitate further steps to be comprehended with ease. At that point, this practice can be ensured with the help of cartoons so that learners can keep on reading or return back former pages if required to be able to imbue verbal and non-verbal messages. Regarding 'analyse' phase, they are supposed to check memory, organize mind and the brain for this new word. Later on, they will evaluate themselves via tests or critiques reflecting their performance in how well they can utilize it. Finally, they are assumed to attain this word literally by generating, planning and producing it on their own.

The main reason that Bloom has developed his taxonomy covering cognitive process seems to originate from learners' lack of careful examination of the subject they aim to learn. In other words, they disregard drawing inferences, reaching conclusions with evidence to assess and convey critical thinking. The studies probing into the efficacy of Bloom's taxonomy in language teaching unearth frequently usage of low order thinking skills. Likewise, Khorsand (2009) investigates Iranian EFL teachers' questions from cognitive aspects by embracing Bloom's taxonomy, and finds out that they have commonly resorted to lower cognitive skills during their teaching. Identical results have been recorded by Riazi (2010) upon examining Aviles (2000) and Sultana (2001) in terms of perusing the importance of Bloom's taxonomy from the perspective of critical thinking skills. They are both in parallel with his own findings that lower cognitive skills are more salient than higher order ones according to research. These results all imply that learners cannot reach higher order thinking skills due to the lack of adequate exposure to language or inconvenient materials. Therefore, enhancing learners' cognitive development through cartoons will potentially serve mounting evidence to break down prejudices and compensate for failures in vocabulary learning.

Enhancing Retention Skills of Learners via Cartoons in Vocabulary Learning

Cartoons essentially qualify vocabulary learning by firstly activating and then accelerating *retention, recall, retrieval* and *recognition* skills, respectively. Before investigating those memory skills within a frame as a whole, the leading factor of that process, repetition needs to be stressed properly. Repetition is generally necessitated in learning progress to extend and enrich heaps of knowledge (Harmer, 2007) besides expanding retention span even while trying to keep friends' names or the lyrics of a new song in minds. Nation (1999) has cited some scholars, such as Baddeley (1990), Bloom and Shuell (1981), Dempster (1987), Griffin (1992) who share the same outlook concerning repetition and support that learners forget easily and quickly right after gaining the knowledge; moreover, the degree of retention period decreases so fast. To boost the strength of repetition in vocabulary learning, hence only a set of words in a single block could be presented and practiced. As a

result, they can be included in spaced repetition and massive repetition in sequence. That is, handling spaced repetition by breaking words down into minimal units, giving learners the opportunity to install just gained word knowledge into their minds or pacing and letting them use the lexis with cognitive practices besides associations of new vocabulary with imaging and mnemonics or cartoons as visuals will advance their uptakes in due course. In a similar vein, Ludescher (2015) draws conclusion within the light of Brown and McNeil (1966) that word entries ought to be linked to vocabulary organized as mental lexicon frame sharing similar characteristics in meaning, form or both.

As to recalling procedure and its correlation with retention and retrieval, Baddeley (1990) gives a clear outline about it as follows:

> ... the act of successfully recalling an item increases the chance that that item will be remembered. This is not simply because it acts as another learning trial, since recalling the item leads to better retention than presenting it again; it appears that the retrieval route to that item is in some way strengthened by being successfully used (Nation, 1999, p.58).

This expression plainly highlights the scheme that in the beginning, learners gather information, make inferences and construct a plan during recalling. In addition to the fact that the way of arranging information and adopted strategy to combine related figures in mind has importance, recalls demand clues with retrievals owing to perception and trace link. Thus, when learner attempts to rekindle the mind, initially s/he has to check long term memory store to associate the item with previously acquired one(s). A fruitful recalling and retrieval will hence have learners identify the word, latent image and probable provisions in L2 equivalence thoroughly.

From a different point of view, Johnson and Engelbeck (1989) feature forgetting and its occurrence when knowledge and the link with other procedures besides retrieval clues cannot be maintained fairly enough to bring back relevant information to the mind. In accordance with that side effect of repetition, 30 or more aged students might face difficulty in retention skills of recalling, retrieval, and recognition like a domino effect as well. Moreover, they make further comments that comprehension of a reading text calls for complementary steps, otherwise, this might lead impediments in recalling. Due to the fact that recall is in the role of information centre, any struggle would serve backlash effects on acquisition, representation and then retrieval of knowledge. Conclusively, supplying only teacher's support to learners' vocabulary retention of freshly gained lexical units cannot be a real attempt to succeed. As well as teacher's reinforcements, learners ought to demand data to work on and follow their advancement and achievement during this critical period. By providing essential links between knowledge and time course to retrieve key aspects, set up another phase to contribute comprehension and to reach recognition, cartoons will presumably promote information.

Cartoons and Vocabulary Learning Strategies

Since the second half of the twentieth century, researchers and scholars have underlined the futility of holding only one method or approach to enhance achievement in learning strategies and thus they have called particular attention to personal differences. Thereby, the efforts have been mostly spent with regard to know how to attack language (Allen, 1999). To Brown (2007a), learners should take responsibilities of their own learning without any assistance, but create conscious knowledge and take action in the light of strategies they developed in autonomy, awareness and action trilogy. He remarks strategies as target specific and conscious 'attacks' coming out while surmounting a challenge in a way. In a like manner, Oxford (2003) elucidates that via these tactics, learners comprehend more quickly, gain autonomy and self-efficacy, feel motivated, associate and transfer information much better. In line with this perspective again, Hammond and Danaher (2012), Nation (1999), O'Malley, Chamot, Stewner-Manzanares, Kupper, and Russo (1985) clarify that learning strategies can be sorted into three classes: metacognitive, cognitive and socio-affective strategies. Oxford (2003) and Schmitt (2007) assert that whereas cognitive system heads learners to check word formation process, develop examples and descriptors along with practising each sub-skill of cognitive competence and the knowledge already anchored in memory, metacognitive strategies are to monitor performance by means of assessments, planning, material arrangements, forming a schedule, finding errors in studies or exploiting English language in newscasts (Schmitt, 2007). Accordingly, Oxford (1990) upgrades and classifies vocabulary learning strategies into social and recalling levels with memorization, cognitive and metacognitive types (Asgari & Mustapha, 2010). Even though these steps seem to be a little bit intricate and theoretical, the moment the learners begin to read cartoons, they would use the most appropriate learning strategies overlapping with their own style and feel really motivated and ready to discover more in the target language. In the last phase of this process, as Schmitt (2007) delineates and then defines, determination strategies are to be incorporated as well referring to revealing unknown words and employing monolingual and bilingual dictionaries in the course of word attacks.

Having signified the strategies in vocabulary learning process, their implementations on visual materials ought to be dealt precisely. Initially, Gu (1999), Curtis (1987), and Cousins (2005) handle the search of Sahbazian (2004), who has carried out a similar practice on Turkish EFL learners to inform about their vocabulary learning strategies. Through traditional vocabulary learning techniques of Turkish learners', such as rote learning with mnemonic devices, it has been found out that determination and memory strategies predominate the others in assimilating words. In addition, Tanyer and Öztürk (2014) investigate vocabulary learning strategies in vocabulary use and size correlation. A strong connection between L2 vocabulary size and reading ability has been acknowledged in the end. Nonetheless, in the other experiments, Noor and Amir (2015) have emphasized a big deal which is the lack of confidence among learners in utilizing vocabulary learning

strategies. Furthermore, Kafipour and Naveh (2011) reveal that learners cannot see the whole picture or unity in a reading text. Therefore, despite the fact that they can grasp the meanings of each word and scrutinize the vocabulary explicitly, majority of learners are not able to comprehend the gist because they are not aware of vocabulary learning strategies with a high degree of probability. After further research, almost the same results are arrived by Çelik and Toptaş (2010) on Turkish EFL learners. As a consequence, it will be compatible to declare that reading activities need to promote top-down and bottom-up processes due to the fact that learning strategies appeal more to receptive skills.

Looking at the issue from a different angle, Gu (2002) examines vocabulary learning strategies of males and females and he establishes that the female learners have applied more vocabulary learning strategies aiding them to take further steps to accomplish word usage in EFL environment. He also reports the use of strategies for retention, and he associates the relation with higher vocabulary size rather than language proficiency of the learners. Nevertheless, Khatib et al. (2011), Shmais (2003), Pourshahian, Azarfam, & Kalajahi (2012) and Zhang (2009) did state no studies showing significant differences between two genders in vocabulary achievements.

Another controversial topic to be underlined is whether cartoons are only for kids or adults. Clydesdale (2014) confirms that cartoons are for all the students of all ages. As a matter of fact, Trent and Kinlaw (1978) discover that comic readership is at the highest points at age range of 30 to 39. Moreover, Çelik and Toptaş (2010) add cognitive strategies appear the least frequent strategy among teenagers while reading cartoons so as to learn or repeat words. Regarding cartoons specifically, Nation (2001) and Wyk (2011) address the utility of cartoons in cooperative and constructive learning among learners as in think-pair-share sessions or during discussions. They also touch upon how cartoons boost their interdependence and personal accountability by giving opportunities to 'realize oneself' and breaking the ice for communication by tackling intake, memory and recalling interplay alongside verbal and non-verbal entities. Hence, considering all these examinations and the need of filling a niche in the literature, conducting cartoons on EFL learners to illuminate their vocabulary learning strategies, this study has been planned to answer the following research questions:

1. What are the vocabulary learning strategies of learners in the experiment group within specific contexts of cartoons?

2. What are the vocabulary learning strategies of learners in the experiment group according to gender?

3. What are the vocabulary learning strategies of learners in the experiment group according to age?

Method

Convenience sampling as one of the non-probability sampling method was administered to select the study group. That is, as participants were volunteer students to attend the research, an ad hoc fashion in design was automatically incorporated. Additionally, this strategy was simple for researcher to launch data collection process as well as being low-cost as was also echoed by Bornstein, Jager, and Putnick (2013).

Participants and Setting

This study was carried out on sixty-seven Turkish learners of English language at intermediate level to enlighten the effects of cartoons on vocabulary learning strategies. The data were gathered in the research and application centre of a state university in Ankara, Turkey. Whereas forty-seven participants took part in the experimental group, there were twenty subjects in the control group. Furthermore, there were 28 female and 19 male subjects in the experimental group; however, the number was 11 female and 9 male in the control group. As to age range, students aged 10-19 were 31, 20-29 were 20 and 30 or more were six in number in experimental group while the ratio for the ones at 10-19 age limit was eight, 20-29 was six and to 30 or more aged group was six in the control group.

Data Collection

Treasure Island by Robert Louis Stevenson, *Great Expectations* by Charles Dickens, *Romeo & Juliet* by William Shakespeare were appointed respectively in this quasi-experimental research design. The experimental group worked on either coloured or black and white formats of cartoons while only simple text versions were exposed to the control group by the researchers.

In order to reveal vocabulary learning strategies of the students and check the possible effects of cartoons in that process, a Vocabulary Learning Strategy Test (hereinafter VLST), in Turkish was given to two groups. The reason behind preparing VLST in Turkish was not to block their comprehension skills. It was made up of ten questions divided into seven parts according to the taxonomy of Schmitt (2007) with regard to the strategies used in vocabulary learning, such as determination, social, cognitive, metacognitive and memory strategies. In addition to these five basic strategy types, 'all' and 'no' strategy sections were added to some options. In the strategy test, the strength of their retention skills, reasons for students' satisfaction with cartoons in the experimental group were also respected. Notwithstanding, no vocabulary achievement tests were involved into data collection so as to correlate their achievement rates with the strategies, which was out of scope of the study.

VLST was comprised of ten basic questions aiming to report how to overcome and attack unknown words, their vocabulary learning preferences, the ways easing to keep words in mind longer, the efficient points they could pinpoint in reading lessons during teacher's instructions, warm-up and

ice-breakers, the literal meaning of comprehending lexis and how to discover the route they followed while reading the texts through cartoons. It was developed in five point Likert-scale type by the researchers only after a comprehensive literature review and getting the approvals of two ELT professors in content and face validity.

Data Analysis

T-test was administered to reach vocabulary achievement scores of experimental and control group. Besides, one-way Anova test was incorporated to indicate vocabulary achievements according to gender. Statistical Package for the Social Sciences (SPSS) 21 for Windows packaged software was adopted to data analysis. The cronbach alpha of the vocabulary test was $\alpha = 0.899$, which displays its validity and reliability.

Results

The above sub problems were presented under subtitles in findings section to unearth the impacts of cartoons in using vocabulary learning strategies of English language students at intermediate level.

Vocabulary Learning Strategies of the Experiment Group

Table 2. The Answers of the Experimental and the Control Groups to the Vocabulary Learning Strategies Test

	Determination		Social		Memory		Metacognitive		Cognitive		No Strategy		All	
	E	C	E	C	E	C	E	C	E	C	E	C	E	C
1.	85,1%	65,0%	0,0%	10,0%	-	-	-	-	-	-	-	-	14,9%	25,0%
2.	42,6%	40,0%	-	-	-	-	53,2%	40,0%	-	-	4,3%	20,0%	-	-
3.	55,3%	25,0%	-	-	6,4%	10,0%	36,2%	65,0%	-	-	2,1%	0,0%	-	-
4.	66,0%	80,0%	19,1%	15,0%	2,1%	0,0%	-	-	-	-	6,4%	0,0%	6,4%	5,0%
5.	2,1%	0,0%	-	-	36,2%	40,0%	59,6%	50,0%	-	-	2,1%	10,0%	-	-
6.	10,6%	10,0%	12,8%	10,0%	-	-	34,0%	35,0%	-	-	-	-	42,6%	45,0%
7.	23,4%	20,0%	23,4%	40,0%	4,3%	10,0%	8,5%	5,0%	-	-	40,4%	25,0%	-	-
8.	-	-	17,0%	15,0%	6,4%	0,0%	72,3%	80,0%	4,3%	5,0%	-	-	-	-
9.	42,6%	40,0%	27,7%	15,0%	29,8%	45,0%	-	-	-	-	-	-	-	-
10.	-	-	100,0 %	100,0%	-	-	-	-	-	-	-	-	-	-

(E=Experimental Group, C= Control Group)

Upon reviewing Table 2 in relation to the experimental group, it appeared that they most frequently used determination and metacognitive strategies in the test. As to the control group, even though their cluster points in determination and metacognitive strategies were lower, they performed well majorly in memory strategies. Moreover, having analysed the first question in VLST, one can easily notice that maximum points were attained at determination strategy with responses that they did spend a lot of time about how to associate the words with an item that they had known before.

As for the responses of control group to some questions, such as second and fifth in VLST, they clearly divulged to what extent they could maintain their own learning without thinking of any external help, such as cartoons. Besides, they reflected that they did nothing special or use no particular strategies before reading a text as a favoured warm-up technique.

Vocabulary Learning Strategies of Learners According to Gender

When the students' answers in VLST were considered according to gender, it can be seen that in terms of memory and social strategies, the females were more active while in determination, metacognitive and cognitive strategies the male subjects were more successful.

Table 3. The Answers According to Gender of the Participants in the Experimental Group

	Determination		Social		Memory		Metacognitive		Cognitive		No Strategy		All	
	F	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**
1.	79,5%	78,6%	5,1%	0,0%	-	-	-	-	-	-	-	-	15,4%	21,4%
2.	46,2%	35,7%	-	-	-	-	43,6%	57,1%	-	-	10,3%	7,1%	-	-
3.	43,6%	50,0%	-	-	12,8%	0,0%	43,6%	46,4%	-	-	0,0%	3,6%	-	-
4.	66,7%	75,0%	17,9%	17,9%	2,6%	0,0%	-	-	-	-	5,1%	3,6%	7,7%	3,6%
5.	0,0%	3,6%			38,5%	35,7%	56,4%	57,1%	-	-	5,1%	3,6%	-	-
6.	7,7%	14,3%	10,3%	14,3%	-	-	38,5%	28,6%	-	-	-	-	43,6%	42,9%
7.	28,2%	14,3%	20,5%	39,3%	7,7%	3,6%	5,1%	10,7%	-	-	38,5%	32,1%	-	-
8.	-	-	17,9%	14,3%	2,6%	7,1%	76,9%	71,4%	2,6%	7,1%	-	-	-	-
9.	46,2%	35,7%	20,5%	28,6%	33,3%	35,7%	-	-	-	-	-	-	-	-
10.	-	-	100,0 %	100,0 %	-	-	-	-	-	-	-	-	-	-

As Table 3 indicates, VLST also introduced the finding that while learning vocabulary through classical cartoons, the most frequent strategies were almost the same for males and females ranging from determination, metacognitive to social.

Vocabulary Learning Strategies of the Experimental Group According to Age

Table 4. The Vocabulary Learning Strategies of the Experimental Group According to Age

	Determination			Social			Memory			Metacognitive			Cognitive			No Strategy			All		
	1	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1.	72,4 %	84,6 %	83,3%	6,9 %	0,0 %	0,0 %	-	-	-	-	-	-	-	-	-	-	-	-	20,7 %	15,4 %	16,7 %
2.	34,5 %	42,3 %	58,3%	-	-	-	-	-	-	51,7 %	50,0 %	41,7 %	-	-	-	13,8 %	7,7 %	0,0 %	-	-	-
3.	51,7 %	46,2 %	33,3%	-	-	-	3,4 %	15,4 %	0,0 %	41,4 %	38,5 %	66,7 %	-	-	-	3,4 %	0,0 %	0,0 %	-	-	-
4.	62,1 %	73,1 %	83,3%	24,1 %	11,5 %	16,7%	0,0 %	3,8 %	0,0 %	-	-	-	-	-	-	6,9 %	3,8 %	0,0 %	6,9 %	7,7 %	0,0 %
5.	0,0 %	3,8 %	0,0 %	34,5 %	34,6 %	50,0%	-	-	-	62,1 %	53,8 %	50,0 %	-	-	-	3,4 %	7,7 %	0,0 %	-	-	-
6.	3,4 %	23,1 %	0,0 %	13,8 %	7,7 %	16,7%	-	-	-	44,8 %	30,8 %	16,7 %	-	-	-	-	-	-	37,9 %	38,5 %	66,7 %
7.	27,	19,	16,	24,	30,	33,	6,9	3,8	8,3	6,9	7,7	8,3	-	-	-	34,	38,	33,	-	-	-

	6 %	2 %	7%	1 %	8 %	3%	%	%	%	%	%	%				5 %	5 %	3 %			
8.	-	-	-	13, 8 %	23, 1 %	8,3 %	6,9 %	0,0 %	8,3 %	72, 4 %	73, 1 %	83, 3 %	6,9 %	3,8 %	0,0 %	-	-	-	-	-	-
9.	37, 9 %	46, 2 %	41, 7%	27, 6 %	19, 2 %	25, 0%	34, 5 %	34, 6 %	33, 3%	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	10 0,0 %	10 0,0 %	10 0,0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1= 10-19 ages, 2= 20-29 ages, 3= 30 or elder)

Table 4 displays that pioneer strategies of the first group, 10-19 year-old students, were metacognitive and cognitive types. Despite their adoption of cognitive strategies, in fact out of all types, cognitive strategies appeared the least frequently utilized group. Furthermore, in determination and memory strategies, the students aged 20 to 29 were described as the most constant users. Finally, participants aged 30 or more majorly selected social strategy, and they selected 'no' strategy at the least among all.

What VLST distinctly presents was that with the age increase, reference to dictionaries and creating word associations decreased and students felt obliged to employ cognitive strategies, such as mechanical processing, repetitions or analyses. Then, it can be postulated that neither the female learners besides the experimental group nor 30 or elder group could use cognitive strategies well.

Discussion, Conclusion and Recommendations

The experimental group's most frequently used strategies in the test were in line with Kafipour and Naveh (2011) who had emphasized that the students successful in metacognitive strategies, such as testing themselves, skipping or keeping on getting new words, monitoring and decision-making were one step ahead than others in their study. They further asserted that metacognitive strategies must have helped students to discover language and vocabulary on their own. In addition, now that strategies were related with students' awareness about their own learning process, improvement and being knowledgeable of individual study, they can be commented as introverted and well-informed personalities about their own language learning achievement. Regarding the success of control group in memory strategies, cartoons must have functioned as rational and analytical tools to autonomize learners, and hence operationalize self-directed learning in contextualized word representations. In spite of the potential misleading indication, cartoons may not facilitate vocabulary learning procedure to that degree, as the persistency of their memory skill was not assessed in detail, this point might not reflect solid evidence of their achievement indeed.

Furthermore, according to the ratio of determination strategy in VLST, a correlation subsists with the study of Smith (1975), which Brown (2007) quoted due to his impressive explications of how mnemonic devices supply retention, and retrieval process strongly. In this field, surveys of Cohen (2009) revealing the success of participants in learning new words via imagery interventions like dual

coding method and imagery techniques, Krashen (2004) working on the wide reading effects, Hammond and Danaher (2012) who referred one important aspect of cartoons in use of learning strategies, and Nation (1999) enlightening cartoons or other images on the way to giving opportunities to trigger cognitive practices and associate words all corroborated results of the experimental group. In respect of control group and their deficiency in drawing on the cartoons, it was evident that they could not control their learning properly and they were in need of additional support to complete vocabulary learning procedure more productively.

Considering the competency of the females in memory and social strategies in addition to mastery of male subjects in determination, metacognitive and cognitive strategies, this outcome was consistent with the research of Oxford, Nyikos, & Ehram (1988), whereas it cannot be overlapped with Khatib et al. (2011), Pourshahian et al. (2012), Shmais (2003) and Zhang (2009) who did not record any difference between two genders. Moreover, the similarity of most frequent strategies among the subjects unpacked a correspondence result with Askar (2014) who listed some scholars drawing the same conclusion that social strategies were the least favoured types as Amirian and Heshmatifar (2013); Bangar and Kasmani (2013); Doczi (2011); Hamzah et al. (2009); Heidari et al. (2012); Karami and Barekat (2012); Khoshsaligheh (2009); Kodu (1999), Komol and Sripetpun (2011). Yet, it was not in congruent with Catalan (2003) who found social strategies were more favourable by the females, whereas the male learners were more predisposed to visual strategies. Catalan (2003) explained the success of the females with their application of formal rule, studies and elicitation strategies. However, the reason behind that difference must originate from the proficiency levels, background knowledge or mother tongue influence on their performance.

In accordance with the strategies of 10-19 year-old students, Tsai and Chang (2009) ought to be addressed from the literature in that they had already come into the same point by clarifying that younger students were more eager to use mental skills and their cerebral functions would discover word meaning. Even though, in general, Tsai and Chang (2009) chimed in with this research, their outcomes stating proficiency level, higher use of social strategies, the increase in cognitive and manipulation strategies despite the decline in memory strategies and prior learning cannot be matched with the current study. In the same line, 20-29 age group's ebb in ratio of applying metacognitive and social strategies must have the evidence indicating their failure in individualized learning and gaining control over their study. This might also be correlated with their lack of mastery in vocabulary learning strategies. Regardless of this distinction, however, Çelik and Toptaş (2010) were in tune with the utilization of cognitive strategies as the least activated one among readers.

To sum up, the females, experimental group, and learners at 30 or elder could not make use of cognitive strategies. Main reason might be specified in tune with Gu and Johnson (1996), Karami and Barekat (2014), Kudo (1999), Peng (2009) and Pourshahran et al. (2012) who put forward that the

most successful students at highest proficiency had capacity to activate their cognitive strategies. Notwithstanding, the students in the study were intermediate, which leads us to the solution that the findings overlapped with theirs. Similarly, Ahmed (1989) advocated that moderate strategy users were at moderate success. This lack of competence in students' use of vocabulary learning strategies was also disclosed by Lawson and Hogben (1996) that vocabulary can be quite neglected by language learners at this level.

To put it all in simple terms, the research was about the differences between experimental and control group considering male and female students and three age groups, 10-19, 20-29 or 30 and elder in the light of their vocabulary learning strategies and the influences of three English cartoons at this stage. To conclude, the common vocabulary learning strategies were detected to be determination and metacognitive strategies; nonetheless, these two were favoured by the experimental group whereas the control group mainly drew on memory, social and metacognitive strategies.

In terms of gender, according to the VLST, females preferred determination and memory strategies while the male students opted for social, metacognitive and cognitive strategies. By employing determination strategy as their consolidation strategy, the female subjects came into prominence on the way of developing their own techniques to learn vocabulary. On the other hand, the male participants outnumbered in social strategies.

Regarding their ages, 10-19 and 30 or elder subjects outweighed in metacognitive and social strategies, yet, the success of 20-29 year-old students in using determination and memory strategies were recorded to be dominant than the other two groups.

In the light of these results, further studies can be developed by selecting learners who are at elementary or upper-intermediate levels and attending foreign language courses via using a similar research design to compare the results with this design.

Note

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