An empirical study into Hungarian young learners' English as a foreign language learning strategies

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Abstract

Research in the domain of vocabulary gained impetus in the 1980s. The popularity of word knowledge assessment has increased in the past 30 years. Even though the construct of learning strategies is another significant and well-researched domain in educational science, the intersecting construct, vocabulary learning strategies are rather under-researched (Schmitt, 2000, p. 44). An attempt is also made to fill in this gap. The study was carried with the participation of 86 Hungarian 6th graders in primary schools. A self-report 52-item questionnaire was developed so that the most frequently used vocabulary learning strategies would be mapped in depth. The questionnaire consisted of five factors. Item-analysis and factor analysis were conducted to examine how each item functioned and whether the factor classification of the questionnaire was justified. Results indicate that some of the items have low item-total correlation value and the original factor classification is not reflected by what we found in the factor analysis. Based on this pilot study a new questionnaire was developed by replacing items. Further findings are discussed.

Keywords: vocabulary; learning strategies; young learners; quantitative research; empirical study

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1. Introduction

Research in the domain of vocabulary gained impetus in the 1980s. The popularity of word knowledge assessment has increased in the past 30 years. Even though the construct of learning strategies is another significant and well-researched domain in educational science, the intersecting construct, vocabulary learning strategies are rather under-researched (Schmitt, 2000, p. 44). An attempt is also made to fill in this gap. Vocabulary learning strategy research is important for two reasons: (1) the processes of language learning can be identified (Cohen 2003, p. 279); and (2) knowing the strategies learners apply has enormous classroom implications since with strategy training the learning process can be made more efficient (Schouten-Van Parreren, 1992, p. 98).

2. Language learning strategies

2.1 Defining language learning strategies

The past more than three decades have seen an enormous number of researches into FL learning strategies. It must also be emphasized that at the outset of strategy research, strategies were thought of as conscious processes whereas nowadays they are considered semi-conscious operations (Cohen, 1990, p. 30). Data on language learning strategies can be gathered through self-reporting methods that might comprise interviews, written diaries and think-aloud protocols. Cohen also focuses on the conscious procedures by asserting that language learning strategies are "the conscious or semi-conscious thoughts and behaviors used by learners with the explicit goal of improving their knowledge and comprehension of a target language" (Cohen 2003, p. 280). According to him conscious thought is the intentional utilization of techniques whereas semi-conscious thinking involves automatized, routine actions from the part of the learners.

As for the best possible strategy, it is unanimously claimed in the literature that the most successful language learners do not use a great deal of strategies but they use only few of them, which might be only two or three in number (Cohen, 2003; Doró & Habók, 2013; Oxford, 1991). Cohen (2003, p. 282) argues from a perspective focusing on tasks:

"no single strategy will be appropriate for all learners or for all tasks, and invariably individual learners will apply the very same strategies in different ways".

During these past three decades in research drawing attention to FL learning and discussions on SLA theory, the emphasis has been transferred from universal processes to the role of individual differences including cognitive and affective features. In research with a focus on individual differences the most frequently investigated field is the procedures applied to solve the communicative and learning processes. That is why light has been shed on the research of language learning strategies (Nikolov, 2003). In spite of the enhanced interest in language learning strategies, defining strategies is still dubious (McDonough, 1999; Doró & Habók, 2013). As for the theoretical background to strategy research, two major models have been used: (1) the information processing model of cognitive psychology (Bialystok, 1990); and (2) the communicative knowledge model of language knowledge whose executing components make it possible for learners to achieve their goals (Bachman, 1990). Strategic knowledge is composed of metacognitive strategies whose executing functions enable the language learner to set goals, to evaluate and to plan.

Weinstein and Mayer (1986, p. 320) define strategies from a behavioral perspective by stipulating that

"learning strategies can be defined as the behaviors and thoughts that a learner engages in during learning and that are intended to influence the learners' encoding process." O'Malley and Chamot (1990, p. 1) define language learning strategies as "special thoughts or behaviors that individuals use to assist them comprehend, learn, or retain new information". They distinguish three main types of strategies: metacognitive, cognitive and socio-affective. Their focus is mostly on metacognitive strategies. Language learning strategies are defined by Ellis (1994, p. 226) from a behavioral perspective by stating that a strategy is a behavioral or mental activity related to some specific stages in language learning and to the process of language use. According to Ridley (1997, p. 231) strategies denote procedures which operate consciously or unconsciously in order to reach some kind of goal. Taking all the definitions of language learning strategies into consideration, I regard Ellis' concise definition the most applicable one; he says that strategy is a behavioral or mental activity related to some specific stages in language learning and to the process of language use. There are two reasons for this: (1) strategy must be looked at as a behavioral activity on the one hand; (2) on the other hand it is also a mental activity that motivates learners to learn new information.

A composite construct was implemented by Oxford (1991) who classified strategies in a most comprehensive way. The dimensions of her Strategy Inventory of Language Learning (SILL) are as follows: memory, cognitive, compensatory, metacognitive, affective and social. She defined language learning strategies as "operations employed by the learner to aid the learning, storage, retrieval, and use of information...; specific actions taken by the learners to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (Oxford, 1991, p. 8). Three direct strategies and three indirect strategies were identified: the direct ones were memory, cognitive and compensation; the indirect ones were metacognitive, affective and social.

According to Oxford (1991, p. 43), cognitive strategies involve the function of "manipulation of the target language by the learner". Metacognitive strategies are related to a conscious overview of the learning process: planning, monitoring or evaluating. Memory strategies comprise the linking of new material to already existing knowledge. Social strategies involve interaction with peers and the teacher to track down the meaning of unknown vocabulary items. Compensation strategies comprise the use of synonyms, circumlocution, native language equivalents and guessing meaning. Finally affective strategies mean the reduction of anxiety and applying self-encouragement.

Nisbet, Tindall, and Arroyo (2005, p. 105) imply that the SILL measures self-reported behavior but it fails to measure autonomy. Their assertion was meant to include both adult and YLs. It must be noted at this point that any questionnaire focusing on learning strategies suffers from this difficulty, namely what the students say they use as a strategy might not be in line with what strategy they actually use.

The large number of definitions in the literature are summed up by Cohen and Macaro (2007, p. 27) who try to determine a common intersection of the previously made claims: (1) the strategies that learners use can be documented; (2) a strategy is a construct that can be defined, and what it is and what it does can be described in practical terms; (3) strategies are important because they are associated with successful learning; (4) some learner types are more likely to use strategies or use them more successfully than other learner types; (5) strategies can be taught and learners, as a result, can develop more effective strategic behavior. As a consequence consciousness plays a major role in effective strategy use.

2.2 Research on language learning strategies used by young learners

A key question of strategy research is the extent to which strategies contribute to the success of language learning. Firstly, it must be determined whether successful language learners use more strategies than less successful ones. Secondly, it must also be investigated whether a successful language learner uses more or fewer strategies. Another focus of language learning strategy research is related to the emergence of strategies. Chesterfield and Chesterfield (1985, p. 56) asserted that strategies emerge in a natural way. This finding is

confirmed by Nikolov in her study involving young Hungarian EFL learners (Nikolov, 1999, p. 228). O'Malley and Chamot (1990, p. 198) further stipulated that strategies could be taught and were essential elements of communicative autonomy, which is the ability of a YL to use language in production.

Gunning (1997) developed the SILL adapted for children (Children's SILL). The instrument comprises 30 items. The main classifications: memory, cognitive, compensation, metacognitive, affective and social strategies remained unchanged but the wording of the questionnaire items was altered so YLs could easily comprehend them. In a study done with the application of the Children's SILL instrument it was found that YLs had a tendency of relying on compensation strategies to a great extent.

In a study involving adult and young language learners, the similarities and differences between the strategy uses of the two age groups were investigated by Pinter (2006). Students had to interact in pairs doing a 'Spot the difference' task. Pinter (2006, p. 624) asserted that adults controlled the task more effectively than YLs by using more cognitive and metacognitive strategies. Thus it can be concluded that adult learners might use strategies that are more helpful in the actual context. In another study (Nikolov, 2006) investigating YLs' strategy use while solving EFL tasks Hungarian 12 year-old children (n=53) were examined with the method of think-aloud protocols in non-mediated verbalization (Gass & Mackay, 2000). In this research Nikolov (2006, p. 38) found that students used cognitive strategies in the majority of the cases, more specifically, translation. Besides translation, skimming and scanning the texts were also frequently used with the latter more often used. The researcher also identified a lot of individual differences in the data received from think-aloud protocols that were applied to map the test taking strategies of YLs. It was also asserted that good performers did not necessarily use more strategies. In fact it was found that some of the high achievers did not report any strategy use. It was also noted, however, that some good performers used various types of strategies. It was claimed as a conclusion that high achievers might benefit more from strategy use and this finding confirmed previous research (see Purpura, 1991).

Nikolov (2003, p. 6) states that studies investigating YLs consciously use different strategies, an assumption that is confirmed by Szpotowicz and Szulc-Kurpaska (2012) and Mihaljevic Djigunovic (2010). However, Nikolov (2003, p. 6) also declares that no correlation exists between frequency in the use of strategies and language learning achievement.

The major factors of successful language learning by YLs have been examined in several studies. Apart from early exposure, attitude and motivation, one of the most important variable was strategy use (Szpotowicz & Lidgren, 2011, p. 140). It was also pointed out that young language learners use similar communicative and cognitive strategies to adults. As part of a large-scale project called ELLiE (Enever, 2011) in which substantial data were collected on language use, classroom context, teaching style, the pace of learning and strategy use, Szpotowicz and Lindgren (2011) found that virtually all the students used transfer of words from their native language, which can be considered a cognitive strategy. In a study published by Szulc-Kurpaska (2000), eleven-year-old YLs' strategy use was examined in a communicative language game. When children faced dilemmas as far as language was regarded, they used formulaic chunks, formulated new, non-existing words, drew on their native language and turned to the teacher. The first three are cognitive strategies and the latter one is a social strategy.

In a study done with the participation of 61 5th and 6th graders in Mexico as part of a large-scale EFL instruction program called National English Program for Basic Education (PNIEB), focus-group interviews were done in order that conclusions could be drawn partly of YLs' strategy use. The researchers were seeking to find data concerning language learning outside the classroom (Sayer & Ban, 2014, p. 324). They found that children used numerous functions, sources and strategies to learn English. It was asserted that in the uses of English outside the classroom, 16 distinct strategies were identified. Listening to popular songs, watching movies in English, playing video games, using the Internet and using Google Translate were among the most frequently used functions. Numerous students specifically reported that playing computer games, listening to present day

celebrities are great help for them in the process of language learning. As this study proved, the classroom is not the only learning environment any more for learning languages and using strategies as it has been previously hypothesized. The members of the Z generation are increasingly involved in out-of-school learning (Fűz, 2014).

Playing online English games is another technique that has recently been examined empirically. Butler, Someya and Fukuhara (2014, p. 265) examined the effect online games exert on language learning. The use of an online English game called 'Jido-Eiken' developed by Japanese programmers in 1994 was scrutinized. This game is designed to teach learners words and common expressions. The complete game comprises nine elements. One is a car-racing game with multiple competitors. It is essential that language learning games be interesting for the students. The researchers identified features that are attractive for the learners. They must be motivated by the challenge, the curiosity and by control. In this game learners are awarded extra fuel once they answer an English language question. A total of 3,945 children took part in the study, aged 4 to 12. The main finding of the study was that the online game contributed to receptive word knowledge to a great extent and to productive word knowledge to a lesser extent. The YLs were divided into four age groups so that researchers could observe variations dependent on age: 4-5 year-olds, 6-7 year-olds, 8-9 year-olds and 10-12 year-olds. They found that vocabulary learning through online games drastically increased in the 10-12-year-old group. A major conclusion can be drawn from this study: playing online games and playing games is an efficient technique for both general language learning and vocabulary learning. Online games are inclusive of cognitive strategies.

Another investigation on YLs' language learning strategies was conducted by Doró and Habók (2013). The study used the SILL (Oxford, 1991) with 5th and 6th graders in Hungarian schools (n=275). It must also be mentioned that the SILL was not originally developed to assess YLs but Doró and Habók (2013) adapted this instrument to the assessment of YLs by rewording a few statements in the questionnaire. Six strategies were examined: metacognitive, compensation, memory, affective, social and cognitive. Although the main focus of the study was general language learning strategy use, the SILL questionnaire involves a great number of questions looking into the use of vocabulary learning. It was found that metacognitive strategies were the most frequently used ones by YLs, while compensation strategies were the least often used ones. By refining their findings with respect to gender, they found that girls used new English words in sentences more often and they told rhymes and repeated words to recall them. They also frequently acted out situations or used mental images in order to memorize words more efficiently according to the self-report questionnaire. From these studies a definite conclusion can be drawn: YLs tend to use cognitive and metacognitive strategies more often than any other strategy in order to memorize new FL words.

3. Vocabulary learning strategies

3.1 Defining vocabulary learning strategies

The taxonomies of language learning strategies differ in a lot of areas but their most important features align to a great extent. The past 20 years have seen a considerable increase in studies on vocabulary learning and strategic thinking in FL learning. Yet, their intersection, strategies in vocabulary learning, has not attracted sufficient attention. Several researchers had set up 37 categories and dimensions with regard to learning strategies. Schmitt (2008) synthesized the literature on the topic. In order to gain a clear insight into what different scholars consider the components of vocabulary learning strategies, I have gathered all the relevant taxonomies. Table 13 presents six vocabulary learning taxonomies.

Several scholars (Cohen, 1990; Nation, 1990; Oxford, 1991) gave a definition of vocabulary learning strategies and determined its components. However, Nation (1990, p. 217) asserted that it is difficult to define vocabulary learning strategy but a strategy is one that needs to involve choice, be complex, require knowledge and benefit from training and increase the efficiency of vocabulary learning.

Nation's (1990) attempt was the first one in the field of vocabulary learning that had tapped into learning

strategies. He examined the following three strategies: (1) guessing from context; (2) using mnemonics; and (3) using word parts. Later Nation (2001, p. 98) extended his taxonomy of vocabulary learning strategies by setting up the following general class of strategies: (1) planning; (2) sources: finding information about word; and (3) processes: establishing knowledge. Within these general classes of strategies he determined sub-types of strategies. According to Nation (1990), planning involves choosing words, choosing the aspects of word knowledge, choosing strategies and planning repetition. His second general class of strategies comprises analyzing the word, using context, consulting a reference source in NL and FL and using parallels in NL and FL, whereas his third general class consists of noticing, retrieving and generating words. It must be noted, however, that Nation's construct has never been validated with empirical data to the best of our knowledge.

Stoffer (1995) validated a questionnaire called the vocabulary learning strategy inventory (VOLSI) whose item pool took vocabulary strategies into consideration based on nine dimensions. Stoffer (1995, p. 23) used his instrument with university students learning FLs and the VOLSI proved to be a reliable questionnaire (Cronbach's Alpha=.86). The most frequent strategy in Stoffer's study (1995) was linking to native language words similar in spelling and all in all, the fourth group of strategies (strategies for creating mental linkages) was indicated by the students as the most often used one. It was also found that learners who had previously received some kind of vocabulary learning strategy instruction used these strategies more frequently than those with no instructions whatsoever. The age of the language learners appeared to be significant on seven of the nine factors in that YLs tended to use fewer strategies than their older counterparts did. Gender differences, however were not significant only by a small margin.

Schmitt (1997) distinguished nine determination strategies (three of them are presented in Table 12.) in his taxonomy, a new variable compared to other instruments. According to this taxonomy, determination strategies facilitate the discovery of the meaning of new words through guessing from an NL cognate and from context, applying any kind of reference material and asking somebody. Cognates are words in two languages that take their origins in the same word family (Merriam-Webster, 2015). For example the word 'Vater' in German is a cognate of the English word 'father' or the word 'hamburger' has the same meaning in English as in Hungarian. Thus, it is quite simple for a German or a Hungarian learner of English to learn these items. Guessing from context has been a highly promoted method of learning words in the communicative era of language learning and instruction (Thornbury, 2004, p. 46). Guessing from context might occur in different learning environments; however, it most commonly means inferring the meaning of an unknown word from its surrounding context. Bossers (1992, p. 251) claims that a substantial amount of the words that students learn occur through inferencing meaning from context; hence it can be asserted that contextual guessing is a major component of determination strategies.

Out of the eight social strategies included in Schmitt's taxonomy, five belong to the discovery-social and three to the consolidation-social dimension. The five discovery-social questionnaire items all inquire about students' asking their teachers or mates for help. Of the items, the 'Ask teacher for a synonym or paraphrase' is generally a common strategy amongst students in a classroom environment (Schmitt, 1997; p. 202). As follows, discovery-social strategies involve requests for help whereas the consolidation-social strategies dimension involve interactions after the lexical item has been learned. As for consolidation-memory strategies, Schmitt (1997, p. 96) claims that these types of strategies traditionally known as mnemonics comprise the relating of already learned knowledge to the newly-learned words. Such strategies include imagery, an activity during which learners match words to pictures, relating words, normally synonyms to the new items (e.g., amazed-fascinated), grouping words in semantically related clusters and using physical action to memorize the lexical items.

The consolidation-cognitive strategies dimension consists of nine questionnaire items in Schmitt's instrument and they focus on mechanical repetition and involve such traditional strategies as keeping a written vocabulary, writing word lists and using flash cards for the retention of words. The final dimension in the taxonomy is metacognitive strategies. When using metacognitive strategies, students evaluate their own learning

process. Metacognitive and self-regulatory learning, two different kinds of strategies, are complex, interactive processes generated by willingness in which both motivation and self-regulatory activities play a role (Boakerts & Simon, 1995). Students learn some facts and some processes during the years that assist them remember something when it is necessary. Schmitt (1997, p. 224) asserts that the most common metacognitive strategy is continuing to study word over time.

In Schmitt's (1998) qualitative research with Japanese students of 14-40 years of age, he examined these categories thoroughly and found that the most frequently used ones were discovery strategies: using a bilingual dictionary, verbal repetition and guessing from textual context. Besides Schmitt's data gathering instrument, the vocabulary learning questionnaire (VLQ) compiled by Gu and Johnson (1996) is an instrument that examines different learner strategies in this sub-field of SLA. They distinguished three factors: (1) beliefs, (2) metacognitive strategies and (3) cognitive strategies. Beliefs were not further divided into any other categories; however metacognitive strategies were split into self-initiation and selective attention. Cognitive strategies comprised initial handling, reinforcement and activation. The focus of their investigation was advanced learners of English. They ran a correlation study based on the data received from the questionnaire and students' scores on tests of vocabulary size. They intended to reveal what strategies went hand in hand with previous learning and they also aimed at finding out which clusters learners used. They found that self-initiation strategies and activation strategies correlated significantly with vocabulary size. Self-initiation strategies were defined as ones involving the learner's autonomous decision to use any technique to learn a new word whereas activation was regarded as the intention to activate a strategy to learn a new word. Then, they distinguished five types of learners: (1) readers who dealt with words in context; (2) active strategy users who were hard working and motivated; (3) non-encoders who used no intentional memorization strategies; (4) encoders who used intentional memorization strategies and; (5) passive strategy users who hardly ever used any strategy.

Tseng, Dörnyei, and Schmitt (2006) drew on work done in educational psychology and focused on proposing a new psychometrically-based approach toward FL vocabulary learning strategies. This construct of this new approach is grounded on the learners' self-regulatory capacity. It is a conceptual framework that highlights the learners' innate capacity which energizes their effort to personalize strategies efficient for them. Tseng et al. (2006, p. 98) claim that the underlying problem in strategy research is the diverse conceptualization of the notion. It is difficult to determine the specific dimensions suited for specific age groups.

In his synthesis Schmitt (2008, p. 88) compiled a taxonomy of vocabulary learning strategies by distinguishing five dimensions: (1) determination; (2) social; (3) memory; (4) cognitive; and (5) metacognitive. Schmitt (2008; p. 340) conceived two major factors when setting up his new taxonomy of vocabulary learning strategies by creating two major factors: discovery and consolidation. Two sub-factors were added to the discovery factor: determination and social. The consolidation factor was widened with four sub-factors: social, memory, cognitive and metacognitive. It must be noted that in spite of the fact in the Nation's taxonomy (1990) the labels of the dimensions differ from Schmitt's (2008), there is a considerable amount of overlap among the two researchers' dimensions. Nation's planning dimension aligns with Schmitt's determination and cognitive dimensions. Nation's sources dimension has an overlap with Schmitt's social factor to a great extent and the third dimension in the Nation taxonomy, processes, strongly aligns with Schmitt's memory and metacognitive dimensions. In order to be fully aware of Schmitt's (1998) system it is inevitable to look at these various strategies in detail. Table 1 presents Schmitt's taxonomy of vocabulary learning strategies with three sample items.

Table 1

Dimensions of Schmitt's (1998) vocabulary learning questionnaire

Dimension	Sample items
Discovery determination	I analyze part of speech.
	I check for NL cognate.
	I use a bilingual dictionary.
Discovery social	I ask teacher for synonym.
	I ask for a translation of the word.
	I ask classmates for meaning.
Consolidation social	I study and practice meaning in a group.
	My teacher checks student's word list.
	I interact with native speakers.
Memory	I use semantic maps.
	I image word meaning.
	I connect word to personal experience.
Cognitive	I use word lists.
	I use verbal repetition.
	I keep a vocabulary notebook.
Metacognitive	I use English language media.
	I test myself with word tests.
	I continue to study word over time.

Lin (2001, p. 145) ran a case study with the participation of seven Taiwanese learners to examine their vocabulary learning strategies. Data gathering methods involved classroom observation, interviews and think-aloud protocols. More than 70 vocabulary learning strategies were identified. These items were then identified as one of the three main types of strategies: cognitive, metacognitive and social-affective strategies. These types of strategies are identical in most of the instruments assessing vocabulary learning strategies; however memory strategy and discovery strategy are not involved in Lin's (2001) questionnaire, which might question the validity of the instrument.

Catalan Jimenez (2003, p. 44) came to the conclusion that males and females differed in the use of strategies. She stipulated from her empirical data on a sample of 581 YLs of Basque (NL) and English as a FL that males and females both used similar strategies: using a bilingual dictionary, guessing from textual context, asking the teacher and saying the word out loud when studying. This finding confirms Schmitt's (2008) results: discovery strategies are used more often than any other strategies.

3.2 Research on vocabulary learning strategies of young learners

Plenty of empirical research has been conducted on vocabulary learning strategies; however, few involve YLs (Cameron, 2001). It is asserted by Cameron (2001, p. 92) that efficient strategies of vocabulary learning at the disposal of YLs are the following: guessing meanings by using all information available in a picture or text, noticing grammatical information about words, noticing links to similar words in the NL and remembering where a word has been encountered. Cameron (2004, p. 93) also emphasizes that strategy use changes with age and there is a large variance in terms of what strategies they use and how they use them. I suppose YLs' word knowledge develops and their vocabulary increases when they are exposed to plenty of encounters with the words both in speaking and in writing. Research has also indicated that learning words by young children takes place indirectly most of the time (Baumann, Kame'enui, & Ash, 2003) so in many cases word learning is not related to strategies. It has been pointed out that social strategies as extensive reading, intentional engagement in oral language and listening to adults, all for the purpose of learning a language, are efficient ways of YLs (Ellis,

1994).

Schouten-van Parreren (1992) examined 12-15-year-old Dutch learners of French as a FL. The vocabulary learning strategies of reading from context for new lexis were studied. It was found that weak learners were unsystematic in their strategy use compared to efficient learners who used numerous resources to pick up meaning from context: illustrations, linguistic context, the topic, and many others. Nikolov (2003, p. 22) points out that learners use a wide range of strategies; however it is also posited that conscious use of strategies were not typical of young learners. Even though YLs' vocabulary learning strategies have been theorized by several researchers, very few studies can be found with respect to this domain.

Another instrument was developed by Pavičič (2008) to assess the construct: Vocabulary Learning Strategy Questionnaire for Elementary Schools (VOLSQUES). Three main dimensions were identified by Pavičič (2008): (1) strategies of formal vocabulary learning and practicing; (2) self-initiated independent vocabulary learning; and (3) spontaneous (incidental) vocabulary learning (learning). The questionnaire comprised 27 items; every dimension contained nine items. The instrument was validated with item-analysis and factor-analysis with the participation of 300 Croatian children. She found that strategies of formal vocabulary learning and practicing are used most often by young learners, especially, within this classification, ones that involve repetition.

Griva, Kamaroudis, and Geladari (2009) conducted another research focusing on YLs' vocabulary learning strategy use. Greek-speaking 6th graders (n=238) participated in the study. The researchers used both qualitative and quantitative measures. Besides a self-report questionnaire, think-aloud protocols were applied so that a deeper insight could be gained as far as word learning strategy use was concerned. In the self-report process, the participants were requested to write down the strategies they used frequently to learn words. Translating into the mother tongue, repeating orally and looking up words in a dictionary were reported as the most frequently used strategies. During the think-aloud protocols, the researchers also revealed that a metacognitive strategy, contact consciously thought over, with the FL, was also a frequent instance of the attempt to learn new words. This finding is in line with the results of Doró and Habók (2013).

Coyle and Gomez Gracia (2014) sought to find whether the strategy 'listening to songs to learn new words' used by YLs would prove to be an efficient one from the perspective of vocabulary learning. Spanish children of 5-6 years of age (n=25) participated in the study. Vocabulary was taught through songs in three sessions. Children were told to listen to the songs then to watch the teacher perform gestures related to the unknown words in the songs, and then to link words to pictures. It was found that receptive vocabulary was enhanced and in the delayed post-test a major finding was that some of the children performed better than on the post-test five weeks earlier. It was concluded that listening to songs is an efficient strategy that young language learners can use in the vocabulary learning process.

Hardi (2014) investigated Hungarian YLs' vocabulary learning strategy use within the framework of self-regulation. Hardi (2014, p. 188) conducted her research in three phases. In the first phase she applied semi-structured interviews and classroom observations with a small number of students. In the second phase, she did a focus group interview and structured interviews. Following the interviews the researcher did a pilot study of her data-collection questionnaire that she developed. In phase 3, her validated questionnaire was used with the participation of 3rd-8th graders (n=331). Looking up words in the dictionary, oral repetition, translating word to NL were strategies the participants reported applying in order to learn words. One of the main findings of her research was that there is a certain change in YLs' vocabulary learning strategies as they grow older. With the passing of time, FL learners tend to experiment with and apply new strategies. She documented that strategic vocabulary learning changes over time. Metacognitive strategies, even in the case of YLs (8-10-year olds), were found to be frequent in self-reports. Self-regulated strategy use was found as early as 3rd grade and this indicates that self-regulation develops at an early age. This refutes the findings of Schmitt (1997) and Catalan Jimenez (2003) who had found that discovery strategies were more frequent strategies used by young learners to learn words.

4. Development of the vocabulary learning strategies questionnaire

Having investigated the instruments assessing vocabulary learning strategies with special regard to those of YLs, a decision was made to consider Stoffer's (1995), Schmitt's (1998) and Pavičič's (2008) questionnaire items adapted from Oxford's SILL (1991) for a large item pool. The reason for this was that these instruments had been either used or adjusted for YLs vocabulary learning strategies. The pool also involved items that were considered worthy of being a component of a questionnaire assessing Hungarian YLs' vocabulary learning strategies. The items from all of the selected questionnaires were considered for inclusion in my new instrument. These four questionnaires appeared to have the most alignment with the construct and to be best suited for the development of vocabulary learning strategies questionnaire for YLs because these instruments had also been previously used to investigate YLs. I also added some items to my new instrument because new strategies had also come into the picture especially amongst YLs since social network sites became so popular. Some of the items were extended with different variations. For example, the item in Pavičič (2008) 'I watch English language TV shows spoken in English or go to movies spoken in English' was modified in the following way and was broken up into three different items: 'I watch English films with subtitles', 'I watch English films without subtitles' and 'I watch English films with Hungarian subtitles'. Table 2 presents the questionnaire items and their origins in the literature. Once the pool of the multitude of strategies was gathered, each and every item was examined as to whether they would fit into the instrument and into the Hungarian context. In the wake of this, the items were examined from the perspective of dimensions of vocabulary learning strategies.

Five factors were selected to be the composing parts of the questionnaire: cognitive, memory, metacognitive, determination and social. I decided not to have two major categories and six sub-categories as in Schmitt's taxonomy (1998) due to the fact the above-mentioned dimensions covered all the questionnaire items for a pilot study. Summing up the literature on this issue the five different strategies are defined as follows: 1) cognitive strategies involve the transformation of the target language by the learner, 2) memory strategies include the usage of old material and its linking to new knowledge, 3) metacognitive strategies are ones that exhibit evaluation and review of the cognitive processes by the learner, 4) determination strategies are used by the learners when faced with the challenge of discovering the meaning of a new word, 5) social strategies involve interaction of the learner with their environment and peers.

Once the five dimensions were decided on, the questionnaire statements were carefully phrased with a view to the specific Hungarian learning environment and circumstances. Two experts were consulted during the process of questionnaire development. All the questionnaire items were thoroughly thought over with special respect to their wording so that they would reflect the construct. Items such as Schmitt's (1998) 'I use a word list to learn words' and Oxford's (1991) 'I use new words in a sentence so I can remember them' were adapted unchanged but these were rare cases in the questionnaire development process. The definition of the cognitive factor in my instrument is the same as Schmitt's (1998): cognitive strategies involve the mechanical repetition of word for the sake of retention. The cognitive factor comprised eight items and each of them were meant to investigate how students try to retain the knowledge of newly-learned items by using them in a written sentence, in a spoken sentence, etc. The memory factor contained eleven different items. My working definition is based on Schmitt's definition: learners manipulate the words in order to memorize them. The metacognitive factor contained sixteen different statements as I considered it a significant factor to investigate. Metacognitive strategy is the conscious evaluation of the learners' strategies.

All the statements focused on this conscious evaluation, manipulation and assessment of the vocabulary learning strategies used by the students. The involvement of the eight items assessing the use of the determination factor was also motivated by Schmitt's taxonomy (1998). Since guessing from context is a traditional, efficient and valid way of learning new words, this factor was indispensable in the instrument. The items were phrased with the aim of gaining the most possible information as to how and how often learners use context to learn new vocabulary. The social factor contained nine items inquiring into the learners' conscious use of social media and their willingness to turn to their teachers or peers to learn the meanings of the new words.

None of the cited data gathering instruments inquire into the use of info-communications technologies (ICT) to learn words, which is natural since at the time of their development ICT tools did not play as vital a role as now in education. This gap was meant to be filled in with statements added to the questionnaire. Three other statements not used by any of the cited researchers were also added as they were regarded as strategies typical in a Hungarian context. Table 2 presents the questionnaire with the items in Hungarian and English.

Table 2The vocabulary learning strategies questionnaire

Dimension	Item in Hungarian	English translation	Previous instrument inclusive of item
Cognitive 1	Az új szót mondatban használom.	I use the new word in a sentence	Stoffer (1995), Pavičič (2008), Schmitt (1997)
Cognitive 2	Az új szót sokszor leírom.	I write down new word many times.	Pavičič (2008), Schmitt (1997)
Cognitive 3	Az új szót sokszor kimondom	I say the new word many times.	Stoffer (1995), Schmitt (1997)
Cognitive 4	Szótárfüzetet használok a szavak tanulására	I use a vocabulary list to learn words	Stoffer (1995), Pavičič (2008), Schmitt (1997)
Cognitive 5	Az újonnan megtanult szót beszédben használom.	I use the newly-learned word in speaking.	Stoffer (1995), Schmitt (1997)
Cognitive 6	Az újonnan megtanult szót írásban használom	I use the newly-learned word in writing.	Stoffer (1995), Schmitt (1997)
Cognitive 7	Tárgyakra ráírom vagy ráragasztom az angol jelentésüket.	I write or stick the meaning of words onto objects.	Stoffer (1995), Pavičič (2008)
Cognitive 8	Szójátékokat játszok.	I play word-games.	added item
Memory 1	Elképzelek egy helyzetet, amikor használnám a szót.	I imagine a situation when I would use the word.	Schmitt (1997), Pavičič (2008)
Memory 2	Szólistát csinálok, hogy emlékezzek a szóra.	I make a word list in order to remember it.	Stoffer (1995)
Memory 3	Csoportosítom a szavakat hasonlóságuk alapján.	I group the words in clusters based on their similarities.	Stoffer (1995), Schmitt (1997)
Memory 4	Hasonló jelentésű szóhoz kötöm a megtanulandó szót.	I link the new word to one with synonymous meaning.	Schmitt (1997), Pavičič (2008)
Memory 5	Ellentétes jelentésű szóhoz kötöm a megtanulandó szót.	I link the new word to one with antonymous meaning.	Schmitt (1997)
Memory 6	Az új szót ismert szóhoz kapcsolom.	I link the new word to one already known.	Stoffer (1995), Schmitt (1997)
Memory 7	Képes szókártyákat készítek.	I make picture word cards.	Stoffer (1995), Pavičič (2008), Schmitt (1997)
Memory 8	Angol-magyar szókártyákat készítek.	I make English-Hungarian word cards.	Stoffer (1995), Pavičič (2008), Schmitt (1997)
Memory 9	Magamban elismétlem a szót.	I repeat the word to myself.	Stoffer (1995), Pavičič (2008), Schmitt (1997)
Memory 10	A szó mellé képeket rajzolok.	I draw pictures next to the word.	Stoffer (1995)
Memory 11	Felmérem, hogy megtanultam-e az új szót.	I evaluate if I have really learned the word.	Stoffer (1995), Pavičič (2008)
Metacognitive 1	Angol nyelvű zenét hallgatok, hogy új szót tanuljak.	I listen to English music so as to learn new words.	Pavičič (2008)
Metacognitive 2	Aláhúzom a fontos szót.	I underline the important word.	Stoffer (1995), Pavičič (2008), Schmitt (1997)
Metacognitive 3	Bekarikázom a szót, amely fontos.	I circle the word that is important.	Stoffer (1995), Pavičič (2008), Schmitt (1997)
Metacognitive 4	Angol nyelvű filmeket nézek angol felirattal.	I watch English film with English subtitles.	Stoffer (1995), Pavičič (2008)

Table 2 ... continued

Table 2 Contin			Previous instrument inclusive
Dimension	Item in Hungarian	English translation	of item
Metacognitive 5	Angol nyelvű filmeket nézek	I watch English films	Stoffer (1995), Pavičič (2008)
Metacognitive 6	felirat nélkül. Angol nyelvű filmeket nézek	without subtitle I watch English films with	Stoffer (1995), Pavičič (2008)
Metacognitive 7	magyar felirattal. Angol nyelvű rajzfilmeket nézek.	Hungarian subtitle. I watch English cartoons.	added item
Metacognitive 8	Angol nyelvű újságot olvasok a szó tanulására.	I read English newspapers so as to learn the words.	Stoffer (1995), Pavičič (2008)
Metacognitive 9	Angolul olvasok könyvet	I read English books	Pavičič (2008)
Metacognitive	Angol nyelvű számítógépes	I play English computer	Pavičič (2008),
10	játékokat játszok.	games.	, , ,
Metacognitive 11	Angol nyelvű képregényeket olvasok.	I read English comics.	added item
Metacognitive 12	Elolvasom az angol nyelvű feliratokat mindenféle termékeken.	I read the English labels on every product.	Stoffer (1995)
Metacognitive 13	Azért használok írásban új szót, hogy emlékezzek rá	I use a new word in writing so as to remember it.	Stoffer (1995), Schmitt (1997)
Metacognitive	Azért használok	I use a new word in my	Stoffer (1995), Schmitt (1997)
14	beszédemben új szót, hogy emlékezzek arra.	speaking so as to remember it.	
Metacognitive	Elemzem egy új szó részeit,	I analyze the meaning of	Stoffer (1995), Pavičič (2008),
15	hogy rájöjjek a jelentésére.	new words so as to realize its meaning.	Schmitt (1997)
Metacognitive	Olvasáskor a	I infer the meaning of the	Stoffer (1995), Pavičič (2008)
16	szövegkörnyezetből	new word from context	
	következtetem ki a szó jelentését.	when reading.	
Metacognitive	Angol nyelvű beszédből	I infer the meaning of the	Stoffer (1995), Pavičič (2008),
17	következtetem ki a szó jelentését.	new words from spoken English.	Schmitt (1997)
Determination 1	Nyomtatott szótárból	I look up the meaning of the	Stoffer (1995), Pavičič (2008),
	keresem ki az új szó	new word in a printed	Schmitt (2008)
	jelentését.	dictionary.	
Determination 2	Elektronikus szótárból	I look up the meaning of the	added item
	keresem ki a jelentést.	word in an electronic dictionary.	
Determination 3	Megjegyzem hol láttam az új	I remember where I have	added item
	szót a tankönyv oldalán.	seen the new word on the	
		page of the textbook.	
Determination 4	Megjegyzem hol hallottam az	I remember where I have	added item
Determination 5	új szót. Az új szót angol-magyar	heard the new word. I look up the new word in an	Schmitt (1997)
Determination 3	szótárból nézem ki.	English-Hungarian	Schillet (1997)
	szotarbor nezeni ki.	dictionary.	
Determination 6	Az új szót egynyelvű angol	I look up the new word in a	Pavičič (2008)
	szótárból nézem ki.	monolingual dictionary.	,
Determination 7	Pórbálom az új angol szó	I try to remember the	Pavičič (2008)
	magyar megfelelőit is	Hungarian equivalent of the	
0 11	megjegyezni.	new English words.	G 1 14 (1007) B 1717 (2000)
Social 1	A tanárt kérdezem meg, mit	I ask the teacher what the	Schmitt (1997), Pavičič (2008)
Social 2	jelent az új szó. Osztálytárssal tanulom az új	new word means. I learn the new word with a	Schmitt (1997), Pavičič (2008)
Social 2	szót.	classmate.	50mm (1797), 1 avicio (2008)
Social 3	Órán, a társam kérdezem	I ask my classmate in class	Schmitt (1997), Pavičič (2008)
	meg, mit jelent az új szó.	what the new word means.	, , ,

Table 2 ... continued

Dimension	Item in Hungarian	English translation	Previous instrument inclusive of item
Social 4	A szüleim kikérdezik tőlem a szavak jelentését.	My parents check if I have learned the new words by asking me.	added item
Social 5	Órán csoportmunkában együtt tanuljuk a szavakat.	We learn the new words together in group work in class.	Stoffer (1995), Pavičič (2008)
Social 6	Angolul tudó barátot keresek a közösségi oldalakon.	I look for English speaking friends on the social network sites.	added item
Social 7	Angolul használom a facebookot	I use facebook in English.	added item
Social 8	Angolul twitterezek.	I use twitter in English.	added item
Social 9	Angolul skypeolok	I skype in English.	added item

5. Methodology

This study seeks to answer the following research questions

- ➤ How do the questionnaire items function?
- ➤ How does the factor analysis reflect the original dimensions?
- What are the most frequent vocabulary learning strategies used by Hungarian young learners?

5.1 Participants and procedure

The instrument was the 52-item vocabulary learning strategies questionnaire. The pilot study was carried out with the participation of 86 Hungarian 6th graders in primary schools in Budapest, Mezőtúr and Szeged in February 2014. All the students had studied English from their 4th grade (age 10) in three lessons a week. Four classes were selected to be involved in the study. The headmasters and the English teachers had been requested to provide access to the learners two weeks before the data were taken.

5.2 Instrument

The self-reported vocabulary learning strategies questionnaire was used to gather data, the development of which was described in section 4. Following the selection of the questionnaire items it was also decided that the data would be collected on a 4-value frequency scale: 'never', 'once a month', 'once a week', 'always.' The decision was made with the intention of forcing to students not to opt for a neutral answer. Since the foundations of my questionnaire were laid on Oxford's (1991) and Schmitt's (1998) data-gathering instruments, their way of data-gathering ought not to be left out of consideration. Oxford used a 5-value frequency scale from 'never' to 'always' and Schmitt's instrument also sought to reveal the frequency of the use of the statements the same way. Hence choosing the frequency scale made sense and it was also decided that instead of a 5-value scale, on which students can give a neutral answer, a 4-value scale would be used so that learners would by all means have to choose to give a solid answer.

5.3 Procedure

I went to all the schools and presented the paper-and-pencil 52-item questionnaire to the learners. The questionnaire contained a brief description in Hungarian and a sample statement to which the answer was an obvious and predictable 'never': 'I skype with my Ugandan friend to learn new words.' This was done in order it would be evident for the learners what the correct answer was and what they were expected to do. The children took the questionnaire seriously and filled in it without any disturbance. When the completed questionnaires

were collected, I asked each student to write down strategies that they use to learn words on their own. The lists of strategies of all the students were later considered at the pilot of the questionnaire and this resulted in new items being involved in the modified instrument used at the large-sample assessment.

Results and discussion

The reliability of the questionnaire was fairly high (Cronbach's Alpha = .91). It was also found that some of the items had 0 standard deviation. Every student indicated 'always' at the statement 'I use a vocabulary list to learn word'. Since this item provides the research with no information from an education scientific sense, it was decided that items having zero standard deviation would not be used in the final questionnaire. The correctness of the decision on adding the item 'My parents check if I have learned the new words by asking me' was confirmed since participants reported high frequency of this activity (M=3.09). Dictionary use also appeared to be a frequent activity used by students. Both the item 'I look up the new word in an English-Hungarian dictionary' and 'I look up the meaning of the word in an electronic dictionary' had high frequencies (3.09 and 3.03 respectively) as it had been previously assumed for Hungarian learners have a tendency of using dictionaries for the purpose of learning words.

The activities 'I infer the meaning of the new word from context when reading' and 'I infer the meaning of the new words from spoken English', both related to inferring meanings from context also turned out to be often used by learners (M=2.86 and M=2.84, respectively). This is a finding that is in line with and is confirmed by what Hardi (2014) found when investigating Hungarian learners' vocabulary learning strategy use: with Hungarian learners of a foreign language it is a popular tendency to infer the meanings of vocabulary from context. In Hungarian schools writing down items with the purpose of memorizing them is also a frequent strategy, as a result participants indicated they often used this strategy (M=2.87). In Table 3 the descriptive statistics of all the questionnaire items is presented.

Table 3 Descriptive statistics of the vocabulary learning strategies questionnaire

Factor	Items	Mean	SD
Cognitive 1	I use the new word in a sentence	1.945	1.166
Cognitive 2	I write down new word many times	2.876	1.254
Cognitive 3	I say the new word many times	2.383	1.178
Cognitive 4	I use a vocabulary list to learn words	4.000	0.000
Cognitive 5	I use the newly-learned word in speaking	2.485	1.112
Cognitive 6	I write or stick the meaning of words onto objects	2.593	0.978
Cognitive 7	I play word-games	1.332	0.944
Cognitive 8	I imagine a situation when I would use the word	1.996	0.917
Memory 1	I draw the situation when I would use it	1.554	1.022
Memory 2	I make a word list in order to remember it	1.823	0.478
Memory 3	I group the words in clusters based on their similarities	1.374	0.797
Memory 4	I link the new word to one with synonymous meaning	1.222	0.686
Memory 5	I link the new word to one with antonymous meaning	1.513	1.000
Memory 6	I link the new word to one already known	1.205	0.544
Memory 7	I make picture word cards	1.656	1.087
Memory 8	I make English-Hungarian word cards	1.148	0.602
Memory 9	I repeat the word to myself	1.347	0.936
Memory 10	I draw pictures next to the word	2.014	1.122
Memory 11	I evaluate if I have learned the new word or not	1.092	0.388
Metacognitive 1	I listen to English music so as to learn new words	3.151	1.000
Metacognitive 2	I underline the important word	2.054	1.224
Metacognitive 3	I circle the word that is important	2.046	0.547
Metacognitive 4	I watch English film with subtitles	1.414	1.023
Metacognitive 5	I watch English films without subtitle	1.652	0.938
Metacognitive 6	I watch English films with Hungarian subtitle	1.912	1.122
Metacognitive 7	I watch English cartoons	2.154	1.124
Metacognitive 8	I read English newspapers so as to learn the words.	1.918	1.203
Metacognitive 9	I read English books	1.412	1.021
Metacognitive 10	I play English computer games.	1.576	0.947

Table 3 ... continued

Factor	Items	Mean	SD
Metacognitive 11	I read English cartoons.	1.264	1.166
Metacognitive 12	I read the English labels on every product	1.538	1.012
Metacognitive 13	I use a new word in writing so as to remember it	2.244	1.078
Metacognitive 14	I use a new word in my speaking so as to remember it	2.063	1.011
Metacognitive 15	I analyze the meaning of new words so as to realize its meaning	1.912	1.103
Metacognitive 16	I infer the meaning of the new word from context when reading	2.866	1.168
Metacognitive 17	I infer the meaning of the new words from spoken English	2.848	1.277
Determination 1	I look up the meaning of the new word in a printed dictionary	1.982	1.286
Determination 2	I look up the meaning of the word in an electronic dictionary	3.032	1.024
Determination 3	I remember where I saw the new word on the page of the textbook	1.576	0.712
Determination 4	I remember where I have heard the new word	1.466	1.277
Determination 5	I look up the new word in an English-Hungarian dictionary	3.098	1.192
Determination 6	I look up the new word in a monolingual dictionary	2.276	0.606
Determination 7	I try to remember the Hungarian equivalent of the new English words	2.664	0.944
Social 1	I ask the teacher what the new word means	2.818	1.198
Social 2	I learn the new word with a classmate	2.166	0.604
Social 3	I ask my classmate in class what the new word means	1.854	0.943
Social 4	My parents check if I have learned the new words by asking me	3.687	0.677
Social 5	We learn the new words together in group work in class	2.612	1.298
Social 6	I look for English speaking friends on the social network sites	1.414	1.000
Social 7	I use facebook in English	1.876	1.354
Social 8	I use twitter in English	1.247	0.722
Social 9	I skype in English	1.378	0.796

Looking at the frequency of strategy usage, effectual information can be inferred. The most frequently used vocabulary learning strategies, based on the results of the questionnaire, are the following as shown in Table 4.

Following the investigation of descriptive statistical data and the frequencies of the different items, item-analysis was carried out through looking at corrected item-total correlations. This value shows how each item correlates with the rest of task. It is a regularly used statistical method in pilot studies since a clear picture is outlined in terms of the functioning of the items. On a sample of 103 students, the reliability and the usefulness of the items with values under .194 are called into question (Falus & Ollé, 2008). Some of the items that fell near or under this .194 value. A decision was made item by item as to which items that fell under the value of .194 would be removed from the questionnaire and those that fell near this value would further be examined. In Table 5 the items whose item-correlation values were under or near the value of .194 are presented. In response to RQ 1, the malfunctioning items are enlisted. Two items were examined and it was decided that they would be relevant items in the new questionnaire: 1) 'I make picture word cards' and 2) 'I ask my classmate what the new word means'.

Table 4

The most frequently used strategies

Factor	Item	Mean	SD
Cognitive 4	I use a vocabulary list to learn words	4.000	0.000
Social 4	My parents check if I have learned the new words by asking me	3.687	0.677
Metacognitive 1	I listen to English music so as to learn new words	3.151	1.000
Determination 2	I look up the meaning of the word in an electronic dictionary	3.032	1.024
Determination 5	I look up the new word in an English-Hungarian dictionary	3.098	1.192
Cognitive 2	I write down new word many times	2.867	1.254
Metacognitive 16	I infer the meaning of the new word from context when reading	2.866	1.168
Metacognitive 17	I infer the meaning of the new words from spoken English	2.848	1.277
Social 5	We learn the new words together in group work in class	2.612	1.298
Cognitive 6	I write or stick the meaning of words onto objects	2.593	0.978

 Table 5

 Items with low item-total correlation values

Item	Item-total correlation value
I write down the words many times	.184
I say the new word many times	.263
I write new word and its Hun. meaning into my vocabulary	.004
I write or stick the meaning of words onto objects	.122
I relate the new word to one with antonymous meaning	.195
I make English-Hungarian word cards	.164
I group the words in clusters based on their similarities	.222
I read English comics	.183
I draw pictures next to the word	.097
I look up the meaning of the new word in a printed dictionary	.046
I imagine a situation when I would use the word	.145
I watch English film with English subtitles	.168
I ask my teacher what the new word means	.159
I ask my classmate what the new word means	.227
I watch English cartoons	.238
I learn the new word with a classmate	.226
I remember where I have heard the new word	.164
My parents check if I have learned new words by asking me	.153
We learn the new words together in group work in class	.242
I use twitter	.185

Having investigated the descriptive statistics of the questionnaire results and having gained an insight into the items, factor analysis was conducted to check whether the five factors reflect the original conceptualization. In response to RQ 2, factor-analysis was conducted. After the factor-analysis had been run, it turned out that ten factors existed on the basis of the results. The KMO-index was .72 which was an indication that the strength of the correlation among the five dimensions make it moderately suited for factor analysis. The factor-loadings over the .50 factor-loading limit (Csíkos, 2003, p. 44) were taken into account. It must be noted that Pavičič (2008) took a .40 factor-loading limit in her vocabulary strategy learning research. The ten different factors were considered too many so a frequent procedure was taken in this case. Varimax factor rotation was performed in order that the number of factors would decrease.

7. Conclusions and further instrument development

Having looked at the results indicated by the descriptive statistics, the original five dimensions were exposed to factor analysis so that our primary concept would be justified. However, results of the factor analysis clearly showed that data do not reflect the original factors since the SPSS analysis indicated ten factors for the 52 items. Since the ten new factors were found to be overwhelmingly plenty, a decision was made to reduce the factors with Varimax factor rotation and the number of factors was reduced to four. The interpretation of the four components reveal that statements focusing on metacognitive strategies such as underlining words and circling words load heavily on Factor 1. This factor is named functional since strategies inclusive of this component are related to functional use of the study material. It is also discovered that the factor loadings of repetitive strategy techniques such as rote-learning, repeating words to oneself, looking up words in a bilingual dictionary along with inferring meaning from context, watching English film with subtitles form one cluster in Factor 2. This factor is named the traditional factor since these strategies reflect traditional learning techniques dating from a long time. Reading newspapers and books using Facebook, reading labels on products, listening to music, watching films load heavily on Factor 3, named the authentic factor as all these strategies require encounter with authentic language used by native speakers. The last cluster is named the innovative factor. Such strategies as 'analyzing and evaluating newly learned words along with the use of word cards, inferring meaning from spoken context, playing video games loaded heavily on the fourth component. All these strategies have non-traditional way of learning. In Table 6 the new factors are presented.

Table 6The new factors after Varimax rotation with the strongest factor-loadings reported

Items	1	2	3	4
I make a word list to remember the words		.605		
I make English-Hungarian word cards				.678
I underline the important words	.402			
I circle the word that is important	.505			
I read English newspapers so as to learn words			.606	
I use new words in my speaking so as to remember them	.509			
I remember where I have seen the new word on the page of the textbook		.606		
I use new word in a sentence	.708			
I play with word games				.702
I relate the new word to one with synonymous meaning	.406			
I look up the meaning of the word in an electronic dictionary				.403
I look up the meaning of the word in a monolingual dictionary		.503		
I ask my classmate in class what the new word means	.446			
I use facebook to learn English words		.389		
I use skype to learn English words		.489		
I link new word to an already known word	.602			
I evaluate if I have really learned the word				.396
I watch English films with Hungarian subtitles			.452	
I analyze parts of the word in order to find out its meaning				.582
I infer the meaning of the new word in an English context when reading		.602		
I try to remember the Hungarian equivalent of the new English word		.556		
I listen to English music in order to learn new words			.602	
I watch English films without subtitles			.384	
I read English books to learn new words			.478	
I play English video games to learn new words				.581
I read English labels on all kinds of products to learn new words				.652
I infer the meanings of the words from spoken English			.346	
I look for English speaking friends in the social media	.588			
I use the newly-learned word in speaking	.624			
I use the newly-learned word in writing	.445			
I ask my classmate in class what the word means in class	.365			
I make picture word cards				.426
I repeat the word to myself		.398		

Items with low total-correlations have been taken out and their factor-loadings are not reported. In consequence, 33 items remained in the final version of the questionnaire plus five new added items of which it was thought to fit well into the pertaining factors. The new items were the ones most frequently listed by the participants after filling in the questionnaire as they were requested to list the most frequently used strategies. Table 7 shows the new dimensions and their questionnaire items including the new added items from the pool of items given by the participants. The 4-value frequency scale remained unchanged and the developed questionnaire was used in the assessment on a large sample.

Table 7The new dimensions, the pertaining items and their previous place in the original questionnaire factors of the vocabulary learning strategy questionnaire

Functional	Traditional	Authentic	Innovative
I use the new word in a sentence	I repeat the word to myself	I read English newspapers so as to remember the words	I make English-Hungarian word cards
I circle the word that is important	I make a word list in order to remember it	I infer the meaning of the new words from spoken English	I play with word games
I use a new word in writing so as to remember it	I try to remember the Hungarian equivalent of the new English words	I use facebook in English to learn new words	I make picture word cards
I link the new word to synonymous meaning.	I remember where I have seen the new word on the page of the textbook	I skype in English to learn new words	I read English labels on all kinds of products to learn new words

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Table 7 continued

Functional	Traditional	Authentic	Innovative
I use a new word in speaking so as to remember it	I infer the meaning of the new word from context when reading	I watch English films with Hungarian subtitles	I analyze parts of the word in order to find out its meaning
I underline the important word	I look up the new word in a monolingual dictionary	I watch English films without subtitles	I play English video games
I ask my classmate in class what the new word means	I rote-learn the words (new item)	I listen to English music in order to learn new words	I look up the word in an electronic dictionary
I look for English speaking friends in the social media	I look up the meaning of the new words in a bilingual dictionary (new item)	I read English books	I evaluate if I have learned the word
I link new word to one already known	I learn new words from my own vocabulary (new item)	I learn new word in order to say whatever I want (new item)	I take notes of the words when watching/listening to English programs (new item)
I use the newly-learned word in writing			

The results of the pilot study provides us with valuable information concerning not only vocabulary learning strategies but also FL learning and teaching in Hungarian classrooms and in different other learning environments. It became clear from the data that besides writing the words in a bilingual vocabulary, students are checked by the parents whether they have learned the new words or not. In Hungarian schools, especially until the end of primary school a considerable part of the parents puts special focus on their children's studies. The other eight most frequently used strategies reported by the students reflect the special features of Hungarian YLs learning FL words. Looking up words in either a printed or an electronic dictionary has always been a popular and favored strategy by students not just in Hungary but globally. Reading English comics appears to be a frequent activity, consequently a strategy, applied by the Hungarian YLs. This item was not adapted from any of the cited questionnaires in the literature but it was my own decision to involve it in the questionnaire. This result confirms and justifies the correctness of this decision. It is somewhat surprising that the participants indicated more frequent comics reading (M= 3.26) than listening to English music with the purpose of learning words (M= 3.15) since listening to English music is not only a daily activity but a popular trend among Hungarian 12-year-old children. It seems that comics is still a favored activity by the Hungarian primary school students. However, because of the low item-total correlation value of the item 'I read English comics', it was not included in the final questionnaire developed for online use.

It has also been revealed, in accordance with my presupposition, that asking the teacher for the meaning of the new word, writing down the word many times, remembering the Hungarian equivalent of the new word and learning words in group work are within the most applied vocabulary learning strategies. However, drawing pictures next to words was also reported to be a popular strategy (M= 3.01). Visualization might have become such an everyday part of the children's lives that they use images in all situations as a way of learning new words. Drawing images appears to be a habitual activity amongst most of the students. It must also be kept in mind that in the questionnaire the learners had to indicate how often they use certain strategies. Value 3 on the 4-value scale meant 'every week'. Hence, the majority of students draws pictures next to words (M= 3.01) every week but it does not necessarily mean that they draw images to all the words nor does it mean that they draw them next to even the half of the words.

Attention must also be paid to the strategies which had been supposed that to be more frequently used ones. They then turned out to be either hardly ever used or to have low standard deviation. Contrary to the relatively frequent activity, drawing pictures next to words (M=2.09), it turned out that students do not draw entire situations and do not use social network for vocabulary learning purposes consciously. Learning English words by using such social network sites as Facebook and Twitter and conducting English conversations on skype is still an undiscovered area amongst YLs. None of these strategies were reported to be used more on a weekly

basis as the highest mean of these (use of Facebook) is under the value 2. Even though a considerable amount of time is spent on the use of social network sites they do not yet see an opportunity to learn English words with their assistance. The metacognitive activity, evaluation of whether the word has been learned or not, is also an infrequent strategy among young language learners. With all probability, at the age of 12 students are not as mature as they could evaluate their own learning process successfully. In Table 8, the new questionnaire is presented with the items translated into English and it is also clarified which factor each item belongs to.

 Table 8

 The newly-developed self-reported vocabulary learning strategies questionnaire

Factor Functional (F) Traditional (T) Authentic (A) Innovative (I)	Item in Hungarian	Item in English		How often do you do these activities to learn words? 1 never 2 once a month 3 once a week 4 always		
A	Szólistát csinálok, hogy emlékezzek a szóra.	I make a word list to remember the words	1	2	3	4
I	Angol-magyar szókártyákat készítek.	I make English-Hungarian word cards	1	2	3	4
F	Aláhúzom a fontos szót a szövegben.	I underline the important words	1	2	3	4
F	Bekarikázom azt a szót a szövegben, amit fontosnak tartok.	I circle the word that is important	1	2	3	4
A	Angol nyelvű újságot olvasok a szavak tanulása céljából.	I read English newspapers to learn words	1	2	3	4
T	Megjegyzem hol láttam az új szót a tankönyv oldalán.	I remember the page where I have seen the new word	1	2	3	4
F	Azért használok beszédemben új szót, hogy emlékezzek arra.	I use the newly-learned word in speaking to remember it	1	2	3	4
F	Az új szót mondatban használom.	I use new word in a sentence	1	2	3	4
A	Angolul használom a Facebookot, hogy angol szavakat tanuljak.	I use Facebook to learn English words	1	2	3	4
I	Szójátékokat játszok.	I play with word games	1	2	3	4
F	Hasonló jelentésű szóhoz kötöm a megtanulandó szót.	I link new word to one with synonymous meaning	1	2	3	4
I	Elektronikus szótárból keresem ki a szó jelentését.	I look up the word in an electronic dictionary	1	2	3	4
T	Az új szót egynyelvű angol szótárból nézem ki.	I look up the new word in a monolingual dictionary	1	2	3	4
F	Órán, a társam kérdezem meg, mit jelent az új szó.	I ask my classmate in class what the new word means	1	2	3	4
A	Angolul skypeolok, hogy angol szavakat tanuljak.	I use skype to learn English words	1	2	3	4
F	Az új szót ismert szóhoz kapcsolom.	I link new word to one already known	1	2	3	4
I	Felmérem, hogy megtanultam-e az új szót.	I evaluate if I have really learned the word	1	2	3	4
I	Elemzem egy új szó részeit, hogy rájöjjek a jelentésére.	I analyze parts of the word in order to find out its meaning	1	2	3	4
A	Angol nyelvű beszédből következtetem ki a szó jelentését.	I infer the meaning of the new words from spoken English	1	2	3	4
T	Próbálom az új angol szó magyar megfelelőjét is megjegyezni.	I try to remember the Hungarian equivalent of the new English words	1	2	3	4

Table 8 ... continued

Factor Functional (F) Traditional (T) Authentic (A) Innovative (I)	Item in Hungarian	Item in English	How often do you do these activities to learn words? 1 never 2 once a month 3 once a week 4 always			
T	Szavakat azért tanulok meg, hogy könnyebben kommunikáljak.	I learn new words to communicate better	1	2	3	4
A	Angol nyelvű filmeket nézek magyar felirattal, hogy szavakat tanuljak meg.	I watch English films with Hungarian subtitles	1	2	3	4
A	Angol nyelvű zenét hallgatok, hogy új szót tanuljak.	I listen to English music in order to learn new words	1	2	3	4
A	Angol nyelvű filmeket nézek felirat nélkül.	I watch English films without subtitles	1	2	3	4
A	Angolul olvasok könyvet.	I read English books	1	2	3	4
I	Angol nyelvű számítógépes játékokat játszok.	I play English video games	1	2	3	4
T	Elolvasom az angol nyelvű feliratokat mindenféle termékeken.	I read English labels on all kinds of products to learn new words	1	2	3	4
T	Olvasáskor a szövegkörnyezetből következtetem ki a szó jelentését.	I infer the meaning of the new word from context when reading	1	2	3	4
F	Angolul tudó barátot keresek a közösségi oldalakon.	I look for English speaking friends in the social media	1	2	3	4
F	Az újonnan megtanult szót írásban használom.	I use the newly-learned word in writing	1	2	3	4
A	Mikor angol nyelvű műsort nézek/hallgatok jegyzetelem a szavakat.	I take notes of the words when watching/listening to English programs	1	2	3	4
F	Az újonnan megtanult szót beszédben használom.	I use a new word in speaking so as to remember it	1	2	3	4
I	Képes szókártyákat készítek.	I make picture word cards	1	2	3	4
T	Magamban elismétlem a szót.	I repeat the word to myself	1	2	3	4
T	Kétnyelvű szótárból nézem ki a szó jelentését.	I look up the meaning of the new words in a bilingual dictionary	1	2	3	4
T	Saját szótárfüzetből tanulom a szavakat.	I learn new words from my own vocabulary	1	2	3	4
T	Bemagolom a szavakat.	I rote-learn the words	1	2	3	4

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