

PalArch's Journal of Archaeology of Egypt / Egyptology

LEXICAL INFERENCE IN ENGLISH AND OTHER LANGUAGES: A SYNTHESIS OF THE RESEARCH

*Yasir Naseem¹, Dr. Muhammad Shahab-ud-Din Shah², Hamad Mehdi³, Dr. Muhammad
Shafiq⁴*

¹Lecturer in English, Department of English, Emerson University Multan, Pakistan.

²Professor of English, Department of English, NCBA&E, Multan Campus, Pakistan.

³M. Phil, Department of English, Ghazi University, Dera Ghazi Khan, Pakistan

⁴Associate Professor of English, Department of English, Emerson University Multan,
Pakistan.

Corresponding Author's Email: [4mshafiq3448@gmail.com](mailto:mshafiq3448@gmail.com)

[1yasirwarraich1@gmail.com](mailto:yasirwarraich1@gmail.com), [2drshahabshah1@gmail.com](mailto:drshahabshah1@gmail.com), [3hamadmehdi961@gmail.com](mailto:hamadmehdi961@gmail.com)

Yasir Naseem, Dr. Muhammad Shahab-ud-Din Shah, Hamad Mehdi, Dr. Muhammad Shafiq. Lexical Inferencing In English And Other Languages: A Synthesis Of The Research-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 20(1), 881-896. ISSN 1567-214x

Key Words: Lexical Inferencing, Research, Word Meanings, Contextual Clues, Processes, Outcomes, English, Other Languages, Broader Implications, Findings, Acquisition, Second Language, Foreign Language, Morphological Analysis, Cognitive And Meta-Cognitive Abilities, Explicit Lexical Inferencing Instruction.

ABSTRACT:

The research paper aims at providing a systematic synthesis of the existing body of research on lexical inferencing in English and other languages. It sheds light on the insights gained from the research regarding the processes involved in generating word meanings. It is revealed that lexical inferencing deals with the active engagement of learners' cognitive abilities while employing contextual clues based on semantic, syntactic, pragmatic and discourse information. The results of the study underscore the impact of factors e.g. language proficiency, metacognitive skills, and familiarity with the language and cultural context on successful inferencing. Besides this, the study offers the broader pedagogical implications of lexical inferencing research for the acquisition of second/ foreign language. The study stresses on the worth of explicit lexical inferencing instruction, learning vocabulary through contextual guessing and morphological analysis of the unfamiliar words, and metacognitive training in accelerating learners' inferencing abilities. The paper ends with the practical implications for

stakeholders - teachers and learners - giving comprehensiveness of lexical inferencing for unfolding the meanings of the unknown words encountered during reading a text in language at target, facilitating lexical acquisition and overall language proficiency in second or foreign language contexts.

INTRODUCTION

The significance of lexical knowledge cannot be denied. Deficiency in grammar creates hurdles in communication, but deficiency in lexis stops communication at once (Folse, 2004). Whenever the language learners are asked to read texts in language at target, they encounter unknown words in reading (Shafiq et al., 2019; Shafiq & Ahmad, 2021; Shafiq et al., 2022). Lexical knowledge is “at the centre of language and our ability to communicate successfully” (Barcroft, 2016). While interacting with a text at target, language learners encounter unknown words. In order to arrive at meaning potentials (Halliday, 1985) learners use compensatory ways to make up for their language deficit. Lexical inferencing is a complex cognitive process (Wesche & Paribakht, 2009) which involves using linguistic and extra-linguistic clues to generate the meanings of the novel words during reading.

Lexical inferencing is considered a meaning construction process (Nassaji, 2004) which is remarkably influenced by the learner’s schemata. The centrality of lexical inferencing through incidental reading is worth-mentioning as far as the comprehension of both first language and second language is concerned. In inferencing, the familiar attributes and contexts are utilized in recognizing that is unfamiliar (Carton, 1971). A more detailed definition of lexical inferencing is given by Haastrup (1991, p.40) that lexical inferencing involves making informed guesses as to the meaning of a word in light of all available linguistic clues in combination with the learner’s general knowledge of the world, her awareness of context and her relevant linguistic knowledge.

Lexical inferencing deals with a cognitive process, playing a crucial role in second/foreign language vocabulary acquisition and reading comprehension. It helps language learners infer the meaning of unfamiliar words based on contextual clues provided in the context in reading as well as listening tasks. Understanding the mechanisms and strategies involved in lexical inferencing is mandatory for language learners as it paves the way for them to augment their vocabulary knowledge and read the texts pregnant with unfamiliar words with greater proficiency. Many research studies have explored lexical inferencing in both English and other languages, offering valuable insights into the processes and outcomes of inferring word meanings.

The process of lexical inferencing engages learners' cognitive abilities when they employ linguistic and non-linguistic sources to in order to generate word meanings from context. Contextual cues - surrounding words, sentence structure, and discourse context serve as valuable clues for learners to fill the gaps in their deficiency of vocabulary knowledge. These clues can be semantic, relying on the meaning of other words in the same sentence or passage, syntactic, utilizing grammatical structures, or pragmatic, drawing on the communicative intent or situational context. Learners also utilize metacognitive

strategies such as self-monitoring and self-regulation in order to check their understanding and adjust their inferencing processes accordingly.

Existing body of research has contributed to an in-depth awareness of the factors influencing successful lexical inferencing. Language proficiency, schematic knowledge, reading abilities, and familiarity with the topic have been marked as prominent determinants. Strategic learners are more adept at using an exporter of contextual cues. On the other hand less proficient learners may depend on simpler clues or struggle to infer accurately. Thus, researchers have examined the role of individual differences, such as cognitive abilities, metacognitive awareness, and lexical size, in assessing inferencing outcomes

The implications of lexical inferencing research extend beyond theoretical understanding and have practical significance for language teachers and language learners. Researchers can employ the insights from the research to plan and implement effective instructional interventions that aim to augment learners' inferencing skills. Explicit instruction, metacognitive training, and providing authentic reading opportunities with contextualized vocabulary learning can help learners in increasing their guessing abilities. Incorporating inferencing activities and assessment into curriculum design can accelerate learners' autonomy and promote active engagement in language classroom.

Lexical inferencing plays a significant role in second/foreign language lexical acquisition and reading comprehension. The exploration of the processes involved and outcomes of generating word meanings in English and other languages provides valuable perceptions in this domain. Understanding the strategies, factors, and implications associated with lexical inferencing can bring fruitful results, making dictionary the last resort. Explicit instructional practices, and assessment techniques augment learners' vocabulary acquisition plus overall language proficiency.

STATEMENT OF THE PROBLEM

While several studies have investigated specific aspects of lexical inferencing, there is a need for a systematic study which synthesizes the existing body of research on lexical Inferencing. Moreover, limited attention has been given to the implications derived from the research on lexical inferencing regarding the learning of English and other languages. As a result, there is need for further investigation into the practical implications and applications of lexical inferencing research for the language classroom.

SIGNIFICANCE OF THE STUDY

The study will provide a systematic analysis of the research on lexical Inferencing, identifying patterns and the latest trends in this domain. The study will contribute a lot to a deeper knowledge of the cognitive processes involved in lexical inferencing. This study will offer practical insights, gearing up teaching and learning of second or foreign languages. The implications derived from this research will have the potential to inform instructional approaches, materials development, and assessment methods. All this will positively influence learners' guessing skills. Thus, the study will contribute to both theoretical and practical domains. The findings will advance scholarly

understanding of lexical inferencing processes and results that provide practical guidance for teachers as well as the learners. The gap will be bridged between theory and practice, resulting in appropriate ways of teaching and learning how to reach successful guessing for the unfamiliar words encountered in the texts in English as a second or foreign language and other languages.

RESEARCH OBJECTIVES

1. To examine the existing body of research on lexical inferencing in English and other languages.
2. To find out implications based on the research on lexical inferencing for the learning of English or other languages.

RESEARCH QUESTIONS

1. What insights does the existing body of research on lexical inferencing offer regarding the processes and outcomes of inferring word meanings in English and other languages?
2. What are the pedagogical implications derived from the research on lexical inferencing for the learning of second or foreign languages?

The knowledge of a word

A word has its own world. The meaning of a word can be known through its relation with the real world, the association it carries with, its relation with other words and the regular company it keeps with other words (Jackson, 2002). Wallace (1982) has stated that knowledge of a word means ability to recognize it in both spoken and written form, use it in proper grammatical form to pronounce it, to spell it, to know its collocations, level of formality and its connotations. Meara and Wolter (2004) have presented a network view of lexical knowledge.

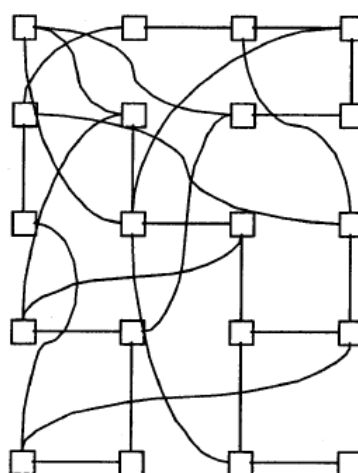


Figure 1: Vocabulary size and organization

(Meara & Wolter, 2004, p. 89)

Learners have great depth of word knowledge when they are familiar with the interconnection the words have with each other. If there is a developed lexical

network, learners will quickly recognize and retrieve the words they have learnt. The stronger the links, the deeper the word is known. The depth of lexical knowledge turns into an organization of words when these words are connected strongly with each other. When words have fewer links or connection they remain at the receptive level. Learners should have automaticity which enables them to recognize, process and access words for language use (Meara, 1996). Daller et al. (2007) call it fluency.

Surveying the research on lexical inferencing in English and other languages

Haastrup (1991), the great grandmother of lexical inferencing, conducted a study of Danish learners of English. All the informants were asked to infer the meanings of eighteen unfamiliar words in text. The introspective and retrospective methods were used in the study. According to Haastrup (1991, p. 207), learners “enjoy the guess work – and they seem to enjoy some words more than others – this facilitates the inferencing process”. The successful participants were active in their use of clues found in text. Haastrup has suggested that the task of lexical inferencing can be facilitated if awareness is created among learners to use knowledge sources and processing type.

Azin et al. (2015) conducted their study to explore the effect of lexical inferencing from context on the retention of the new learnt words by EFL Iranian learners. The findings of the study revealed that the words learnt through cognitive effort enhanced learning and retention. When some material was processed deeply, it led to better retention. Contextual guessing dealt with the deeper processing than rote learning. The text offered valuable clues which helped learners process the novel words deeply. All this led to retention of the word.

Shafiq et al. (2022) have used the theoretical framework of knowledge sources in lexical inferencing – propounded by Bengelil and Paribakht (2004) – but with some minor changes as this study was concerned with cloze letters to editor. The research was conducted to find out impact of cloze instruction on the success in guessing abilities of ESL learners. The instructional model CALLA – presented by Chamet and O’Malley (1994) – was employed. After receiving instructional treatment, the experimented group outperformed the control group in finding out the appropriate words for the given blanks in the letters published in newspaper Pakistan Observer. Furthermore, the subjects made more successful attempts for the deleted function words than the deleted content words.

Comer’s study (2012) has explored how English learners of Russian as a second language use lexical inferencing and other notable reading strategies when they read international texts written in Russian. The subjects were enrolled in fifth semester Russian class at Midwestern University in America study. They verbalized their thoughts in English. The four major strategy groups were unexplained guessing, reasoned guessing and meta-linguistic comment in reasoned guessing group. The context reference was on 14th number (the lowest one) in overall ranking. In unknown word group the strategy of unexplained guess stood first in the overall ranking. Sometimes the participants did not make

full use of phonological analysis. Morphological analysis proved beneficial when applied to form connected families of words. The findings of the study demonstrated that subjects were able to use a repertoire of lexical inferencing and reading strategies. It is worth mentioning that Russian learners made little use of sentence clues and paragraph clues in their attempts to generate the meanings of the unknown words. Even the participants seldom used their prior knowledge to guess the meanings of the unfamiliar words. The orthographic clues in a Russian text were found ineffective for figuring out the meaning of the unknown words. The major limitation of the study was the open-ended nature of think aloud. It made impossible for the researcher to compare the verbalized thoughts of the participants. It was recommended that introduction should be given to the student at intermediate level of Russian. It would enable them to deploy reading and lexical inferencing strategies in an effective way for successful guessing. The learners should be told to verify the phonological analysis with the context in which an unknown word occurred. Learners should be provided opportunities to share their ideas about lexical inferencing task.

In their study, Dessenberger et al. (2022) have compared lexical inferencing to word lists for the lexical growth of L2 Learners. The next objective was to find out the effect of the generation effect of memory. The subjects read English sentences with embedded Swahili words. They were asked either to deduce the meanings of the words using the given context or they were provided with translations before reading the sentences. Surprisingly, the inference condition resulted in lower rates of retention when compared with the reading condition effect – arguing against the proposal that lexical inferencing acts as a type of generation effect.

In her study (2003) Frantzen investigated why the participants did not infer the correct meanings of Spanish unknown words. Eleven subjects participated in the study. They were the students of third year university Spanish grammar class at a university in the Midwestern United States. The findings of the study showed that frequently context did not help learners to generate the meanings of the unknown words in the text. In the study the phenomenon of oblivious certainty was also noticed. The participants thought that they knew the meanings of certain words. In fact, they knew the working meanings of these words. Resultantly, they clung to the working answers and paid no attention to the context in which those words occurred. It was recommended that the learners should be instructed to use context to check the meaning, of the target words. As the contexts can provide many meanings, learners should be skeptical about the trustworthiness of contexts in which the unknown words appears.

In their study Garza and Harris (2016) examined the effects of different degrees of unknown words on the abilities of the participants to use linguistic context in translation and lexical inferencing. The results of the study demonstrated that foreign language learners were able to use the surrounding L1 foreign context in order to translate the unfamiliar words into L1 with ease. The findings of the study also indicated that there was an optimal level of usefulness in the linguistic context strategy for learning the words in foreign language. But care should be taken in this regard as there was a limit to the effectiveness of context strategy. Unlike translation, understanding of foreign words in native language decreased

beyond five foreign unknown words per sentence. The study provided the baseline for effectiveness of linguistic context strategy for lexical inferencing and translation. While using a similar theoretical model, the results of the study might be re-tested in further studies.

Hamada (2015) conducted three experiments to find out lexical inferencing processing while using the task of semantic relatedness judgment. The purpose was to notice the effect of forward contextual elaboration and backward contextual elaboration. The first experiment demonstrated that accurate attempts were made when the probe words were presented in elaborative contexts. The participants of the first experiment generated the meaning of the unfamiliar words when these words were based on backward contextual information. In the second experiment it was revealed that the backward contextual elaboration required more intricate mental processes when compared with forward contextual elaboration. The rationale behind the claim was that the subjects had to keep the guessed meanings of the target words in mind longer in the background contextual information than the forward contextual information. The findings of the third experiment revealed that the accuracy for the inference was higher in the forward context than the backward context. The subjects gave more accurate responses in forward condition than backward condition.

In their study Huckin and Bloch (1993) examined how the intermediate non-native students deduce the meanings of the unknown words in English text. Huckin and Bloch preferred to use case studies rather than controlled experiments.

As far the inferencing strategies are concerned, the learners followed the following pattern when guessing the meanings of the known words.

- i. They first studied the target word morphologically. When successful in this, they generated a hypothesis about the meaning of the word. In order to check their hypothesis, they used one or more context-based strategies.
- ii. If they failed in getting any meaning from morphological analysis of the word, they would rely on context-based clues in order to deal with the word. They were found to use immediate or local clues when guessing the meaning of the target words. They would try to explore the meanings of the unfamiliar words while using global clues and their world knowledge.
- iii. If they were unsuccessful in finding local or global cues, they would prefer to “detour” around the target word.

Mistaken identity (ID) was observed in the cases when learners were deceived by the outward phonological or orthographic similarity of the target word with another L2 word. Another major category of unsuccessful attempts was seen in “pothole” cases. In such cases the inferencer avoided the target word completely while going around the test word as one drove around a pothole seen in a street. Huckin and Bloch used the term “pothole” as a descriptor. There are two reasons for potholing on a target word.

- i. The subject might feel that the word is not essential to the meaning of the sentence and therefore not worth expending a lot of time and energy on.
- ii. The subject might simply have no idea what it means
(Huckin & Bloch, 1993, p. 163)

Hu and Nassaji (2012) explored the relationship between the ease of lexical inferencing and the retention of correct guessed word meanings. The participants of the study were eleven ESL learners who inferred the meanings of unfamiliar words in the academic text given to them. The introspective technique was used to collect data. The researchers have also found out that retention rate decreased when the participants of the study relied on meaning-focused strategies. The strategies dealt with the contextual clues in the text. On the other hand, retention rate increased when the participants focused on the formal properties of the target word. Formal properties of the word dealt with the decomposition of words into prefixes, root and suffixes in order to deduce the meanings of the unknown words. The study recommended that breaking words into parts would be effective if the strategy was used in the combination of other contextual strategies. Findings of the study revealed that the retention degree depended on the type of the strategies learners used in guessing the meanings of the targeted word.

Hu and Zhang's study (2023) explored the contribution of L1-L2 tradition and lexical inference to the comprehension of text. It was found that successful lexical inference incorporated learners' ability to employ strategically contextual information and integrate word meanings to update the given context.

Kelly (1990) in his article "*Guessing: No substitute for systematic learning of lexis*" has opposed Nation's claim (1990) that guessing could be used as a substitute for learning of vocabulary.

when reading in a FL, namely that unless the context is very constrained, which is a relationally rare occurrence, unless there is a relationship with a known word identifiable on the basis of form and supported by context there is little chance of guessing the correct meaning
(Kelly, 1990, p. 203)

Kelly called contextual guessing a time-consuming process. He was strongly biased against the strategy of contextual guessing. In the study he had found that direct teaching of vocabulary including infrequent words was more reliable than contextual guessing. His point of view was based on his partial disliking for contextual guessing. If an objective person had conducted the same study, the results would have been totally different.

The study conducted by Kondo-Brown (2006) has explored how advanced Japanese language learners guessed the meaning of unknown Kanji (Chinese characters) words which frequently appeared in Japanese texts written for native readers. A phenomenon was noticed that context did not help the participants pronounce Kanji words correctly. Resultantly, the learners' phonological knowledge of Kanji words led to successful guessing of those words. It was also

found that the participants followed a deductive approach in lexical inferencing. Phonological coding was given preference to the knowledge of Kanji language. The word part analysis was beneficial for making a successful guessing.

In their study Macaro and Mutton (2009) have investigated the effectiveness of a new pedagogical tool as support to inference of the meaning of unknown words. The second objective of the study was whether learners who received instruction in inferring strategies via the pedagogical tool comprehended a written French text better than those exposed to commonly used 'French readers'. A code-switched text was produced after the insertion of French words into the text. The findings of the study demonstrated that the pedagogical tool proved effective because it helped learners figure out the meanings of the unknown words. The learners who worked with the pedagogical tool learnt words better than those who did not work with the pedagogical tool. The successful inferencers focused on the meaning of French words and their relationship with the intermediate context available in English. The study suggested the combination of the pedagogical tool with greater exposure to L2 texts. What surprised the readers of the study was the use of code-switched material for inferencing task. Initially, the researchers adopted the mixed procedure. Such text-based work in primary schools proved beneficial because the participants in the study happily engaged in the task given to them.

The study conducted by Tang et. al., (2023) examined the potential of SL vocabulary acquisition via lexical inferencing in Child-robot interaction. The A story-little robot read a book to Duti kindergartners learning French. The result have revealed that the children learned the Key words successfully. Lexical inferencing acted as a new and different way to teach even kindergartners a second language.

In a study Qian (2005) has examined the use of lexical knowledge of ESL learners in Canadian universities for deciphering the meanings of the unknown words encountered when reading texts. Twelve subjects (10 Koreans and two Chinese) took part in the study. The Korean participants well interviewed in English. Only the two Chinese participants chose L1 for the interview. It was found that combined knowledge sources were also used to infer the meaning of a target word. Lexical knowledge had impact on the success rate in lexical inferencing task Qian has stated that "the greater the depth of their vocabulary knowledge, the more likely it is that learners will succeed in inferring the meaning of additional vocabulary when reading English texts" (Qian, 2005, p. 48). The study also found that the Matthew effect (rich-get-richer) in L1 reading could also be applied to inferences in L2 reading. It was also observed that learners with less depth of vocabulary knowledge relied on word form more than contextual guessing. It led to mistaken identity and finally to failures. The study recommended the benefits and necessity of improving the depth of lexical knowledge of ESL learners. In order to make successful attempts in lexical inferencing learners should use various types of clues (both local and global) along with other sources including their schematic knowledge. The use of various knowledge sources would lead to wild guesses for the meaning of the unknown words in L2 written texts.

Paribakhat and Wesche (2006) have conducted a study to find out the similarities and differences between Farsi speakers of learning English as a

foreign language in generating the meaning of the unknown words in Farsi and English. All those words were unknown to them. As the words were known to ENL speakers, the words were replaced by the ‘dummy’ words, having the same morphological clues as the original words had. The results of the study revealed that L1 lexical inferencing was more successful than L2 lexical inferencing. The native speakers had deep awareness of the cultural issues in the society in which they lived. For correct guessing, the prior knowledge of the topic and content was considered a useful knowledge source. L2 learners often relied on the first meaning which came to their minds. They never bothered to verify it with the clues available in the text. More importantly, Farsi speakers in L2 inferencing made a greater use of sentence level clues and discourse level clues than word level clues. The basic interpretation for such phenomenon was that there were orthographic differences between Farsi and English.

Rutamornchai and Tepsuriwong (2022) examined possible factors of unsuccessful lexical inferencing – with strategy use as main focus. There were only eight participants who read an academic text and tried to generate the meanings of unknown words. The study used retrospective interviews for the inferred meanings of the unknown words. It reported on the high amount of failure or less successful attempts in lexical inferencing. Lexical inferencing was found a complex cognitive process which involved various factors – strategy use, characteristics of the guessed words, contextual clues – and such learner’s factors as their lexical breadth and depth, their grammatical knowledge, and their schemata.

The study conducted by Yang et. al. (2023) has revealed that the contribution of lexical inferencing to language comprehension was correlated with learner-related and discourse-related variables. Schematic knowledge plus the dynamic patterns of lexical inferencing.

Zaho et al. (2016) examined the predictive role of four learner factors in L2 incidental vocabulary learning through reading. The researchers developed three instruments in order to measure the subjects’ levels of anxiety, motivation and mastery of strategies. One point was given to a correct response and half a point was given when the guessed meaning was correct semantically. For the incorrect guess, no point was assigned. Learners with higher level of proficiency learnt more words incidentally than those with lower proficiency. Higher-proficient learners possessed better decoding skills which enabled them to find out correct inferences. Both bottom-up processing and top-down processing were used by the learners. Learners with higher level of incidental vocabulary learning worried more about the meanings of the unknown words and paid heed to these words. The study found out that mastery of strategies was also a positive predictor of incidental vocabulary acquisition in second language. Learners who had mastery over strategies were able to use appropriate strategies in deducing the meanings of the unfamiliar words found in L2 texts. Motivation was the only factor which did not significantly predict incidental vocabulary learning. The finding was inconsistent with the previous studies. The possible explanation for such a claim was that learners’ levels of motivation fluctuated during the process of incidental vocabulary learning in L2 language.

Zhang and Pei (2022), explored the role of word knowledge dimensions in second language word-meaning inference. The findings maintained that the word-knowledge dimension made a collective contribution to L2 lexical inference after text comprehension ability was controlled. It was found out word-associates and morpheme- form knowledge had the strongest predicting power among all word-knowledge.

Pedagogical Implications

What follows are pedagogical implications for teachers:

1. Give explicit training to language learners on how to unfold the mysteries of unfamiliar word in the texts at target.
2. Incorporate guessing skills of learners into vocabulary learning while providing authentic and meaningful contexts for inferencing practice.
3. Design questionnaires, MCQs tests, and cloze procedure tests that measure learners' lexical inferencing abilities with the passage of time.
4. As for guessing the meaning of the part of speech, nouns and verbs are easier to guess than adjectives and adverbs. Thus, move from easier to difficult in lexical inferencing task assigned to learners.
5. Enhance learners' metacognitive awareness and self-regulation skills in the process of lexical inferencing, putting learners on the way to autonomy.
6. Provide learners with lots of opportunities for controlled, guided and free tasks in order to derive word meanings from the available context through multifaceted activities on lexical inferencing.
7. Offer targeted support and guidance to learners who make wild guessing, providing additional scaffolding and individualized instruction as required.
8. Utilize technology and digital in order to engage learners in lexical inferencing tasks, facilitating the whole process.
9. Motivate language learners to actively engage with various texts across genres exposing them to linguistic and non-linguistic knowledge sources..
10. Develop interactive learning environments where learners can engage in discussions with their peers on order to refine their guessing work.
11. Use the texts which contain the unknown words presented in various types of constraints – semantic, syntactic and pragmatic. Such constraints ‘determine how lexically available structures are glued together’ (Hagoort, 2011, p. 406).

12. Provide feedback to language learners, acknowledging their strengths while equipping them with tricks how reach correct guessing.
13. Promote learners autonomy in learning vocabulary by boosting their confidence in inferring the meanings of the unknown words by themselves.
14. Give learners awareness about cultural and cross-cultural differences while informing them about cognates and cultural connotations of words in different language contexts.
15. Encourage reflection on post lexical inferencing tasks among learners, allowing them to share their difficulties, observations, and experiences in the task of guessing with their peers.
16. Promote a growth mindset among learners, clarifying that lexical inferencing is not a skill to be mastered overnight. Instead, it requires patience and practice in the way to success.
17. Train learners in guessing the syntactic property of the unfamiliar word. Knowledge of part of speech will lead them to the right path.
18. Alert their students to the problem and encourage them to use context clues, to double-check word identification' (Huckin & Bloch, 1993, p. 173).

Following are pedagogical implications for language learners:

1. Give exposure to intensive and extensive reading in the language at target. Such exposure to diverse texts will develop familiarity with different topics as well as vocabulary contexts and ensure the chances of making successful attempts in lexical inferencing.
2. Take special care of available context when encountered with unfamiliar words. Analyze the nearby words, sentence meaning, sentence grammar, punctuation and discourse meaning in order to find necessary clues which can support you in generating the correct meaning of the targeted word.
3. In order to confirm the guessed meaning dictionary, and online sources should be utilized. Keep in mind that such sources should be the last resort.
4. Create a meaningful network for the words learners learn (Kavitha & Kennan, 2016). It is imperative for learners to be familiar with the intentional and extensional meanings of an L2 word (Henrikson, 1999).
5. Be skeptical about the guess you have made (Frantzen, 2003). Like a good lawyer, find logical arguments to support your guess.
6. Accelerate metacognitive awareness while reflecting on the inferencing task. Monitor the whole process, assessing the accuracy of your guesses.

7. Augment knowledge of word roots prefixes, and affixes. Morphological analysis of words will unfold the mysteries of the mechanism involved in the formation of words. But check such guess against the given context.
8. Use both top-down and bottom-up processing in order to find out the meanings of the targeted words.
9. Check and double-check the guess you have made. It will ensure the accuracy of the guess you have made.
10. Engage in active reading strategies including skimming and scanning. The utilization of these strategies will boost up focus and comprehension and lead you to successful lexical inferencing.
11. Solve vocabulary-building exercises and activities specifically planned to improve guessing abilities. Vocabulary apps and artificial intelligent sources will work wonders in increasing word power.
12. Share your guesses with your peers in pair work and group work. Such sessions will increase the guessing skills collectively. Sharing thoughts will pave way to critical thinking.
13. Get feedback from your teachers to receive guidance on the accuracy of your guesses and areas for improvement. Actively amuse such feedback for further guessing tasks for sure-shot success.
14. Give extensive exposure to yourself to a variety of academic texts - poems, short stories, essays, dramas, criticism, novels, and novellas. This exposure will fortify your understanding of domain-specific vocabulary and gear up your skills to guess the meanings in academic English contexts.
15. Consider lexical inferencing as hunting for something lost. Act like a police officer to find out the clues for the thing lost.
16. Keep in mind that lexical inferencing is the mental gymnastics (Van Parrern and Shouten van-Parrern, 1981) you are engaged in. Be vigilant and do what is needed.
17. Use strategies and knowledge sources of lexical inferencing which help you reach the correct guesses. Be aware of the fact the quality - not quantity - matters in the guessing task.
18. Avoid unreasonable meanings of polysemous words (Levenston, 1979). When familiar with one of the meanings of a polysemous word, try to fit it though it makes no sense in the context provided in the text.

CONCLUSION

To cut the long story short, the extensive review of the research on lexical inferencing provides useful perceptions to the processes involved in lexical inferencing task in English and other languages. The findings underscore the

significance of context clues metacognitive strategies, and the integration of multiple knowledge sources for making successful attempts in generating the meanings of the unfamiliar words in reading texts in a second or foreign language. Such insights have broader practical implications for language instruction, highlighting the importance of explicit lexical training, the use of authentic texts, and metacognitive development in figuring out the meanings of the unfamiliar words in language at target. By incorporating the findings of the research on lexical inferencing into language pedagogy, teachers can help learners reach the successful guessing, and empower them to comprehend complex texts with confidence.

Future research should be conducted to examine the application of advanced technologies, such as artificial intelligence and machine learning, in augmenting successful lexical inferencing. Thus, exploring the transferability of inferencing skills across languages and contexts, as well as assessing individual learner factors, would contribute a lot to an in-depth understanding of effective inferencing strategies and knowledge sources - both linguistic and non-linguistic.

REFERENCES

- Azin, N., Biriya, R., & Sardabi, N. (2015). The effect of inferencing in the meaning of new words from context on vocabulary retention by Iranian EFL learners. *Theory and Practice in Language Studies*, 5(6), 1280-1285.
- Barcroft, J. (2016). *Vocabulary in language teaching*. New York: Routledge.
- Bengeleil, N.F., & Paribakht, T.S. (2004). L2 reading proficiency and lexical inferencing by university EFL learners. *The Canadian Modern Language Review*, 6(2), 225-249.
- Chamot, A.U., & O'Malley, J.M. (1994). *The Calla handbook: Implementing the cognitive academic language learning approach*, Reading, Mass: Addison-Wesley.
- Comer, W.J. (2012). Lexical inferencing in reading L2 Russian. *Reading in a Foreign Language*, 24(2), 209-230.
- Daller, H., Milton, J., & Treffers-Daller, J. (2007), Editors' introduction, convention terminology and overview of the book. In H. Daller, J. Milton & J. Treffers-Daller (Eds.), *Modeling and assessing vocabulary knowledge* (pp.1-32). Cambridge: Cambridge University press.
- Dessenberger, S., Waung, K., Jordan, E. & Sommers, M. (2022). Lexical inferencing as a generation effect for foreign language vocabulary learning. *Memory & Cognition*, 50(5), 1-17.
- Folse, K.S. (2004). Myths about teaching and learning second language vocabulary: What recent research says. *TESL Reporter*, 37(2), 1-13.
- Frantzen, D. (2003). Factors affecting how second language Spanish students derive meaning for context. *The Modern Language Journal*, 87(2), 168-199.
- Garza, B., & Harris, R.J. (2016). Acquiring foreign language vocabulary through meaningful linguistic context: Where is the limit to vocabulary learning? *Journal of Psycholinguistics Research*, 45 (3), 447-468.

- Haastrup, K. (1991). *Lexical inferencing procedures or talking about words: Receptive procedures in foreign language with special reference to English*. Tübingen: Gunter Naar.
- Hagoort, P. (2001). The binding problem for language, and its consequences for the neuro-cognition of comprehension. In E. Gibson & N.J. Pearlmutter (Eds.), *The processing and acquisition of references* (pp.403-436). Cambridge: The MIT Press.
- Halliday, M. A. K. (1985). Context of situation. In M. A. K. Halliday & R. Hasan, (Eds.), *Language, context and text* (pp. 3–14). Geelong, Vic.: Deakin University Press.
- Hamada, A. (2015). Effects of forward and backward contextual elaboration on lexical inferences: Evidence from a semantic relatedness judgment task. *Reading in a Foreign Language*, 21 (1), 1-21.
- Henrikson, B. (1999). Three dimensions of vocabulary development. *Studies in Second Language Acquisition*, 21, 303-317.
- Hu, M., & Nassaji, H. (2012). Ease of inferencing, learner inferential strategies, and their relationship of word meanings inferred from context. *The Canadian Modern Language Review*, 68(1), 54-77.
- Hu, Z., & Zhang, H. (2023). Non-selective language activation in L2 lexical inference and text comprehension. Comparing skilled and less-skilled readers 9(1), Retrieved on March, 2023 from [https://www.cell.com/heliyon/fulltext/S2405-8440\(23\)00025-7?returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2405844023000257%3Fshowall%3Dtrue](https://www.cell.com/heliyon/fulltext/S2405-8440(23)00025-7?returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2405844023000257%3Fshowall%3Dtrue)
- Huckin, T., & Bloch, J. (1993). Strategies for inferring word-meanings in context: A cognitive model. In T. Huckin, M. Haynes & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 153-178). Norwood: Ablex Publishing Corporation.
- Jackson, H. (2002). *Lexicography: An introduction*. London: Taylor & Francis Routledge.
- Kavitha, V., & Kennan, P. (2016). The role of association in vocabulary acquisition: A psycholinguistic study on Indian ESL learners. *East European Journal of Psycholinguistics*, 3 (1), 65-72.
- Kelly, S. (1990). Guessing: No substitute for systematic learning of lexis. *System*, 18,199-207.
- Kondo-Brown, K. (2006). How do English L1 Learners of advanced Japanese infer unknown Kanji words in authentic texts? *Language Learning*, 56(1), 109-153.
- Levenston, E.A. (1979). Second language acquisition: Issues and problems. *Inter-language Studies Bulletin*, 4, 147-160.
- Macro, E., & Mutton, T. (2009). Developing reading achievement in primary learners of French: Inferencing strategies versus exposure to ‘graded readers’. *Language Learning Journal*, 37, 165-82.
- Meara, P. (1996). The dimensions of lexical competence. In G. Brown, G. K. Malmkjaer, J. Williams, (Eds.), *Performance and competence in second language acquisition* (pp.35-52). Cambridge: Cambridge University Press.
- Meara, P., & Wolter, B. (2004). V_Links: Beyond vocabulary depth. In D. Albrechtsen, K. Haastrup, & B. Henriksen (Eds.), *Angles on the*

- English-speaking world. Vol. 4 (pp. 85–96). Copenhagen, Denmark: Museum Tusulanum Press.
- Nassaji, H. (2004). The relationship between depth of vocabulary knowledge and L2 learners' lexical inferencing strategy use and success. *The Canadian Modern Language Review*, 61(1), 107-134.
- Osisanwo, A. (2022). "This Virus is a common threat to All Humans.": Discourse representation of Covid-19 in selected newspaper editorials. *Athens Journal of Mass Media and Communications*, 8(1), 59-78.
- Paribakht, T.S. & Wesche., M.(2006). Lexical inferencing in L1 and L2: Implications for vocabulary instruction and learning at advanced levels. In H. Byrnes, H.D. Weger-Guntharp, & K. Sprang (Eds.), *Educating for advanced foreign language capacities: Constructs, curriculum, instruction, assessment* (pp.118-135). Washington, DC: Georgetown University Press.
- Qian, D.D. (2005) Demystifying lexical inferencing: The role of aspects of vocabulary knowledge. *TESL Canada Journal*, 22,2, 34-54.
- Rutamornchai, N., & Tepsuriwong, S. (2022). When lexical inferencing failed: An investigation into strategy use and factors underpinning less successful lexical inferencing. *LEARN Journal: Language Education and Acquisition Research Network*, 15(1), 124-155.
- Shafiq, A., Shafiq, A, Shafiq, M. (2022). Closing the gaps in cloze letters to editor: A verbal protocol study. *International Journal of Linguistics and Culture*, 3(1), 147-169.
- Shafiq, M., & Ahmad, N. (2021). ESL lexical inferencing for the unknown words in newspaper editorials at advanced level. *International Journal of Linguistics and Culture*, 2(2), 135-158.
- Shafiq, A; Shafiq, A., Tahir, A. & Sajid, M.A (2019). Lexical inferencing in newspaper columns: An introspective study. *International Journal of English linguistics*, 9(1), 367-382.
- Tang, H. K., Smakman, M., De Haas, M., & Van Den Berghe, R. (2023, March). L2 Vocabulary Learning Through Lexical Inferencing Stories With a Social Robt. In *Companion of the 2023 ACM/IEEE International Conference on Human-Robot Interaction* (pp. 526-530).
- Van Parreren, C.F., & Schouten-van Parreren, M.C. (1981). Contextual guessing: A trainable reader strategy. *System*, 9(3),235-241.
- Wallace, M.J. (1982). *Teaching vocabulary*. London: Heinemann.
- Wesche, M.B., & Paribakht, T.S. (2009). *Lexical inferencing in a first or second language: Cross-linguistic dimensions*. Clevedon: Multilingual Matters.
- Yang, H., Fang, L., & Yin, H. (2023). Knowledge mapping of the research on lexical inferencing: A biblio-metric analysis. *Front Psychol*.14:1101241. doi:10.3389/fpsyg.2023.1101241
- Zaho, A., Guo, Y., Bailes, C., & Olszewski, A. (2016). Exploring learner factors in second language (L2) incidental vocabulary acquisition through reading. *Reading in a Foreign Language*, 28(2), 224-245.
- Zhang, H & Pei,z ((2022). Word Knowledge Dimensions in L2 lexical inference. Testing vocabulary knowledge and partial word knowledge. *Journal of psychologinsitic Research* 51 (4):1-18.