

CHAPTER II

LITERATURE REVIEW

This chapter is separated into two main sections that detail the theoretical framework and previous study. The theoretical framework in this study includes related theorists, while previous research explored the implementation of related theorists.

2.1 Theoretical Framework

The theoretical framework in this study is to guide all levels of activity theory. It means this unit serves the theorists of scholars and researchers who discuss communication strategy, CSs in F2F environments, and CSs in virtual environments.

2.1.1 Communication Strategy

For the past decades, many studies have discussed the definition of CSs, which fall into two main categories: interactional and psycholinguistic views (Nakatani, 2010; Nakatani & Gho, 2007). From the international perspective, CSs are regarded “not only as problem-solving phenomena to compensate for communication disruptions but also as devices with pragmatic discourse functions for message enhancement” (Nakatani & Gho, 2007, p. 208). According to Tarone’s “interactional” definition (Tarone, 1981), the central function of CSs is the negotiation of meaning, where language is not only an object used by the speaker but a “living organism” created by both the speaker and hearer, making it a fluid form of shared communication (pp. 64-65).

In learning, to use CSs to compensate for target language deficiency, the use of tools involves negotiation of meaning, where both interlocutors attempt to “agree on meaning in a situation where the requisite meaning structures do not seem to be shared” (Tarone, 1980, p.420). In contrast, the psycholinguistic view describes CSs as language learners’ problem-solving behaviors arising from lexical knowledge gaps (Nakatani & Gho, 2007). According to the psycholinguistic definition suggested by Faerch and Kasper (1984), CSs are related to individual language users’ experience of communicative problems and the solutions (cooperative or non-cooperative) they pursue.

CSs are regarded in this case as “the individual’s mental responses to a problem rather than as a joint response by two people” (Faerch & Kaeper, 1983, p. 36), suggesting that they are used to dealing with language production problems that occur at the communication planning stage. CSs are seen as the EFL students’ conscious plans for communicative exchange in solving a problem to reach a particular communicative goal (Faerch & Kaeper, 1983). Nakatani (2010) proposed that the psycholinguistic view focuses on the range of problem-solving activities open to the individual, concentrating on lexical compensatory strategies.

Canale and Swain (1980) presented their influential model of communicative competence, which includes grammatical competence (knowledge of linguistic structure), sociolinguistic competence (knowledge of what is acceptable usage within speech communication), and strategic competence. While the first two competencies are related to the use of linguistic knowledge, strategic competence consists of the ability to employ language use strategies to reach communicative goals (Tarone, 1980) or project language competence in a real

communication context (Bateman, 1990). Canale and Swain (1980) defined strategies competence as “the ability to use verbal and nonverbal strategies that may be called into action to compensate for breakdowns in communication due to performance variables or to learners’ lack of appropriate knowledge of target language” (p. 30). These strategies compensate for disruptions in communication problems due to speakers’ insufficient TL knowledge and enhance the effectiveness of communication with interlocutors (Canale, 1983).

Faerch and Kasper (1984) further developed the concept of CSs concerning inter-language communication, which they classified into two types: achievement strategies and reduction strategies, a practical approach discussed by numerous researchers (e.g., Bialystok, 1990; Corder, 1983; Dornyei & Scott, 1997; Tarone, 1981). Achievement strategies reference learners who have an alternative plan to reach an original goal using the available resources. In contrast, reduction strategies are used to avoid solving a communication problem, allowing learners to give up on conveying an original message. Nakatani (2010) proposed that the former presents learners’ active (positive) behavior in repairing and maintaining interaction, while the latter reflects learners’ evasive (negative) behavior in avoiding solving communication difficulties, an approach that is common among lower-proficiency learners. Dornyei and Scott (1997) and Faerch and Kasper (1983) also labeled these reduction/avoidance approaches as unfavorable.

To explore a reliable and valid strategy inventory, Nakatani (2006, 2010) developed the Oral Communication Strategy Inventory (OCSI), which focuses on strategic behavior the learners use when facing communication problems during

interactional tasks. The OCSI assesses learners' fluency, ability to interact with the interlocutor, and flexibility in developing dialogue. Nakatani (2006) proposed that the OCSI offers a high level of reliability and validity, where her empirical study found that students with less oral proficiency tended to use message abandonment strategies more. The OCSI includes eight (strategic behavior) subscales for speaking strategies: (1) social affective, (2) fluency-oriented, (3) negotiation for meaning while speaking, (4) accuracy-oriented, (5) message reduction and alteration, (6) non-verbal strategies while speaking, (7) message abandonment, and (8) attempt to think in English.

Nakatani (2006) described social, affective strategies as concerned with learners' affective factors in social contexts. To communicate smoothly, these learners try to control their anxiety and enjoy the process of oral communication. Fluency-oriented CSs are seen when language learners pay attention to their speech's rhythm, intonation, pronunciation, and clarity to improve the listener's comprehension. Negotiation for meaning while speaking denote attempts to work out communication exchanges with interlocutor, who are expected to conduct modified interactions to avoid a communication breakdown or misunderstanding. In accuracy-oriented strategies, learners pay attention to the forms of their speech and seek grammatical accuracy by self-correcting when they notice their mistakes. Message reduction and alternation strategies refer to learners' attempts to avoid a communication breakdown by reducing an original message, simplifying their utterances, or using similar expressions they can confidently express. Non-verbal strategies while speaking refer to listeners' use of physical strategies (e.g., eye contact, gestures, and facial expression) to achieve communication goals.

Message abandonment strategies indicate EFL learners who tend to give up their communication attempts, leave the message unfinished, or seek help from others to continue the conversation when they face difficulties executing their original verbal plan. Attempt to think in English strategies relates to learners who think as much as possible in English during actual communication.

2.1.2 CSs Taxonomies Framework

For the past decades, many studies have discussed the definition of CSs, which fall into two main categories: interactional and psycholinguistic views (Nakatani, 2010; Nakatani & Gho, 2007). From the interactional perspective, CSs are regarded “not only as problem-solving phenomena to compensate for communication disruptions but also as devices with pragmatic discourse functions for message enhancement” (Nakatani & Gho, 2007, p. 208). According to Tarone’s “interactional” definition (Tarone, 1981), the central function of CSs is the negotiation of meaning, where language is not only an object used by the speaker but a “living organism” created by both the speaker and hearer, making it a fluid form of shared communication (pp. 64–65). In learning to use CSs to compensate for target language deficiency, using tools involves negotiation of meaning. Interlocutors attempt to “agree on meaning in a situation where the requisite meaning structures do not seem to be shared” (Tarone, 1980, p. 420).

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pursue. CSs are regarded in this case as “the individual’s mental responses to a problem rather than as a joint response by two people” (Faerch & Kasper, 1983, p. 36), suggesting that they are used to dealing with language production problems that occur at the communication planning stage. CSs are the participants’ conscious plans for communicative exchange in solving a problem to reach a particular communicative goal (Faerch & Kasper, 1983). Nakatani (2010) proposed that the psycholinguistic view focuses on the range of problem-solving activities open to the individual, concentrating on lexical compensatory strategies.

Canale and Swain (1980) presented their influential model of communicative competence, which includes grammatical competence (knowledge of linguistic structure), sociolinguistic competence (knowledge of what is acceptable usage within speech communication), and strategic competence. While the first two competencies are related to the use of linguistic knowledge, strategic competence consists of the ability to employ language use strategies to reach communicative goals (Tarone, 1980) or project language competence into real communication contexts (Bachman, 1990). Canale and Swain (1980) defined strategic competence as “the ability to use verbal and nonverbal strategies that may be called into action to compensate for breakdowns in communication due to performance variables or to learners’ lack of appropriate knowledge of target language” (p. 30). These strategies compensate for disruptions in communication problems due to speakers’ insufficient TL knowledge and enhance the effectiveness of communication with interlocutors (Canale, 1983).

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In detail, the six CS coding categories are carefully defined below to avoid overlapping. Table 2.1 has given various Taxonomies of Communication

Strategies, followed by Table 2.2, which contains the description, the example of CSs, and the taxonomist with initial (e.g., the initial “W” for William, D&S refers to Dornyei and Scott, etc.).



Table 2.1 Various Taxonomies of Communication Strategies (Bialystok, 1983; Faerch & Kasper, 1983; Tarone, 1977; Paribakht, 1985; Willems, 1987)

No/ Taxonomists (Year)	Tarone (1977)	Faerch and Kasper (1983)	Bialystok (1983)	Paribakht (1985)	Willems (1987)
1.	<p>AVOIDANCE</p> <ul style="list-style-type: none"> - Topic avoidance - Message abandonment 	<p>FORMAL REDUCTION</p> <ul style="list-style-type: none"> - Phonological - Morphological - Syntactic - Lexical 	<p>L1-BASED STRATEGIES</p> <ul style="list-style-type: none"> - Language switch - Foreignizing - Transliteration 	<p>LINGUISTIC APPROACH</p> <p><i>Semantic contiguity</i></p> <ul style="list-style-type: none"> - Superordinate - Comparison <ul style="list-style-type: none"> • Positive comparison Analogy Synonymy • Negative comparison Contrast & opposite Antony my <p><i>Circumlocution</i></p> <ul style="list-style-type: none"> - Physical description <ul style="list-style-type: none"> • Size • Shape • Color • Material - Constituent features <ul style="list-style-type: none"> • Features • Elaborated features - Locational property - Historical property - Other features - Functional description <p><i>Metalinguistic clues</i></p> <p>CONTEXTUAL APPROACH</p> <ul style="list-style-type: none"> - Linguistic context - Use of L2 idioms and proverbs - Translation of L1 idioms and proverbs 	<p>REDUCTION STRATEGIES</p> <p><i>Formal red.</i></p> <ul style="list-style-type: none"> - Phonological - Morphological - Syntactic - Lexical <p><i>Functional red.</i></p> <ul style="list-style-type: none"> - <i>Message abandonment</i> - <i>Meaning replacement</i> - <i>Topic avoidance</i>
2.	<p>PARAPHRASE</p> <ul style="list-style-type: none"> - Approximation - Word coinage - Circumlocution 	<p>FUNCTIONAL REDUCTION</p> <ul style="list-style-type: none"> - Action red. - Modal red. - Reduction of 	<p>L2-BASED STRATEGIES</p> <ul style="list-style-type: none"> - Semantic contiguity - Description - Word coinage 	<p>ACHIEVEMENT STRATEGIES</p> <ul style="list-style-type: none"> - Paralinguistic strategies - Interlingua strategies <ul style="list-style-type: none"> - Borrowing/code switching 	

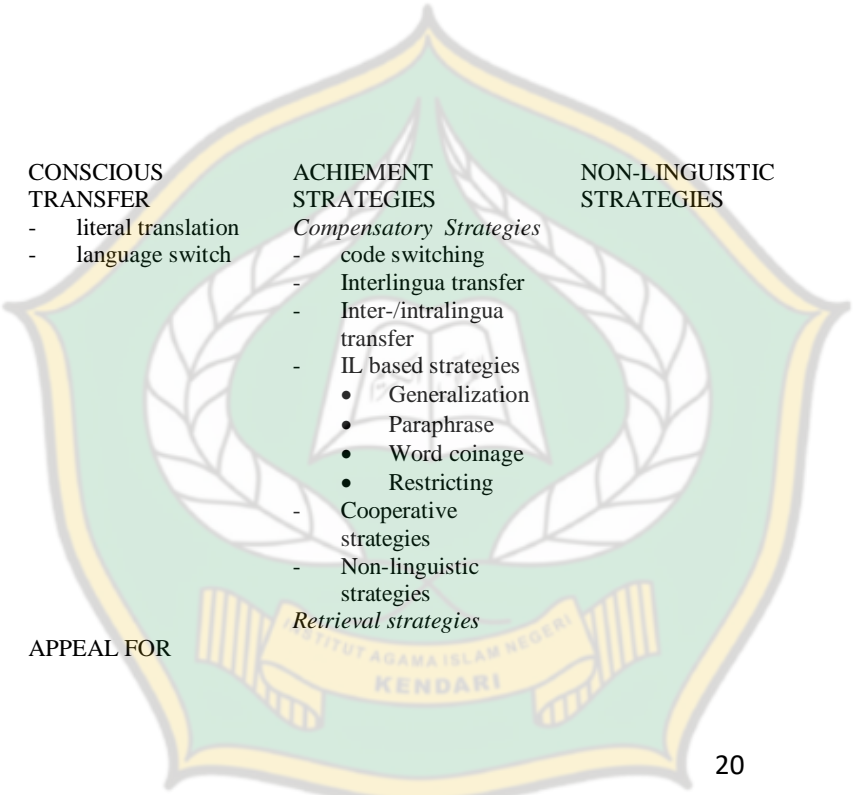


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		<ul style="list-style-type: none"> - propositional content - Topic avoidance - Message abandonment - Meaning replacement 		<ul style="list-style-type: none"> - Idiomatic transfer 	<ul style="list-style-type: none"> - Literal translation - Foreign zing - Intralingua strategies <ul style="list-style-type: none"> - Approximation - Word coinage - Paraphrase <ul style="list-style-type: none"> ➢ Description ➢ Circumlocution ➢ Exemplification - Smurfing - Self-repair - Appeals for assistance <ul style="list-style-type: none"> ➢ Explicit ➢ Implicit ➢ Checking questions - Initiating repair
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3.	CONSCIOUS TRANSFER <ul style="list-style-type: none"> - literal translation - language switch 	ACHIEVEMENT STRATEGIES <i>Compensatory Strategies</i> <ul style="list-style-type: none"> - code switching - Interlingua transfer - Inter-/intralingua transfer - IL based strategies <ul style="list-style-type: none"> • Generalization • Paraphrase • Word coinage • Restricting - Cooperative strategies - Non-linguistic strategies 	NON-LINGUISTIC STRATEGIES	CONCEPTUAL APPROACH <ul style="list-style-type: none"> - Demonstration - Exemplification - Metonymy
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4	APPEAL FOR	<i>Retrieval strategies</i>	MIME
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No/ Taxonomists (Year)	Tarone (1977)	Faerch and Kasper (1983)	Bialystok (1983)	Paribakht (1985)	Willems (1987)
	ASSISTANCE			- Replacing verbal output - Accompanying verbal output	
5	MIME				

Various Taxonomies of Communication Strategies (continued) by (Cohen, Oxford, & Chi, 2001; Dornyei & Scott, 1995; Nakatani, 2006; Rabab'ah, 2002)

No/ Name (Year)	Dornyei and Scott (1995)	Dornyei and Kormos (1998)	Cohen, Oxford, and Chi, (2001)	Rabab'ah (2002)	NAKATANI (2006)
1.	<p>DIRECT STRATEGIES</p> <p><i>Resource deficit-related strategies</i></p> <ul style="list-style-type: none"> - Message abandonment - Message reduction - Message replacement - Circumlocution - Approximation - Use of all-purpose words - Word-coinage - Restructuring - Foreignizing - Code switching - Use of similar sounding words - Mumbling - Omission - Retrieval - Mime <p><i>Own-performance problem-related strategies</i></p> <ul style="list-style-type: none"> - Self-rephrasing - Self-repair 	<p>PSM related to L2 Resource Deficit (RD)</p> <p><i>Lexical PSM</i></p> <ul style="list-style-type: none"> - Message abandonment <p><i>Substitution PSM</i></p> <ul style="list-style-type: none"> - Code-switching - Foreignising - Literal Translation <p><i>Appeals for help</i></p> <ul style="list-style-type: none"> - Direct Appeal for help <p><i>Micro conceptualization</i></p> <ul style="list-style-type: none"> - Circumlocution 	<p>SPEAKING STRATEGIES</p> <ul style="list-style-type: none"> - Retrieval - Rehearsal - Communication - Cover 	<p>L1-BASED STRATEGIES</p> <ul style="list-style-type: none"> - Literal translation - Language switch: <ul style="list-style-type: none"> • L1 slips and immediate insertion • L1 appeal for help • L1-optional meaning strategy • L1-retrieval strategies • L1 ignorance acknowledgement 	<p>BEHAVIORAL STRATEGIES</p> <ul style="list-style-type: none"> - Social affective - Fluency oriented - Negotiation for meaning - Accuracy oriented - Alteration - Attempt to think in English

No/ Name (Year)	Dornyei and Scott (1995)	Dornyei and Kormos (1998)	Cohen, Oxford, and Chi, (2001)	Rabab'ah (2002)	NAKATANI (2006)
	<p><i>Other-performance problem-related strategies</i></p> <ul style="list-style-type: none"> - Other-repair 				
2.	<p>INTERACTIONAL STRATEGIES</p> <p><i>Resource deficit-related strategies</i></p> <ul style="list-style-type: none"> - Appeals for assistance <p><i>Own-performance problem-related strategies</i></p> <ul style="list-style-type: none"> - Comprehension check - Own-accuracy check <p><i>Other-performance problem-related strategies</i></p> <ul style="list-style-type: none"> - Asking for repetition - Asking for clarification - Asking for confirmation - Guessing - Expressing non-understanding - Interpretive summary - Responses 	<p>PSM related to processing time pressure</p> <p><i>Pauses</i></p> <ul style="list-style-type: none"> - Unfilled pauses - Sound lengthening (drawling) - Fillers (lexicalised pauses) <p><i>Repetitions</i></p> <ul style="list-style-type: none"> - Self-repetition 		<p>L2-based strategies</p> <p><i>Avoidance strategies:</i></p> <ul style="list-style-type: none"> - Message abandonment - Topic avoidance - Word coinage - Circumlocution - Self-correction/ Restructuring - Approximation - Mumbling - L2 appeal for help - Self-repetition - Use of similar-sounding words - Use of all-purpose words - Ignorance acknowledgement 	
3.	<p>INDERCT STRATEGIES</p> <p><i>Processing time pressure-related strategies</i></p> <ul style="list-style-type: none"> - Use of fillers - Repetitions <p><i>Own-performance problem-related strategies</i></p> <ul style="list-style-type: none"> - Verbal strategy markers <p><i>Other-performance problem-related strategies</i></p> <ul style="list-style-type: none"> - Feigning understanding 	<p>PSM related to own-output problems</p> <p><i>Self-correction</i></p>			
4.		<p>PSM related to other-performance problems</p>			

Table 2.2 Inventory of Communication Strategies with Description, Selected Examples, and the Taxonomists Names' Code of CSs (Tarone, 1977; Faerch & Kasper, 1983; Bialystok, 1983; Paribakht, 1985; Willems, 1987; Dornyei & Scott, 1995; Cohen, Oxford, & Chi, 2001; Rabab'ah, 2002; Nakatani, 2006)

NO/ CATEGORY	STRATEGY	DESCRIPTION	EXAMPLE	OTHER TAXONOMIES
1.	Message abandonment	Leaving message unfinished because some language difficulty	<i>It is a person er... who is responsible for a a house, for the block of house... I don't know... {laughter}</i>	T, F&K, W, D&S
2.	Message reduction (topic avoidance)	Reducing the message by avoiding challenging language structures or issues, or by leaving out certain planned aspects due to a lack of linguistic resources.	[Retrospective comment by the speaker:] <i>I was looking for "satisfied with good job pleasantly tired," and so on, but instead I accepted less.</i>	T, F&K, W, D&S
3.	Message replacement	Substituting the original message with new one because of not feeling capable of executing it.	[Retrospective comment after saying that the pipe was broken in the middle instead of "the screw thread was broken":] <i>I didn't know "screw thread" and well, I had to say something.</i>	F&K, W, D&S
4.	Circumlocution (paraphrase)	Exemplifying, illustrating or describing the properties of the target object or action	<i>it becomes water instead of "melt"</i>	T, F&K, W, P; B: "description", D&S
5.	Approximation	Using single alternative lexical item, such as a superordinate or a related term, which shares semantic features with the target word or structure.	<i>Plate instead of "bowl"</i>	T, W; B and P: "semantic contiguity"; F&K: "generalization".
6.	Use of all-purpose words	Extending a general, "empty" lexical item to context where specific words are lacking.	The overuse of <i>thing, stuff, makes, do</i> , as well as words like <i>thingies, what-do-you-call-it; e.g.; I can't work until you repair my... thing.</i>	W: "smurfing"
7.	Word-coinage	Creating a non-existing L2 word by applying a supposed L2 rule to an existing L2 word.	[retrospective comment after using <i>dejunktion</i> and <i>unjunktion</i> for "street clearing":] <i>I think I approached it in a very scientific way: from 'junk' I formed a noun and I tried to add the negative prefix "de-"; to 'clear the junk' and "unjunktion" is 'street clearing'.</i>	T, F&K, B, W
8.	Restructuring	Abandoning the execution of a verbal plan because of language difficulties, leaving the utterance unfinished, and communicating the intended	<i>On Mickey's face we can see the...so he's he's he's wondering.</i>	F&K; W: under "self-repair"

NO/ CATEGORY	STRATEGY	DESCRIPTION	EXAMPLE	OTHER TAXONOMIES
9.	Literal translation (transfer)	message according to an alternative plan. Translating literally a lexical item, an idiom, a compound word or structure from L1/L3 or L2.	I'd made a big fault [translated from French]	T. W.; F&K; under "interlingual transfer"; P and B: "transliteration"
10.	Foreignizing	Adjusting a L1/L3 word to L2 phonology (i.e., with a L2 pronunciation) and/or morphology.	Reparate for "repair" [adjusting the German word 'repariren']	B, W; F&K: under "interlingual transfer"; N: under "transfer"
11.	Code-switching (language switch)	Including L1/L3 words with L1/L3 pronunciation in L2 speech; this may involve stretches of discourse ranging from single words to whole chunks and even complete turns.	Using the Latin <i>ferrum</i> for "iron"	T, F&K, B, W; N under "transfer"
12.	Use of similar-sounding words	Compensating for a lexical item whose form the speaker is unsure of with a word (either existing or non-existing) which sounds more or less like the target item.	[Retrospective comment explaining why the speaker used <i>cap</i> instead of "pan":] <i>Because it was to the word which I wanted to say: "pan".</i>	D&S
13.	Mumbling	Swallowing or muttering inaudibly a word (or part of a word) whose correct form the speaker is uncertain about.	And uh well Mickey Mouse looks surprise or sort of XXX [the 'sort of' marker indicates that the unintelligible part is not just a mere recording failure but a strategy].	D&s
14.	Omission	Leaving a gap when not knowing a word and crying on as if it had been said.	<i>Then... er... the sun is is... hm sun is... and the Mickey Mouse...</i> [Retrospective comment: <i>I didn't know what 'shine' was.</i>]	D&S
15.	Retrieval	In an attempt to retrieve a lexical item saying a series of incomplete or wrong forms or structures before reaching the optimal form.	<i>It's brake er... it's broken broked broke.</i>	F&K
16a.	Self-repair	Making self-initiated corrections in one's own speech.	<i>Then the sun shines and the weather get be... gets better.</i>	W
16b.	Other-repair	Correcting something in the interlocutor's speech	Speaker:... <i>because our tip went wrong...</i> [...] Interlocutor: <i>Oh, you mean the tap. S: Tap, tap...</i>	D&S
17.	Self-rephrasing	Repeating a term, but not quite as it was, but by adding something or using paraphrase.	<i>I don't know the material... what it's made of...</i>	(Tarone & Yule. 1987)
18.	Over-explicitness (waffling)	Using more words to achieve a particular communicative goal than what is considered normal in similar L1 situations.	(This CS was not included in Dornyei & Scott's, 1995a, 1995b, taxonomy)	(Tarone & Yule. 1987)
19.	Mime	Describing whole concepts nonverbally, or	[Retrospective comment:] <i>I was miming here, to put</i>	T, F&K, B, P, W

NO/ CATEGORY	STRATEGY	DESCRIPTION	EXAMPLE	OTHER TAXONOMIES
	(non-linguistic/paralinguistic strategies)	accompanying a verbal strategy with a visual illustration.	<i>it out front of the house, because I couldn't remember the word.</i>	
20.	Use of fillers	Using gambits to fill pauses, to stall, and to gain time in order to keep the communication channel open and maintain discourse at times of difficulty.	Examples range from very short structures such as <i>well; you know; actually; okay</i> , to longer phrases such as <i>this is rather difficult to explain; well, actually, it's a good question.</i>	
21a.	Self-repetition	Repeating a word or a string of words immediately after they were said.	[Retrospective comment:] <i>I wanted to say</i>	(Tarone & Yule. 1987)
21b.	Other-repetition	Repeating something the interlocutor said to gain time.	Interlocutor: <i>And could you tell me the diameter of the pipe? The diameter.</i> Speaker: <i>The diameter? It's about er... maybe er... five centimeters.</i>	
22.	Feigning understanding	Making an attempt to carry on the conversation in spite of not understanding something by pretending to understand.	Interlocutor: <i>Do you have the rubber washer?</i> Speaker: <i>The rubber washer?... No I don't.</i> [Retrospective comment: <i>I didn't know the meaning of the word, and finally I managed to say I had no such thing.</i>]	D&S
23.	Verbal strategy markers	Using verbal marking phrases before or after a strategy to signal that the word or structure does not carry the intended meaning perfectly in the L2 code.	E.g.: (strategy markers in bold): (a) marking a circumlocution: <i>On the next picture... I don't really know what's it called in English... it's uh this kind of bird that... that be found in a clock that strikes out or [laughs] comes out when the clock strikes;</i> (b) marking approximations: <i>It's some er... it's some kind of er... paper;</i> (c) marking foreignizing: <i>... a panel [with an English accent], I don't know whether there's a name in English on not [laughter] just its er... a smaller medium flat and in, we call them blockhouse, but it's not it's not made of blocks;</i> (e) marking code switching: <i>the bird from the of blocks come out and say "kakukk" or I don't know what;</i> see also the example for message abandonment.	D&S
24a.	Direct appeal for help	Turning to the interlocutor for assistance by asking an explicit question concerning a gap in one's L2 knowledge.	<i>It's a kind of old clock so when it strucks er... I don't know, one, two, or three 'clock when a bird is coming out. What's the name?</i>	T, F&K, W

NO/ CATEGORY	STRATEGY	DESCRIPTION	EXAMPLE	OTHER TAXONOMIES
24b.	Indirect appeal for help	Trying to elicit help from the interlocutor indirectly by expressing lack of needed L2 item either verbally or nonverbally.	<i>I don't know the name...</i> [rising intonation, pause, eye contact]	T, F&K, W
25.	Asking for repetition	Requesting repetition when not hearing or understanding <i>Pardon? What?</i> Something properly.	<i>Pardon? What?</i>	
26.	Asking for clarification	Requesting explanation of an unfamiliar meaning structure.	<i>What do you mean?, You saw what? Also 'question repeats,' that is, echoing a word or a structure with a question intonation.</i>	W
27.	Asking for confirmation	Requesting confirmation that one heard or understood something correctly.	Repeating the trigger in a 'question repeat' or asking a full question, such as <i>You said...?, You mean...?, Do you mean...?</i>	W
28.	Guessing	Guessing is similar to a confirmation request but the latter implies a greater degree of certainty regarding the key word, whereas guessing involves real indecision.	E.g.: <i>Oh. It is then not the washing machine. It is a sink?</i>	D&S
29.	Expressing that one did not understand something properly either verbally or nonverbally.	Expressing that one did not understand something properly either verbally or nonverbally.	Interlocutor: <i>What is the diameter of the pipe?</i> Speaker: <i>The diameter?</i> I: <i>The diameter.</i> S: <i>I don't know these things.</i> I: <i>How wide is the pipe?</i> Also, puzzled facial expressions, frowns and various types of mime and gestures.	D&S
30.	Interpretive summary	Extended paraphrase of the interlocutor's message to check that the speaker has understood correctly.	<i>So the pipe is broken, basically, and you don't know what to do with it, right?</i>	W
31.	Comprehension check	Asking questions check that the interlocutor can follow you.	<i>And what is the diameter of the pipe? The diameter. Do you know what the diameter is?</i>	W
32.	Own-accuracy check	Checking that what you said was correct by asking a concrete question or repeating a word with a question intonation.	<i>I can see a huge snow... snowman? Snowman in the garden.</i>	W
33a.	Response repeat	Repeating the original trigger or the suggested corrected form	See the example of other-repair.	D&S
33b.	Response repair	Providing other-initiated self-repair.	Speaker: <i>The water was not able to get up and I...</i> Interlocutor: <i>Get up? Where?</i> S: <i>Get down.</i>	D&S
33c.	Response rephrase	Rephrasing the trigger.	Interlocutor: <i>And do you happen to know if you have the rubber washer?</i> Speaker: <i>Pardon?</i> I: <i>The rubber washer... it's the thing which is in the pipe.</i>	D&S
33d.	Response expand	Putting the problem word/issue into a larger context.	Interlocutor: <i>Do you know maybe er what the</i>	D&S

NO/ CATEGORY	STRATEGY	DESCRIPTION	EXAMPLE	OTHER TAXONOMIES
33e.	Response confirm	Confirming what the interlocutor has said or suggested.	<i>diameter of the pipe is? Speaker: Pardon? I: The rubber washer... it's the thing which is in the pipe. Interlocutor: Uh, you mean under the sink, the pipe? For the... Speaker: Yes. Yes.</i>	D&S
	Interactional strategies:			D&S
34	Request for clarification	Asking for explanation of unfamiliar terms or messages.	"What is Bolognese?"	D&S
35	Confirmation check	Repeating the trigger in a rising intonation to ensure one heard something correctly, or using a first language term or asking a full question to ensure the correctness of the input comprehension.	"You you thought it funny to...to speak well of your country. Is that what you mean?"	D&S
36	Comprehension check	Asking questions to ensure one's messages are understood.	"You know what I mean?"	D&S
37	Direct request for help	Asking for assistance by an explicit question concerning a gap of one's knowledge in the target language.	"怎麼說 festival? 用中文." (How to say festival? In Chinese.)	D&S
38	Indirect request for help	Trying to elicit help from one's interlocutor by indicating the problems either verbally or nonverbally.	A: ...所以出去玩, 跟他們的...同::" (...so when going out, with their... co-::") B: 同事, colleague. (co-worker, colleague.)	D&S
39	Input elicitation strategies	Expressing explicitly or passing signals to encourage one's interlocutor to continue talking.	A: Umm now I like rowing. Urr rowing boats[,] urr so that keeps keeps me fit with the university"[.] Umm and what else. (several lines are deleted here) B: [Yeah.] [Uh huh.]	D&S
40	Feigning understanding	Pretending to understand the preceding message in order to carry on the conversation.	A: So she is like a mentor to you. @ @ B: Yeah. A: Do you know the word mentor? B: Not exactly.	D&S
41	Inferential strategies	Asking questions or making comments based on established information to test one's hypothesis of the preceding message, show one's current state of understanding, or gain new information.	A: I never I never went to an actual Taiwanese class. What'd they like? B: So your class just for urr some foreigners to attend.	D&S
42	Framing	Marking the shifts of topics.	Use "Ok. First one." to indicate the closure of chatting and start of topic-based interaction.	D&S

NO/ CATEGORY	STRATEGY	DESCRIPTION	EXAMPLE	OTHER TAXONOMIES
43	Verbal strategy markers	Using verbal marking phrases such as “you know” or “kind of” to indicate the use of strategy or less accurate form in the target language.	“我不知道怎么说用中文. 我们叫 Taj Mahal.” (I don’t know how to say it in Chinese. We call it as Taj Mahal.)	D&S
44	Omission	Leaving an unknown word as a gap and carrying on as if it has been said with the hope that the interlocutor can fill the gap by context.	“Do you have any (), you know? Do you?”	D&S
45	Time-gaining strategies	Using fillers such as “umm...” or repeating interlocutor’s words to fill pauses in order to maintain conversation at times of thinking.	A: What’s your favorite leisure activity? B: Umm my favorite leisure activities. Ok. urr I love to see movies.	D&S
46	Circumlocution	Exemplifying, illustrating, or describing the features of the target object or action.	Use “...urr for example if we play the Facebook, we have to... If I click. If I click an button and I have to wait.” to replace “the loading time”.	D&S
47	Approximation	Using one single substitute term with which the target term shares semantic features.	Use the term “vegetables” to replace one specific type of vegetables “mustard leaf”.	D&S
48	Use of all-purpose words	Using a general “empty” lexical term to replace a specific term to compensate for vocabulary deficiency or to avoid making mistakes.	“So do you play that?” Use “that” to replace one particular term until the learner finally learned how to say it from her peer’s talk.	D&S
49	Literal translation	Translating a first language term literally to a target language term.	Translate “小吃” literally into “small eat”.	W
50	Self-rephrasing	Paraphrasing, restructuring, or repeating one’s own utterance. Sometimes new information may be added to the repetition	“Cause there are no place for, urr no proper place for umm like boxing” in Taiwan. There are not many places for that.”	D&S
51	Message replacement	Replacing the original message by a new one when feeling incapable of executing it.	“That’s..haa..that’s ha Rea...haa. Are you are you serious that?”	N
52	Self-correction	Making self-initiated corrections.	“He don’t urr he doesn’t usually talk to people.”	N
53	Meta-talk	Using the target language to reflect on one’s own or interlocutor’s use of the target language.	The learner described how people celebrate Halloween in his country and mentioned kids go ask for “好吃的東西 (something tasty)”. As he noticed the term “糖果 (candy)” from his peer’s talk a few turns later, he added “摠, 就是糖. 對, 是給他們吃糖果. (Um, it is can-. Yeah, what they are given to eat is candy)” before responding to his peer’s talk.	N
54	Own accuracy check	Checking the correctness of one’s own expression by asking a concrete question or repeating a word with	One learner checked if she pronounced the term “節	N

NO/ CATEGORY	STRATEGY	DESCRIPTION	EXAMPLE	OTHER TAXONOMIES
55	Social formula	Using fixed patterns for social purposes such as greetings, leave takings, or apology.	<p>a rising intonation (or a question mark in text)</p> <p>慶 (festival)" accurately by asking "jie-tng? Festivals, jie-tng." "Sorry to interrupt you."</p>	C
56	Paralinguistic: Mime	Using gestures and body movements to help delivering intended messages.	<p>"真的聖誕樹,樹會..嗯..它的葉會..可能會破掉 ((gesturing something is falling))." (The real Xmas tree, tree would.. um.. its leafs could be broken.)</p>	D&S



2.2 Previous Study

This section provides a general overview of the previous relevant studies considering the communication strategies used by EFL learners in face-to-face and virtual environments.

2.2.1 CSs Research in F2F Environment

Most of the previous research on CSs in F2F environments has focused on defining or classifying the CSs. Dornyei and Kormos (1998), for example, have investigated the various ways speakers manage problems and overcome difficulties in second-language communication. By adopting a psycholinguistic approach based on one level's model of speech production and following Dornyei and Scott's prior frameworks, they distinguish four primary sources of second language communication problems: resource deficits, processing time pressure, perceived deficiencies in one's language output, and perceived deficiencies in the interlocutor's performance.

Within this line of research, the study of second language problem management may have particular importance from a theoretical and practical point of view. First, speech errors have traditionally been viewed as an exposure of the underlying formulating machinery. Research into problem-solving mechanisms can thus provide insight into the psycholinguistic processes underlying message planning, transfer, word construction, and monitoring. Second, this study can have important practical implications: second-language speakers spend much time and effort struggling with language difficulties. Yet, second language courses and course books do not generally prepare learners to cope with performance problems.

Moreover, research in the newest are has focused on investigating the use of CSs in relation to various factors, such as the learners' proficiency level (Bialystok & Fröhlich, 1980; Mei & Nathalang, (2010); Paribakht, 1984; Safont Jorda, 2001; García Núñez, 2006; Prebianca, 2009) and the task used for elicitation purposes (Poulisse & Schils, 1989; Rabab'ah & Seedhouse, 2004). Consideration has also been given to the influence of the learners' L1 (Fernández Dobao, 2001; Rabab'ah & Bulut, 2007), the situational context in which the CSs are employed (Williams, Inscoc & Tasker, 1997) as well as the learning context (Lafford, 2004), amongst others.

The empirical studies which have focused on the proficiency factor have demonstrated a relationship between learners' proficiency levels and their use of CSs (Fernández Dobao, 2001, 2004; Safont Jordá, 2001; Littlemore, 2003; García Núñez, 2006; Prebianca, 2009). It has been observed that those learners with a lower level of L2 competence need to resort to a higher number of CSs due to the relatively small number of linguistic resources available. More proficient learners, on the other hand, do not seem to make much use of these strategies due to their broader L2 linguistic repertoire. In addition to the CS frequency –as related to the learners' competence– the learners' selection of CSs has also been found to correspond with their level of proficiency (Bialystok & Fröhlich, 1980; Hyde, 1982; Paribakht, 1984; Chen, 1990; Fernández Dobao, 2001). Less proficient learners have been observed as resorting to CSs which are more related to their L1, such as, 'literal translation', 'codeswitching' and 'foreignising' as well as to reduction/avoidance mechanisms, such as, 'message abandonment/reduction'.

In contrast, more proficient learners seem to rely on more cognitively demanding mechanisms (achievement CSs) like ‘self-repairs’, ‘approximation’, ‘paraphrase’ and ‘restructure’. Additionally, time-gaining mechanisms have also been found as more related to lower levels as L2 processing requires more attentional resources and time than is needed when using an L1 (Prebianca, 2009; Wannaruk, 2003). Most of these studies; however, have limited their analysis to the lexical problems faced by learners in L2 communication. In addition, the data elicitation procedures followed have favoured less naturalistic settings which do not necessarily entail the same communication demands as in everyday conversation.

The literature reviewed most research has focused on analysing the CSs used by learners to overcome the lexical problems experienced in L2 communication, thus restricting the analysis to this type of difficulty. Additionally, most of the tasks used for the elicitation of the learners’ CS usage involve a more artificial setting, with the learner carrying out an activity on their own or in interaction with the researcher in an interview type of context. This points to the scarce research related to the use of CSs in interactional contexts that is, in learnerlearner or learner-NS communication (Labarca & Khanji, 1986; Fernández Dobao & Palacios Martínez, 2007). In view of this, this study aims at analysing the learners’ strategic behaviour in an interactional, less artificial context by eliciting the learners’ CS usage by means of free conversations between different level students and a NS interlocutor. In addition, the focus of analysis has been extended to other problematic areas by drawing on a wider analytical framework. Hence, the definition proposed by Tarone (1981: 288) has

been here favoured as it recognises the role of the interlocutor in the process of strategic communication: “the term [CS] relates to a mutual attempt of two interlocutors to agree on a meaning in situations where requisite meaning structures do not seem to be shared”. In order to broaden the scope of analysis the taxonomy of CSs proposed by Dörnyei and Körmös (1998) has been followed for its most comprehensive and up-to-date classification of these mechanisms. In addition to the interactional aspect of communication which was incorporated through particularly one of its categories

2.2.2 CSs in Virtual Environment

Even less numerous than in F2F, the majority of CSs research in a virtual environment has focused on text-based interaction in foreign language teaching context, such as Khamis (2010), Kost (2008); Lee (2001, 2002), Omar, Embi, and Yunus (2012), and Smith (2001, 2003). Smith (2003), for instance, is one of the views prominent researchers of CSs use in computer-mediated environments (CMC) may result in differences in participants’ CSs use. This within-group study examines CSs use among adult learners of English in a computer-mediated environment. CSs employed during problem-free discourse and compensatory strategy use during task-based were primarily explored. This strategy use was also examined relative to communicative task type (jigsaw and decision-making). The data suggest that learners use a wide array of CSs during task-based CMC and that the CMC environments shape this use. However, though there is modest evidence that task type influences compensatory strategy use, these strategies were found to be equally effective in the subsequent acquisition of target lexical items embedded in the tasks.

Some CSs studies have also investigated video-based and voice-based interaction. Hung (2012), who compared the CS's use of EFL learners in text-based (MSN Messenger) and video-based (Skype) interactions, found that these environments required different types of CSs. However, Hung also indicated that video-based interactions are similar to F2F environments, presenting opportunities for the visibility of gestures and mimics. However, it remains unknown whether this resemblance between F2F and video-based environments impacts the use of CSs in these settings.

Moreover, a limited number of CSs studies also have been conducted in VC environments, such as Zhao (2010). The study investigates meaning negotiation, and CSs use among non-native speakers in text chat and videoconferencing. Learners in a Chinese and a Japanese university participated in text chats and videoconferences to discuss culture-related topics using English as the common language. Text chat scripts and videoconferencing transcripts were analyzed using a simplified version of the meaning negotiation model developed by Smith (2003a). A survey was conducted on CSs use. The discourse analysis and the survey indicate that text chat and videoconferencing are available tools to assist meaning negotiation and facilitate second language acquisition. Compared to videoconferencing, text chat has the potential to promote lexical acquisition.

Chen (2018) investigates EFL learners' task-based negotiation in Second Life (SL) with a 3d multi-user virtual environment (MUVE). A group of adult EFL learners with diverse cultural/linguistic backgrounds in L1 participated in this task-based virtual class. Learners used avatars to interact with peers in communication tasks via voice chat. A framework of negotiation of meaning was

employed to code and analyze the transcribed data. Two types of negotiation routines were identified: single-layered trigger-resolution sequence and multi-layered trigger-resolution sequence. Significantly, the relationship among task types, negotiation, and strategy use was also established in the study: the jigsaw task prompted the most instance of negotiation and strategy use, followed by information-gap and decision-making tasks, opinion-exchange task triggered the least.

Then, another result by Shih (2013) conducted the study in a multimodal virtual communication context. Using VEC3D as a platform examines the influence of task type on communication strategies (CSs) in a 3D virtual environment that enables English as Foreign Language learners to employ multiple communication modalities. A curriculum based on a communicative, interactive, task-based, and computer-mediated approach to CSs and language acquisition is developed and implemented with a comprehensive framework for analyzing CS use in this innovative virtual environment setting. The findings shed light on how task type influences learners' use of verbal CSs, including gambits/fillers, appealing for assistance, paraphrasing, borrowing, avoidance, and all-purpose words, and non-verbal CSs in the form of haptics, kinesics, paralanguage, and object communication, as means of avoiding communication breakdowns during virtual events. The results reveal that role-play tasks elicited more CS use from learners than open-ended discussion tasks.

Furthermore, in a different case, Peterson (2006) compared the CSs used in F2F and VW environments with the use of different types of tasks and found that mostly the participants used the same types of CSs, with differences being

caused by the task type and the environments' affordances. Cirit-Isikligil, Sadler, and Arica-Akkok, (2022) compared FTF, VC, and VW environments regarding the EFL learners CSs use based on audiovisual data from a psycholinguistic perspective. Finally, they suggested a frequency of use variation across the three environments with several new strategy types discovered. Therefore, this study exists to collect and investigate the CS's use around EFL learners in virtual and FT2 contexts.

2.2.3 CSs in EFL Contexts

In the earlier time, Fernandez Dobao (2001) firstly observed the relationship between CSs use in L1 and L2. This paper identifies the Galician learners of English as a foreign language make of communication strategies. It explains the use of factors suggested in the literature as influencing strategic behavior: proficiency level and speaker's native language, contextual conditions, and cognitive complexity of the task. An experiment was designed and conducted to obtain representative samples of oral production in English ready to be analyzed in search of CSs. Six hundred twenty-nine strategies were identified in the data, classified, and submitted to quantitative and statistical analysis. The result of this analysis suggests that (1) proficiency level has a strong but not definitive influence on frequency and choice of strategies, (2) the different native languages of our subjects seem to be needed to clarify the issue, (3) certain task-related factors such as cognitive complexity and interlocutor's role have a significant effect on the use that foreign language learners make of CSs.

Moreover, in the year 2016, the research related to the relationship between the learners' proficiency level and their CS use was observed by

Maldonado. To examine the different communication strategies (CSs) EFL learners employ when communicating orally, and determine the relationship between the learners' proficiency level and their CS use. Spoken data from three conversations held by Spanish learners of English of different levels were analyzed in order to determine the type of CSs they used when interacting with a native speaker (NS) in an informal environment outside the classroom. Overall results show that there is an association between the learners' proficiency level and their CS usage. Results from a detailed analysis confirmed this relationship and revealed that the learners' linguistic competence is not only related to the frequency of the CSs used but mostly to the type of CS.

Ugla, Abidin and Abdullah (2019) investigated CSs through the influence of language proficiency level on the frequency of the use and choice of L1 or L2 CSs used by Iraqi EFL students. By applying qualitative data, the interactive and speaking tasks were used to gather data regarding communication strategy use and choice from 52 second and third-year English students. Those participants were divided into two groups; low and high-proficient students. The Taxonomy of CSs was adopted in coding the CSs used by low and highly proficient Iraqi EFL students. The result revealed that low-proficient students use communication strategies more frequently than highly proficient students. Both low and high-proficient students used CSs other than those in the selected taxonomy. This study showed that low proficient students use L1-based strategies more frequently, while highly proficient speaking use L2-based strategies more frequently.

Nowadays, language learners can significantly improve their communicative competence by developing their ability to use communication

strategies (CSs) or strategies for coping with face-to-face oral communication problems. Somsai and Intaraprasert (2011) primarily aimed to explore strategies for coping with face-to-face oral communication problems employed by Rajamangala University of Technology students majoring in English for International Communication. Based on the results of the data analysis, 24 emergent strategies for coping with oral communication problems were identified and classified into two main categories: 1) strategies for conveying a message to the interlocutor and 2) strategies for understanding the message. The main category 1 was further subcategorized into two groups, i.e. 1.1) continuous interaction and 1.2) discontinuous interaction. The continuous interaction category comprises 11 individual strategies, the discontinuous interaction 7, and 6 individual strategies for understanding the message respectively. The implications of these findings are not exhaustive. It is suggested that language teachers can play an important role in raising students' awareness and encouraging their students to make use of strategies to cope with communication difficulties. As a result, the students' communicative competence may improve.

Hence, in Indonesian context, Dewi, Batan, and Munir (2018) have conducted the research related to the learner's proficiency level in communication using English as a foreign language. It was indicated by students' capability to make use of strategies to communicate both in written as well as spoken forms. Using qualitative study and focused on finding out (i) the types of communication strategies used by the students in EFL classrooms at SMP Negeri 4 Singaraja, and (ii) the students' reasons towards the use of their communication strategies. The data were obtained from observation and focus group discussion. All data were

analyzed descriptively. The results of the study indicated that numerous types of strategies were used by the students when communicating in the classroom. They are the use of fillers, self-repetition, code switching, appeal for help, self-repair, asking for confirmation, message abandonment, omission, approximation, and literal translation. Various types of reasons were expressed by the students toward the use of communication strategies such as thinking time, anxiety, and proficiency level.

Additionally, Sukirlan (2014), in his study, tried to deal with the effects of teaching communication strategies (CSs) on the types of communication strategies used by the students and level of speech comprehensibility. This research is largely experimental involving 23 students. Thus, the results reveal of this study are (1) in terms of frequency, there are increases in 4 types CSs, decreases in 7 types of CSs, and a consistency in one type of CS, (2) there is a significant increase in the level of speech comprehensibility. Therefore, it can be concluded that teaching communication strategies promote students' communication skills.