

The Effect of Interactionist vs. Interventionist Models of Dynamic Assessment on L2 Learners' Pragmatic Comprehension Accuracy and Speed

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Abstract

Various models of Dynamic Assessment (DA) have been used in L2 pragmatic instruction and have proved their significant contributions to pragmatic production; however, there is a paucity of research regarding their implementation for pragmatic comprehension. Therefore, this study sought to investigate the effects of interactionist and interventionist models of DA on the accuracy and speed of pragmatic comprehension among a convenience sample of 60 advanced EFL learners who were randomly assigned into two DA groups and a control group. A listening pragmatic comprehension test developed and validated by Garcia (2004) was used both as a pretest and as a posttest. During the 14-session treatment, the interactionist DA group received metapragmatic instruction about 28 conversations, and learners interacted with each other and the teacher. Assistance and scaffolding were continuously provided by the teacher as the more knowledgeable other (MKO) within the learners' Zone of Proximal Development (ZPD). The interventionist DA class received its treatment based on DA procedures as presented by Lantolf and Poehner (2010). However, the Non-DA group only received metapragmatic instruction about the conversations from the instructor without any DA-based intervention or interaction. Data analysis using one-way ANCOVA revealed that study groups significantly differed in their pragmatic comprehension accuracy and speed: DA groups significantly outperformed the control group. Moreover, the interventionist DA group did significantly better than the interactionist DA group for pragmatic accuracy but not for pragmatic comprehension speed. The most important pedagogical implication of the study is that teachers can utilize interventionist and interactionist DA to foster learners' pragmatic comprehension accuracy.

Keywords: Dynamic assessment, Interactionist DA, Interventions DA, Pragmatic comprehension accuracy, Pragmatic comprehension speed

INTRODUCTION

Pragmatic competence as the working engine of the communicative competence as mentioned by Flowerdew (2013), encompasses second or foreign language (L2) learners' ability to both comprehend and produce the socio-pragmatic norms and their materialisations in the shape of the pragmalinguistic forms through the appropriate form-function-context mappings and their potential to produce the intended meanings in the target L2 considering the availability of the aforementioned aspects. Put it another way, pragmatic competence includes two sub-competencies: pragmatic production and pragmatic comprehension (Taguchi, 2011). A meticulous walk-through of L2 pragmatic literature since its inception in SLA research from the 1970s to the second decade of the current century shows that the majority of the cross-sectional, cross-cultural, intercultural, and to a lesser degree the developmental studies in L2 pragmatics have mainly investigated pragmatic production (e.g. Bardovi-Harlig & Bastos, 2011; Derakhshan & Eslami-Rasekh, 2015; Félix-Brasdefer, 2007, 2008; Haji Maibodi & Fazilatfar, 2015; Mohammad Hosseinpour & Bagheri Nevisi, 2018; Taguchi, 2014; Tajeddin & Zand-Moghadam, 2012; Zand-Moghadam & Adeh, 2020) and comparatively less research has targeted pragmatic comprehension, its mechanisms, and how to enhance it among the L2 learners (e.g. Malmir & Derakhshan, 2020; Perez, 2017; Taguchi, 2007, 2013).

This paucity of research in the domain of L2 pragmatic comprehension according to Taguchi and Roever (2017) is partly due to the challenges of studying comprehension processes that do not yield themselves to direct experimentation and hence more robust measurement and verification. Because of such a perplexingly daunting task of gaining insights into L2 pragmatic comprehension, less effort has been made even to conduct instructional studies in the domain of pragmatic comprehension compared with pragmatic production and only a few previous studies can be referred to in this regard. Therefore, Bardovi-Harlig (2015) has asked for instructional studies through robust theoretical and experimental designs

implemented via recent innovative methodologies and practices to help L2 learners develop better pragmatic comprehension capabilities. Rose and Kasper (2013) also called for launching instructional studies to better grasp the nature of pragmatic comprehension and to garner efficient knowledge on how to improve pragmatic comprehension. Dynamic assessment is a very rich practice with a lot of invaluable potentials that may help L2 pragmatics researchers and L2 practitioners give a boost to learners' pragmatic comprehension and broaden our view in this regard.

Dynamic assessment is an orientation toward measuring learners' achievements through including mediation into the assessment process and attempts to integrate learning and appraising. Various models of DA have been utilized in SLA and have proved their significant contribution; however, there is a scarcity of research regarding their implementation for acquiring pragmatic knowledge in general and pragmatic comprehension in particular. Therefore, the present study sought to investigate the effects of interactionist and interventionist models of DA on the accuracy and speed of pragmatic comprehension among a sample of EFL learners.

LITERATURE REVIEW

The literature review pertinent to the current study is outlined in the two following sections each including the most important theoretical considerations and the related studies concerning the two main variables of the study, i.e., pragmatic comprehension and dynamic assessment.

Pragmatic Comprehension

Pragmatic comprehension is the process of decoding the pragmalinguistic forms to extract the intended meanings uttered by native speakers of the target L2 or competent non-native speakers that entails the perception and interpretation of the embedded sociopragmatic forms. According to Taguchi (2009), pragmatic comprehension is the indispensable binary part of pragmatic production and these two components of the pragmatic competence are inseparable and go hand in hand. However, Perez (2017)

mentioned that pragmatic comprehension is easier than pragmatic production for language learners though its study is thornier and more challenging due to the invincible nature of the processes of comprehension in the brain of the language learners.

Bardovi-Harlig (2013a) mentioned that pragmatic comprehension is the simultaneous interaction between the micro-level context elements and the macro-level sociocultural components that are occurring in the brain of L2 learners and has numerous cognitive, psycholinguistic, and sociolinguistic dimensions that are hard to grasp. Pragmatic comprehension is mostly made up of declarative knowledge of the common speech acts, various forms of implicatures, conversational routines, and some interactional prefabricated patterns that are proceduralised during pragmatic encounters (Loukusa, et. al., 2007).

Earlier pragmatic comprehension research can be divided into some categories. The first category of the pragmatic comprehension studies like the mainstream pragmatic research is the description of learners' pragmatic comprehension capabilities regarding various speech acts and other forms of pragmatic knowledge (e.g. Lee, 2010; Rose, 2000; Taguchi, 2008c). These cross-sectional and descriptive pragmatic comprehension studies mostly reported some variations between native speakers' pragmatic comprehension abilities and EFL/ESL non-native counterparts and found that L2 learners need more exposure to achieve near-native-like abilities (Lee, 2010). The purpose of this branch of studies, as cited by Taguchi (2008c), was to sharpen the researchers' and teachers' attention toward learners' inefficiencies and knowledge gaps and to tailor their instructional materials in this regard. The second category of the studies is longitudinal pragmatic comprehension studies that have sought to trace the regularities and developmental patterns among L2 learners for the internalisation of the specific speech acts and implicatures during their language learning experiences in the EFL/ESL contexts (e.g. Bouton, 1994; Rose, 2009; Takahashi & Roitblat, 1994) or study-abroad contexts (e.g. Bardovi-Harlig & Bastos, 2011; Schauer, 2009).

Yet the third category of the empirical studies that have investigated pragmatic comprehension is instructional studies that have tried to improve learners' pragmatic comprehension abilities, mostly learners' knowledge of implicatures and speech acts, through various instructional activities and tasks (e.g. Birjandi & Derakhshan, 2013; Sarani & Talati-Baghsiahi, 2017; Taguchi, 2007, 2008a; Taguchi, et. al., 2013; Taguchi, et. al., 2016). Taguchi (2017) maintained that the general finding shared by this branch of research is that explicit instruction can help learners improve pragmatic comprehension capabilities. However, the range and scope of the instructional studies are mostly limited to studies that have focused on pragmatic production. Taguchi and Yamaguchi (2019) mentioned the internal complexities of comprehension processes are the root causes of this relative negligence and less enthusiasm to study pragmatic comprehension.

The main criticism that can be advanced against the previous studies on pragmatic comprehension is that they are lagging behind the recent and novel instructional practices that are used in other domains of applied linguistics and for teaching other language competencies (Roever, 2012). The second criticism is that the majority of these studies are replications of previous ones and they have mostly focused on various forms of implicatures. As mentioned by Taguchi and Yamaguchi (2019), pragmatic comprehension research and its instruction, in particular, necessitates that application of new methodologies, approaches, and practices to bring about substantial changes in L2 learners' pragmatic comprehension abilities. Dynamic Assessment (DA) models are some recent and innovative instructional and testing instructional approaches that can uniquely help L2 learners enhance their pragmatic compression.

Dynamic Assessment (DA)

Dynamic assessment is a recent perspective that seeks to appraise learners' progress and achievement through a rather longitudinal and ongoing evaluation that is mostly concurrent with the learning experiences and

instructional activities (Lantolf & Poehner, 2004). The dynamic assessment was born out of the Vygotsky's (1978) sociocultural theory (SCT) that specifically focuses on the role of the interaction and mediation between the learner and other people present in the surrounding environment. According to Poehner and Infante (2015), dynamic assessment can be thought of as a bridge between evaluation and instruction, teaching and learning, and cognitive and constructivist dimensions of knowledge procurement. The application of dynamic assessment has been optimistically and enthusiastically welcomed by most educators, second and foreign language community being no exception. Currently, various models of dynamic assessment have got substantial momentum in concurrent teaching and evaluating various language skills and sub-skills.

Poehner (2008b) pointed out that DA can effectively integrate teaching and evaluation in the L2 classroom to estimate the learners' progress during instruction. According to Lantolf and Poehner (2011), the basic cornerstone of the DA is the zone of proximal development (ZPD) that refers to the distance/difference between the learner's current capability and the potential level s/he can achieve via the assistance given by a more knowledgeable one (MKO). Put it another way, ZPD is the ability variation between the current or unassisted capability of the learner and what s/he can obtain when s/he is assisted by MKOs (Poehner, 2007). As quoted by Poehner and Lantolf (2013), ZPD is the scene where cognitive and psycholinguistic mediation exert their influence on the process and hence the product of learning.

Another assumption in DA is that learners' cognitive abilities are not fixed; rather they are dynamically changing on the basis of both internal and external factors (Poehner, 2008a). According to Feuerstein and Feuerstein (2001), instructors can mediate the learning of any kind including socio-cultural heritage to learners through various interactional activities in the same vein the adults mediate the culture to their children through social interaction. Kozulin and Pressisen (1995) maintain that mediated learning through ample interaction is more conducive to learning than direct learning

by the individuals themselves which may leave them within an episodic understanding of the social realities.

Numerous models have been proposed for dynamic assessment one of which is that prominent dichotomy between the interventionist vs. interactionist models each with their sub-models. Based on the interactionist approach of DA, the L2 teacher acts as a mediator who facilitates learners' acquisition of interactions and hence interactional patterns and knowledge all of which beneficial for pragmatic development (Lantolf & Poehner, 2011). Vygotsky's (1978) concept of the mediator's role in preparing the learners' knowledge from an intermental to an intramental plane of sociocultural functions also conjures up a kind the use of the previously acquired knowledge of the form of the language into action in a special context to achieve a particular communicative function.

Dynamic assessment pursues a process-oriented approach toward integrating learning and evaluating experiences through providing learners with the instructor's mediation and assistance (Pohner, 2009b). Karpov (2014) asserted that when an instructor mediates the L2 language learning process step-by-step and dynamically within the learners' ZPD, s/he gets some information about the learner's current abilities and knowledge and about the best teaching tasks that can aid that learner to achieve his/her true potential. Haywood and Lidz (2007) argued that in DA, the instructor assesses learners' progress through the way of teaching which contradicts a misconception that the DA means the cursory combination of assessing and teaching.

Buddoff's Learning Potential Measurement Approach, Group-Dynamic Assessment (GDA), Intensive Mediated Language Experience (Intensive MLE), and its Concurrent versus Cumulative models are among the most important DA models which have been reported in the theoretical and empirical literature in education and SLA. Buddoff's Learning Potential Measurement Approach is an interventionist model of dynamic assessment that attempts to activate the learning capacity in any kind of measurement. It follows the tripartite process of pretesting, mediating, and post-testing in the

learner's zone of proximal development (Lantolf & Poehner, 2011). According to Lantolf and Poehner (2004), this approach has shown its efficacy in education though it has not been extensively used in language teaching. Group-Dynamic Assessment (GDA) is another exponentially used model of DA that invests more in the interactions among the learners under the guidance of the more knowledgeable ones. Feuerstein and Feuerstein (2001) have argued that any kind of assessment can and should be the product of dynamism of learning and cooperation among the learners themselves and the teacher's mediation should be dependent on and consistent with the dynamic nature of learning interactions and experiences among the learners. The proponents of DA have argued that both concurrent and cumulative models of dynamic assessment are effective for enhancing L2 learning (e.g. Lantolf & Poehner, 2014) and its sub-skills (Lantolf & Poehner, 2013).

Feuerstein, et. al. (1997) stated that Intensive Mediated Language Experience (Intensive MLE) can best capture how interactions among learners can enhance the development of higher thinking abilities among children. Unlike the two previously introduced models, Intensive MLE attempts to provide information about the events and mechanisms in the ZPD and how these events and mechanisms lead to higher thinking functions. According to Intensive MLE, the mere sociocultural mediation cannot trigger cognitive and mental development rather these mediations should be cognitively and psychologically collaborative and learner-initiated. The role of a more experienced collaborator is significantly important in shortening the distance between the potential level and the current level of the learner's knowledge in this model of DA. Poehner (2008a) pointed out that Intensive MLE can be considered the most efficient type of interventionist DA that has shown its practicality and usefulness in various educational contexts. These interventionist models can also be dichotomised into concurrent and cumulated approaches. In the concurrent dynamic assessment, the interactions occur among the learners and one of the learners is the more knowledgeable one (MKO) who tries to scaffold and

assist other peers or group members and the instructor only interacts with MKO. However, in the cumulative models of dynamic assessment, the instructor initiates the chain of interactions in the classroom with different individual learners and other peers meticulously attend to the flow of the conversations. Poehner (2009b) asserted that the accumulation of these teacher-initiated interactions triggers more effective learning compare with the first type of DA.

Various models of dynamic assessment, interactionist, and interventionist models, in particular, have shown their effectiveness for enhancing L2 proficiency in various EFL and ESL contexts (Antón, 2009; Bachman & Palmer, 2010; Lantolf & Poehner, 2011). Dynamic assessment, for instance, has also proven its significant role in enhancing L2 reading comprehension (e.g. Ebadi & Saeedian, 2015; Kletzien & Bednar, 1990; Kozulin & Garb, 2002.), writing skills (e.g. Heidari, 2019; Shrestha & Coffin, 2012), oral skills (listening and speaking) (e.g. Ebadi & Asakereh, 2017; Hill & Sabet, 2009), vocabulary (e.g. Sarani & Izadi, 2016), and grammar (e.g. Ahmadi & Brabadi, 2014) in various EFL and ESL contexts. However, dynamic assessment for enhancing L2 pragmatic knowledge has a more recent history and further research is anticipated in this regard. Nonetheless, some studies have been done on the use of various dynamic assessment models for improving pragmatic performance (e.g. Moradian, et. al., 2019; Tajeddin & Tayebipour, 2012). Most of the studies have examined the effects of dynamic assessment models on L2 learners' pragmatic production of various speech acts or implicatures and, to date, comparatively little research has been done for using dynamic assessment models for improving L2 learners' pragmatic comprehension.

PURPOSE OF THE STUDY

The rarity of pragmatic comprehension research that comes from the perplexingly difficult nature of teaching and assessing pragmatic comprehension as mentioned by Taguchi (2008a, 2008b) and the importance

of using new instructional methods such as DA models for teaching L2 pragmatic comprehension are valuable research gaps that need consideration. Therefore, the present study was conducted to fill this research gap by employing the interactionist and interventionist models of dynamic assessment for promoting L2 pragmatic comprehension of common English speech acts. To achieve this purpose, the current study tried to investigate the effects of the two aforementioned models of dynamic assessment on both pragmatic comprehension accuracy and speed by posing two research questions as follows:

1. Are there any significant differences among the effects of the interactionist DA, interventionist DA, and the conventional non-DA models of instruction on L2 learners' pragmatic comprehension accuracy?
2. Are there any significant differences among the effects of the interactionist DA, interventionist DA, and the conventional non-DA models of instruction on L2 learners' pragmatic comprehension speed?

METHOD

This study has employed a pretest-posttest control design to investigate the effect of interactionist vs. interventionist models of DA and the conventional non-DA instruction on L2 learners' pragmatic comprehension accuracy and speed. The used method, instruments, data collocation procedure, and the data analysis will be briefly touched upon in this section.

Participants

A total of 67 upper-intermediate to advanced EFL learners at a state university participated in the current study. They were selected based on their scores on the Michigan English Placement Test (Michigan EPT) out of an initial sample of 87 learners. Those learners who scored at or beyond 51

(out of 80) were accepted into the study and were randomly assigned to three groups. Two of these groups included 22 and the other had 23 learners. Then, the three groups were randomly assigned to an interactionist DA group ($n = 23$), an interventionist DA group ($n = 22$), and a non-DA or control group ($n = 22$). Forty-five of the learners were females and the rest 22 were males. Forty learners were seniors and 27 were juniors and most of them had from 2 to 7 years of language learning experience before attending the university ($M = 4.3$, $SD = 1.2$). The majority of them were Persian speakers; however, there were some students with Turkish ($n = 9$), Arabic ($n = 3$), and Chinese ($n = 2$) L1s.

Instrumentation

Two instruments were used for data collection in the present investigation: The Michigan English Placement Test (Michigan EPT) and a pragmatic listening comprehension test the features of which are briefly described in the following sections.

The Michigan English Placement Test (Michigan EPT)

Version D of the Michigan EPT (published in 2008) including 80 multiple-choice items was given to an initial sample of 87 EFL seniors and juniors at a state university as a homogeneity test. This test was made up of 25 listening, 20 grammar, 20 vocabulary, and 15 reading items. The reliability and validity of the test have been proved during the past two decades in a myriad of studies (e.g. see Bachman & Palmer, 2010; Brown & Abeywickrama, 2010); however, in our study, the reliability index was .80 using Cronbach alpha formula. Since pragmatic comprehension for authentic conversations needs at least upper-intermediate proficiency as claimed by Taguchi (2007, 2008), so those learners whose scores were at or beyond 51 were selected for the current study. According to the rubrics given for test score interpretation, scores with the range of 51-61 are high intermediates comparable to B2 level (53-60 score range) on the Common

European Framework of Reference (CEFR). Those who score at or above 62 (up to the maximum score of 80) are considered advanced EFL learners that somehow equal the C1 level on CEFR (61-80 score range). In this study, those 67 learners who scored at or beyond 51 were selected as the study participants and were randomly assigned to three groups, two of which included 22 and the other had 23 learners. But, due to the regulations of the university, the other 20 learners whose general English language proficiency fell short of the expected cut-off score ($x < 51$) could not be totally excluded from their advanced conversation course and the researcher was not to do that exclusion under any conditions; therefore, these 20 learners were also randomly added to the three study groups to have three classes each with 29 learners. These participants also received the treatments and answered the pragmatic comprehension test, but their scores were not used for the final data analysis. In order to avoid any inequality and psychological repercussions, these students with lower proficiency were not briefed about how their participation was dealt with.

Pragmatic Listening Comprehension Test

To measure participants' pragmatic comprehension accuracy in American English, a pragmatic listening test developed and validated by Garcia (2004) was utilized. As asserted by Garcia, any L2 pragmatic test should cover the most important types of knowledge that are involved in pragmatic comprehension and therefore, she included 6 lengthy authentic conversations received from naturally occurring interactions. She developed items to measure learners' comprehension accuracy of the pragmalinguistic forms and sociopragmatic norms not just for speech acts as the building blocks of pragmatic comprehension as claimed by the existing literature on this issue (e.g. Felix-Brasdefer, 2008; Ross & Kasper, 2013; Schauer, 2009; Taguchi, & Roever, 2017) but also for the implicatures. This pragmatic comprehension test was developed based on American English conversations in the United States and included 24 items. These items

checked learners' comprehension of the form-function-context mappings for six audio-recorded authentic conversations derived from an American corpus of academic spoken language. This corpus has been collected at Northern Arizona University in the 1990s. Two of the recorded conversations occur between a student and one of the staff members of the college. Three other recorded interactions included formal talks between a student and her professor at the professor's room about the classroom projects and routines. The final interaction happened between two students in class after the instructor left. Garcia's (2004) justification for inclusion of these contexts was their prevalence in the encounters faced by L2 learners of English during their probable attendance at the US universities and study abroad programs. The included speech acts were requests, suggestions, corrections, and offers. The original test also included a linguistic listening test that was not used in the current study. Garcia (2004) reported a high reliability index ($r = .83$) for the test in her pilot study conducted with 5 nonnative English speakers and also for the main study ($r = .85$).

The current study did not use the linguistic part of the test that had 24 items seeking to test pure linguistic knowledge; accordingly, the test was slightly modified after a pilot study using 10 native speakers of American English at Florida State University ($r = .82$). It was also given to a group of 20 upper-intermediate Iranian EFL learners who were comparable to the sample enrolled in the main study and its reliability turned out to be .79. Some minor content and language modifications were added to the final test. The final pragmatic comprehension test contained 24 multiple-choice items: 12 items for checking the speech act knowledge and an equal number of items for implicature comprehension (Appendix A). The speech act items were 4 requests, 4 offers, 2 suggestions, and 2 corrections. The implicature items were composed of 6 conversational and 6 conventional items. This dichotomous classification of implicatures was firstly proposed by Grice (1975) and later accepted and suggested by other researchers (e.g. Davis, 2007; Haugh, 2007; Plapper, 2019). Each listening prompt was followed by two speech act items and two implicature items. Every correct answer was

given one score and; therefore, the total score a learner could obtain on the test was 24.

Data Collection Procedure

A sample of 67 upper-intermediate to advanced EFL learners who were selected based on their performance on the Michigan EPT test out of an initial sample of 87 participated in this study. These selected participants were randomly assigned into three groups as follows: two DA groups and a non-DA control group.

The data collection procedure was completed in three consecutive stages. First, Garcia's (2004) pragmatic listening comprehension test was administered as a pre-test. Both the listening prompts and the successive items were delivered by a laptop computer in the presence of the researcher and a qualified colleague who was briefed about the study and the assessment procedure. This colleague was in charge of the language lab of the university and was available for tackling any technical problems during the computer delivery of the test.

During the pragmatic comprehension test, the participants wore headphones and they were given information on how to answer the test in English on their PC screens. One example item that was created by the researcher like the ones in the main test based on an American conversation form the conversation book *Touchstone 3* was used as a practice item. They were also given all the necessary information about how to choose their intended answers on the screen and how they could go to the next item by the colleague in charge of the lab in Persian to marginalize any mismanagement during the test and how to ask for the technical assistance if something went wrong. First, they listened to the conversation two times (as proposed by some scholars as an optimal frequency of broadcasting audio pragmatic scenario, e.g. Taguchi, 2008). Then the first test item and its options appeared on the screen automatically by the lab supervisor; however, for the next three related items for each of the 6 conversations, the

learners pressed the Enter key on their PCs. Students could tick their appropriate options on the screen. The response time was measured using the Clockify Windows app (a free time tracking and time recording software) that was installed on the screen of the display monitors. This app recorded the time in seconds from the moment that the item appeared on the screen to the moment that the participants pressed the Enter key to go to the next items. The total response time was calculated in seconds as the average number of seconds spent for comprehending and answering each item properly. Each participant had a final average time for answering an item measured in seconds.

The target treatments of this study were given during the second phase of the present investigation. Each of the three study groups received their special treatments. In the first experimental group, i.e., the interactionist DA group, learner's received metapragmatic instruction regarding 28 conversations in an American instructional book. In this group, participants also engaged in conversations with their classmates and their teacher. Assistance and scaffolding were continuously provided by the teacher as the more knowledgeable other (MKO) within learners' ZPD.

The interventionist DA class received its treatment based on DA procedures as presented by Lantolf and Poehner (2010). In following this framework, the instructor provided calculated interventions and direct teaching to assess and foster the learners' performances for the used pragmatic tasks. The provision of assistance and mediation was based on the learners' capabilities to learn and solve the assigned task. If learners could cope with target tasks, the teacher planned a more challenging task and avoided any mediatory intervention. In the case of learning difficulties and serious challenges, the instructor followed one of a combination of the eight mediatory interventions suggested by Lantolf and Poehner' (2010):

1. Pause.
2. Repeat the whole phrase questioningly without indicating the nature and location of the problem.
3. Repeat just the part of the sentence with the error.

4. The teacher points out that there is something wrong with the sentence, “There is a problem with the word .../ phrase ..., etc.” Alternatively, the teacher can pose this as a question, “What is wrong with that sentence?”
5. The teacher points out the incorrect word.
6. The teacher asks either/or question(s).
7. The teacher identifies the correct answer
8. The teacher explains why. (Lantolf & Poehner, 2010, p. 20)

In line with the claims and principles of dynamic assessment, these intermediary interventions were provided by the teachers by following a continuum of implicitness to explicitness to help the learners improve their pragmatic knowledge within their ZPD and by their cooperation with MKO. For instance, pausing is a non-verbal completely implicit type of intervention that asks the learner to reconsider his/her answer accuracy and appropriacy. At the other end of the continuum, the instructor embarks upon direct explicit explanation as the last recourse when other mediatory forms do not work.

However, the Non-DA group only received metapragmatic instruction about the conversations from the instructor without any DA-based intervention or interaction. These types of treatments were given to the groups for 14 ninety-minute sessions. Two sessions were held each week and this study lasted for about two months (seven weeks).

During the third stage of this study, the same pragmatic listening comprehension test was administered as a posttest to estimate the participants’ pragmatic comprehension development in terms of both accuracy and speed of receiving the study treatments. This second Administration of the pragmatic listening comprehension test was done like the first stage; however, the second administration of the pragmatic comprehension listening test followed the principles of dynamic assessment. First, the learner was given this opportunity to answer the test based on his abilities and without scaffolding and assistance from the instructor. This first response that indicated the learner’s independent ability was considered

as his score on the posttest. If the answer was correct, no feedback was provided; nonetheless, when the answer of the learner was incorrect, the instructor intervened to change, guide, or improve the examinee's performance based on the type of the dynamic assessment treatment used for the two experimental classes. The researcher followed the principles of interactionist DA in the first class and Lantolf and Poehner's (2010) principles in the interventionist DA class as mentioned above. It should be noted that the pretest administration of the test was done like a static test prior to the dynamic assessment treatments the purpose of which was to gain an estimation of the learners' pragmatic comprehension ability before the experimentation.

Data Analysis

IBM SPSS program (version 25) was used for data analysis. Both descriptive and inferential statistics were employed to answer the two postulated research questions. Descriptive statistics including mean, standard deviation, maximum, minimum, skewness, kurtosis, and Cronbach's alpha reliability indices were obtained. Since there was a covariate (pre-test scores) for each of the two research questions in the current study, a dependent variable (posttest), and an independent variable with three levels (study groups), the one-way analysis of covariance (one-way ANCOVA) was used twice.

RESULTS

Cronbach's alpha reliability indices for the pre-test and posttest administrations of Garcia's (2004) Pragmatic Listening Comprehension test turned out to be .83, and .82, respectively, suggestive of the high reliability of this measure. The application of the Kolmogorov-Smirnov and Shapiro-Wilkes normality tests also revealed the normality of the distributions for the performances of the three study groups on the pretest and posttest administrations of the pragmatic comprehension test ($p > .05$). The related

graphs, box plots, and ratios of skewness and kurtosis further supported the normality of the distributions. According to Tabachnick and Fidell (2013), one-way ANCOVA has some important assumptions including the lack of univariate and multivariate outliers, normality of subgroups' distributions, homogeneity of variances, reliable measurement of the covariate prior to the treatments, and linearity and homogeneity of regression slopes. Preliminary checks indicated that these necessary assumptions were kept and no violation was observed.

Research Question One

The first research question aimed at examining the differences among the effects of interactionist DA, interventionist DA, and conventional non-DA instructional models on L2 pragmatic comprehension accuracy. Descriptive statistics for the learners' scores on the listening pragmatic comprehension test used both as a pre-test and post-test are summarised in the following table:

Table 1: Means and SDs for Three Groups' Scores on the Pragmatic Listening Comprehension Test

| <i>Groups</i> | <i>Pretest</i> | | | <i>Posttest</i> | |
|---------------------------|----------------|-------------|-----------|-----------------|-----------|
| | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> |
| Interactionist DA | 23 | 11.52 | 2.92 | 16.65 | 2.32 |
| Interventionist DA | 22 | 11.23 | 2.82 | 18.77 | 2.36 |
| Non-DA (Control) | 22 | 11.64 | 3.43 | 13.68 | 2.96 |
| Total | 67 | 11.46 | 3.02 | 16.37 | 3.27 |

As presented in Table 1, the learners' mean scores on the pretest administration of Garcia's (2004) pragmatic listening comprehension test were very similar for the experimental groups and the control group; however, the mean scores for the two experimental groups were higher than that of the control group on the posttest administration of the aforementioned test. The interventionist DA group obtained the highest

mean score ($M = 18.77$, $SD = 2.36$) followed by the interactionist DA group ($M = 16.65$, $SD = 2.32$). The lowest mean score was recorded by the non-DA group ($M = 13.68$, $SD = 2.96$).

To check the statistical significance of such differences in the posttest of scores obtained by the study groups through controlling the effect of the pretest scores, a one-way ANCOVA was employed. Besides the normality, linearity, and absence of outliers detected prior to the application of the test, Levene's test showed that the requirement of the homogeneity of variances was met ($F(2, 64) = 1.30$, $p = .27 > .05$). Moreover, the regression slopes were homogeneous since the interaction between the pretest scores and independent variable was non-significant ($F(2, 64) = 1.65$, $p = .41 > .05$, *partial* $\eta^2 = .03$).

Results of the one-way ANCOVA in Table 2 revealed significant differences among the three study groups' mean scores on the pragmatic comprehension posttest for the accuracy ($F(2, 63) = 193.54$, $p < .05$, *partial* $\eta^2 = .86$, representing a large effect size).

Table 2: ANCOVA Results for the Pragmatic Comprehension Posttest Scores Obtained by Study Groups

| <i>Source</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> | <i>Partial η^2</i> |
|----------------|-----------|-----------|-----------|----------|----------|------------------------------------|
| Pretest | 369.27 | 1 | 369.27 | 442.50 | .000 | .87 |
| Groups | 323.04 | 2 | 161.52 | 193.54 | .000 | .86 |
| Error | 52.57 | 63 | .83 | | | |
| Total | 18671.00 | 67 | | | | |

Furthermore, the covariate turned out to be significant in explaining the learners' posttest performances ($F(1, 63) = 442.50$, $p < .05$, *partial* $\eta^2 = .87$), and it could account for 87.5% of posttest scores variation. The next table summarises learners' posttest scores after detaching the effects of the covariance.

Table 3: Estimated Marginal Means for Three Groups' Posttest Scores on the Pragmatic Listening Comprehension Test

| <i>Group</i> | <i>Mean</i> | <i>Std. Error</i> | <i>95% Confidence Interval</i> | |
|---------------------------|-------------|-------------------|--------------------------------|--------------------|
| | | | <i>Lower Bound</i> | <i>Upper Bound</i> |
| Interactionist DA | 16.60 | .19 | 16.22 | 16.98 |
| Interventionist DA | 18.95 | .19 | 18.56 | 19.34 |
| Non-DA (Control) | 13.54 | .19 | 13.15 | 13.93 |

In a similar vein to the posttest scores before eliminating the effect of the covariates, the interventionist DA group had the highest marginal mean score ($M = 18.95$) followed by the interactionist DA group ($M = 16.60$) and the non-DA group ($M = 13.54$). Such differences in the estimated marginal means obtained by the study groups can be vividly seen in Figure 1:

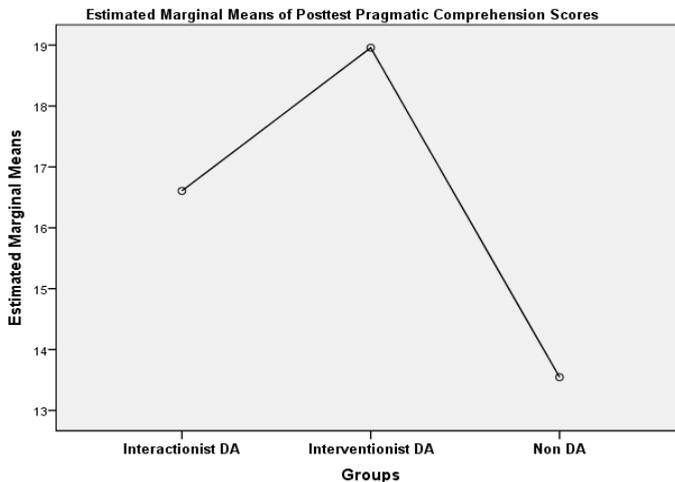


Figure 1: Estimated marginal means of posttest pragmatic comprehension scores

Post-hoc comparisons were made (Table 4) utilizing the Tukey test to detect where the differences among the estimated marginal means exactly existed.

Table 4: Pairwise Comparisons for Posttest Scores by Study Groups

| <i>(I) Group</i> | <i>(J) Group</i> | <i>Mean Difference (I-J)</i> | <i>p</i> |
|---------------------------|--------------------------|------------------------------|----------|
| Interventionist DA | Interactionist DA | 2.35* | .000 |
| | Non-DA | 5.41* | .000 |
| Interactionist DA | Non-DA | 3.06* | .000 |

Based on the pairwise comparisons, the interventionist DA group significantly outperformed the interactionist DA ($MD = 2.35$, $p < .05$) and non-DA ($MD = 5.41$, $p < .05$) groups on the pragmatic comprehension posttest in terms of pragmatic comprehension accuracy. In addition, the interactionist DA group significantly did better than non-DA group ($MD = 3.06$, $p < .05$).

Research Question Two

The second research question attempted to explore whether two types of dynamic assessment and the traditional non-dynamic assessment models exerted significant influences over L2 learners' speed of pragmatic comprehension. As mentioned in the method section, the average speed of answering each of the 24 items in the pragmatic listening comprehension test was recorded at its pre- and post-administrations using PCs in a language laboratory. Descriptive statistics about pragmatic comprehension speed recorded by the two DA and the non-DA groups are displayed in Table 5 below.

Table 5: Means and SDs for Three Groups' Pragmatic Comprehension Speed

| <i>Groups</i> | <i>Pretest</i> | | | <i>Posttest</i> | |
|---------------------------|----------------|-------------|-----------|-----------------|-----------|
| | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> |
| Interactionist DA | 23 | 55.48 | 2.92 | 49.04 | 3.28 |
| Interventionist DA | 22 | 55.77 | 2.82 | 48.41 | 3.36 |
| Non-DA (Control) | 22 | 55.36 | 3.43 | 50.73 | 3.88 |
| Total | 67 | 55.54 | 3.02 | 49.39 | 3.59 |

As witnessed for the pragmatic comprehension accuracy, the three groups had the rather same average speed time to answer the pragmatic

comprehension pretest items and virtually learners could answer each item around 55.5 seconds; nonetheless, the average speed time for answering the pragmatic comprehension questions substantially declined from the pretest to the posttest across the three study groups. Participants in the interventionist DA group indicated the lowest average comprehension speed per item on the posttest ($M = 48.41$, $SD = 3.36$). This average speed was higher for the interactionist DA ($M = 49.04$, $SD = 3.28$) and the non-DA ($M = 50.73$, $SD = 3.88$) groups.

Another one-way ANCOVA was run to examine the significance of such apparent differences among the average pragmatic comprehension speed means recorded by the study groups. Because of the availability of the normality and linearity of the distributions, Levene's test was employed to scrutinise the homogeneity of variances the results of which verified that this prerequisite requirement was retained ($F(2, 64) = .72$, $p = .48 > .05$). Also, the non-significant interaction between the covariate and the independent variable demonstrated the homogeneity of the regression slopes ($F(2, 64) = 1.43$, $p = .332 > .05$, *partial* $\eta^2 = .05$).

The application of the one-way ANCOVA (Table 6) indicated that there were statistically significant differences ($F(2, 63) = 6.52$, $p = .003 < .05$, *partial* $\eta^2 = .17$, representing a small effect size) among the average pragmatic comprehension speed scores recorded by participants in the two DA and the one non-DA groups.

Table 6: ANCOVA Results for the Three Groups' Pragmatic Comprehension Speed on the Posttest

| <i>Source</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P</i> | <i>Partial η^2</i> |
|----------------|-----------|-----------|-----------|----------|----------|------------------------------------|
| Pretest | 402.86 | 1 | 402.86 | 65.45 | .000 | .51 |
| Groups | 80.26 | 2 | 40.13 | 6.52 | .003 | .17 |
| Error | 387.77 | 63 | 6.15 | | | |
| Total | 164279.00 | 67 | | | | |

Participants' pragmatic comprehension speed before the treatments that was measured on the pretest administration of the pragmatic listening

comprehension task could also significantly account for 51% in the variability in the pragmatic comprehension speed on the posttest after the participants received the intended treatments ($F(1, 63) = 65.450, p < .05, \text{partial } \eta^2 = .51$, indicative of moderate effect size). Accordingly, to exactly determine the effects of the treatments on pragmatic comprehension speed measured on the posttest, the effect of the covariate was controlled to obtain the marginal estimated means. These adjusted means are presented in Table 7 below.

Table 7: Estimated Marginal Means for the Learners' Pragmatic Comprehension Speed on the Posttest

| <i>Group</i> | <i>Mean</i> | <i>Std. Error</i> | <i>95% Confidence Interval</i> | |
|---------------------------|-------------|-------------------|--------------------------------|--------------------|
| | | | <i>Lower Bound</i> | <i>Upper Bound</i> |
| Interactionist DA | 49.09 | .51 | 48.05 | 50.12 |
| Interventionist DA | 48.21 | .52 | 47.15 | 49.27 |
| Non-DA (Control) | 50.86 | .52 | 49.81 | 51.92 |

The same declining pattern in the adjusted means can be seen from the control (non-DA) group to the interactionist and interventionist DA experimental groups. The following figure illustrates these pragmatic comprehension speed discrepancies clearly:

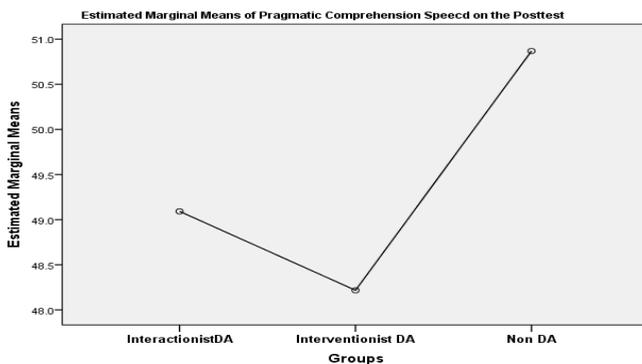


Figure 2: Estimated marginal means of average pragmatic comprehension speed on the posttest

Finally, the Tukey test was applied to provide the between-group comparisons among the marginal means of the pragmatic comprehension speed after the treatments. Based on Table 8, the two experimental groups, i.e., the interventionist ($MD = 2.65$, $p = .001 < .05$) and the interactionist ($MD = 1.77$, $p = .01 < .05$) DA groups significantly answered the pragmatic comprehension posttest in fewer seconds than the non-DA group.

Table 8: Pairwise Comparisons for the Learners' Pragmatic Comprehension Speed on the Posttest

| <i>(I) Group</i> | <i>(J) Group</i> | <i>Mean Difference (I-J)</i> | <i>p</i> |
|--------------------|-------------------|------------------------------|----------|
| Interventionist DA | Interactionist DA | .87 | .242 |
| | Non-DA | -2.65* | .001 |
| Interactionist DA | Non-DA | 1.77* | .019 |

However, no significant difference was found between the pragmatic comprehension speed recorded by participants in the two experimental groups ($MD = .87$, $p = .24 > .05$).

DISCUSSION

Data analysis revealed some important findings. First, dynamic assessment models were significantly better in enhancing L2 learners' pragmatic comprehension accuracy than conventional non-dynamic assessment instruction. To justify this superiority of dynamic assessment for fostering L2 pragmatic comprehension accuracy, we need to take a look at the peculiarities and unique features inherent in DA. As advocated by the founders and proponents of dynamic assessment and sociocultural theory (e.g. Kozulin & Garb, 2002; Poehner, 2007, 2008a; Poehner & Lantolf, 2013), the bedrock of DA is extensive interaction between the language learners themselves and between the language learners and the teacher. According to the existing literature on instructional and developmental pragmatics, more extensive interactions set the stage for richer and better input and hence pragmatic intake (e.g. Bardovi-Harlig & Bastos, 2011;

Barron, 2003; Félix-Brasdefer, 2007; Kasper & Roever, 2005; Taguchi, 2007). Based on Schmidt's (1990) noticing hypothesis, exposure to vast pragmatic input provided through ample interactions in L2 classroom or any context in which L2 is used leads to more noticing of pragmatic features and hence their internalization.

This substantial effectiveness of dynamic assessment for bolstering L2 pragmatic comprehension can also be attributed to the opportunities that are given to learners to engage in authentic interactions with more competent peers and teachers, the more knowledgeable ones based on the principles of dynamic assessment, which in turn, engages the learners in the production of output in the target language. According to Swain's (2005) output hypothesis, more engagement with the target L2 to express the intended meanings in an L2 paves the way for better internalisation of various components of language in general and pragmatic and discourse of knowledge in particular as mentioned by Taguchi and Roever (2017) and supported by some pragmatic studies (e.g. Kasper, 2001; Matsumura, 2003; Rose, 2009; Taguchi, 2003, 2005, 2019).

Dynamic assessment enjoys many other robust features that help L2 learners develop effective pragmatic comprehension of the speech acts which are the building blocks of interactions in social exchanges. For example, cultural exchanges and intellectual communications between language learners in a nonthreatening environment accompanied by the scaffolding provided by more knowledgeable ones (Lantolf & Poehner, 2011; 2014), including teachers and competent peers, may help learners develop the knowledge to better comprehend the sociopragmatic norms of the target language and subconsciously their pragmalinguistic forms.

The second significant finding reported by this study indicated that among the two investigated types of dynamic assessment, the interventionist approach was significantly better than the interactionist approach in enhancing L2 pragmatic comprehension accuracy. Again, such a significant difference can be accounted for by a stronger chain of processes that combine learning and assessment in the interventionist approach in

comparison with the interactionist model. As pointed out by Feuerstein and Feuerstein (2001), such robust chains of learning and assessment processes in interventionist DA provide a richer ground for deeper and stronger absorption of new chunks of knowledge.

The third finding demonstrated that the two approaches of dynamic assessment could help learners significantly reduce the time they spent comprehending pragmatic knowledge in comparison with the conventional non-dynamic assessment instruction which is traditionally followed by the majority of the L2 teachers. However, the effect sizes for the impact of dynamic assessment on the pragmatic comprehension speed were smaller than pragmatic comprehension accuracy. The aforementioned arguments proffered in the support of the superiority of dynamic assessment models for enhancing pragmatic comprehension accuracy also stand true for this finding. Nonetheless, the smaller effect sizes can be attributed to the cognitive and memory-related difficulties that are inherent in the speed at which the brain receives, processes, and deciphers pragmatic knowledge through complex multilayered mechanisms as pointed out by Taguchi (2002) and Corsetti (2014).

The final finding of this study showed that there was not a significant difference between the interventionist and interactionist models of dynamic assessment in reducing the time allocated to comprehending pragmatic knowledge, although learners in the interventionist group recorded a faster time. In the same vein discussed for the second finding, the prominent features of the interventionist DA could have helped learners to reduce the time but due to the memory mechanisms, psycholinguistic dimensions, and the linguistic complexities that are involved in pragmatic comprehension, producing stronger effects on the procedural pragmatic knowledge could have not been achieved just by the treatment of 14 sessions. Taguchi (2014) has argued that substantial change in pragmatic comprehension competence is directly related to both the quantity and the quality of instruction and exposure.

Although no previous study has been done to compare the effect of

various types of dynamic assessment and traditional non-dynamic assessment on L2 pragmatic comprehension accuracy and speed, some studies support the significant role of interactionist and interventionist models of DA for enhancing pragmatic performance with regard to various speech acts (e.g. Moradian, et. al., 2019; Tajeddin & Tayebipour, 2012). These studies have also reported a more significant effect for interventionist DA than the interactionist DA in enhancing L2 pragmatic knowledge for request, apologies, and various forms of implicatures.

CONCLUSION AND IMPLICATIONS

The current study came to some important conclusions. First, interventionist and interactionist dynamic assessment turned out to be significantly more effective in enhancing L2 learners' pragmatic comprehension accuracy and in decreasing the answering speed than the conventional non-dynamic assessment instruction. Second, interventionist DA could help L2 learners improve their pragmatic comprehension accuracy significantly better than the interactionist model of DA. Third, although interventionist DA could help L2 learners reduce their pragmatic comprehension speed in comparison with interactionist DA, there was no significant difference between the two types of DA in reducing the time spent on comprehending pragmatic speech acts and implicatures.

Pedagogical implications suggested by this study imply that L2 teachers can utilise interventionist and interactionist models of dynamic assessment to give a boost to their L2 learners' pragmatic comprehension accuracy and to accelerate the pragmatic comprehension by reducing the time that they spend on analysing and comprehending the pragmatic knowledge. Language teachers can design instructional activities around the principles suggested by these two types of dynamic assessment that highly focus on the authentic interactions between learners and teachers and among the learners themselves.

No study in applied linguistics is without its limitations, this study

being no exception. First, interactionist and interventionist models of DA have some sub-models that were not specifically followed in this study; further research can be done to compare different types of interactionist and/or interventionist DA models on both the production and comprehension of pragmatic knowledge. For example, further research can be done to investigate the impact of Buddoff's Learning Potential Measurement Approach, Group-Dynamic Assessment (GDA), Intensive Mediated Language Experience (Intensive MLE), and its Concurrent versus Cumulative models on L2 pragmatic production and comprehension of the speech acts and implicatures. Moreover, this study focused on a limited number of speech acts and implicatures, future studies can be done using more speech acts and implicatures with better-designed tests.

Disclosure statement

No potential conflict of interest was reported by the authors.

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References

- Ahmadi, A., & Barabadi, E. (2014). Examining Iranian EFL learners' knowledge of grammar through a computerized dynamic test. *Issues in Language Teaching*, 3(2), 161-183.
- Antón, M. (2009). Dynamic assessment of advanced second language learners. *Foreign Language Annals*, 42(3), 576-598.
- Bachman, L. F. (1990). *Fundamental considerations in language testing*. New York, NY: Oxford University Press.
- Bachman, L. F., & Palmer, A. S. (1996). *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.

- Bachman, L. F., & Palmer, A. S. (2010). *Language assessment in practice: Developing language tests and justifying their use in the real world*. Oxford: Oxford University Press.
- Bardovi-Harlig, K. (2005). Contextualizing interlanguage pragmatics. In A. Tyler (Ed.), *Language in use: Cognitive and discourse perspectives on language and language learning* (pp. 65–84). Washington, DC: Georgetown University Press.
- Bardovi-Harlig, K. (2013a). Developing L2 pragmatics. *Language Learning*, 63(Suppl. 1), 68–86.
- Bardovi-Harlig, K. (2013b). On saying the same thing: Assessing the production of conventional expressions in L2 pragmatics. In T. Greer, D. Tatsuki, & C. Roever (Eds.), *Pragmatics and language learning* (Vol. 13, pp. 191–211). Honolulu, HI: University of Hawai'i, National Foreign Language Resource Center.
- Bardovi-Harlig, K. (2015). Designing instructional effect studies for L2 pragmatics: A guide for teachers and researchers. In S. Gesuato, F. Bianchi, & W. Cheng (Eds.) *Teaching, learning and investigating pragmatics: Principles, methods and practices* (pp. 135–164). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Bardovi-Harlig, K., & Bastos, M. T. (2011). Proficiency, length of stay, and intensity of interaction and the acquisition of conventional expressions in L2 pragmatics. *Intercultural Pragmatics*, 8(4), 347–384.
- Barron, A. (2003). *Acquisition in interlanguage pragmatics: Learning how to do things with words in a study-abroad context*. London: John Benjamins Publishing.
- Birjandi, P., & Derakhshan, A. (2013). Pragmatic comprehension of apology, request and refusal: An investigation on the effect of consciousness-raising video-driven prompts. *Applied Research on English Language*, 3(1), 67–86.
- Bouton, L. (1994). Can NNS skill in interpreting implicature in American English be improved through explicit instruction? A pilot study. *Pragmatics and Language Learning Monograph Series*, 5, 88–108.
- Brown, H. D., & Abeywickrama, P. (2010). *Language assessment: Principles and classroom practices*. New York, NY: Pearson Longman Education.
- Corsetti, C. R. (2014). Strategy-based listening and pragmatic comprehension. *BELT: Brazilian English Language Teaching Journal*, 5(1), 4–14.

- Davis, W. A. (2007). How normative is implicature. *Journal of Pragmatics*, 39(10), 1655–1672.
- Derakhshan, A., & Eslami-Rasekh, Z. (2015). The effect of consciousness-raising instruction on the comprehension of apology & request. *TESL-EJ*, 18(4). Available at <http://www.tesl-ej.org/wordpress/issues/volume18/ej72/ej72a6/>
- Ebadi, S., & Asakereh, A. (2017). Developing EFL learners' speaking skills through dynamic assessment: A case of a beginner and an advanced learner. *Cogent Education*, 4(1), 1419796. Retrieved from <https://doi.org/10.1080/2331186X.2017.1419796>
- Ebadi, S., & Saedian, A. (2015). The effects of computerized dynamic assessment on promoting at-risk advanced Iranian EFL students' reading skills. *Issues in Language Teaching*, 4(2), 1-26.
- Ellis, R. (2008). *The study of second language acquisition* (2nd ed.). Oxford: Oxford University Press.
- Félix-Brasdefer, J. C. (2007). Pragmatic development in the Spanish as a FL classroom: A cross-sectional study of learner requests. *Intercultural Pragmatics*, 4(2), 253–286.
- Felix-Brasdefer, J. C. (2008). Data collection methods in speech act performance: DCTs, role plays, and verbal reports. In A. Martinez-Flor, & E. Uso-Juan (Eds.), *Speech act performance: Theoretical, empirical and methodological issues* (pp.41–56). John Benjamins Publishing.
- Feuerstein, R., & Feuerstein R. S. (2001). Is dynamic assessment compatible with the psychometric model? In A. S. Kaufman, & N. L. Kaufman (Eds.), *Specific learning disabilities and difficulties in children and adolescents: Psychological assessment and evaluation* (pp. 218–246). New York, NY: CUP.
- Feuerstein, R., Feuerstein, R., & Gross, S. (1997). The learning potential assessment device. In D. P. Flanagan, J. L. Genshaft, & P. L. Harrison (Eds.), *Contemporary intellectual assessment: Theories, tests, and issues* (p. 297–313). London: The Guilford Press.
- Garcia, P. (2004). Developmental differences in speech act recognition: A pragmatic awareness study. *Language Awareness*, 13(1), 96–115.
- Grice, H. P. (1975). Logic and conversation. In P. Cole, & J. Morgan (Eds.), *Syntax and semantics 3: Speech acts* (pp. 41–58). New York, NY: Academic Press.

- Haji Maibodi, A., & Fazilatfar, A. (2015). the impact of individual differences on the interlanguage pragmatics of Iranian EFL learners in institutional discourse. *Issues in Language Teaching*, 4(1), 99-129.
- Haugh, M. (2007). The co-constitution of politeness implicature in conversation. *Journal of Pragmatics*, 39(1), 84–110.
- Haywood, H. C., & Lidz, C. S. (2007). *Dynamic assessment in practice: Clinical and educational applications*. New York, NY: Cambridge University Press.
- Heidari, F. (2019). The effect of dynamic assessment of Toulmin model through teacher- and collective-scaffolding on argument structure and argumentative writing achievement of Iranian EFL learners. *Iranian Journal of Applied Language Studies*, 11(2), 81–100.
- Hill, K., & Sabet, M. (2009). Dynamic speaking assessments. *TESOL Quarterly*, 43(3), 537–545.
- Karpov, Y. V. (2014). *Vygotsky for educators*. New York, NY: Cambridge University Press.
- Kasper, G. (2001). Four perspectives on L2 pragmatic development. *Applied Linguistics*, 22(4), 502–530.
- Kasper, G., & Roever, C. (2005). Pragmatics in second language learning. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 317–334). Mahwah: NJ: Lawrence Erlbaum Publishing.
- Kasper, G., & Rose, K. (2002). *Pragmatic development in a second language*. Boston, MA: Blackwell.
- Kletzien, S. B., & Bednar, M. R. (1990). Dynamic assessment for at-risk readers. *Journal of Reading*, 33(7), 528–533.
- Kozulin, A., & Garb, E. (2002). Dynamic assessment of EFL text comprehension. *School Psychology International*, 23, 112–127.
- Kozulin, A., & Pressisen, B. Z. (1995). Mediated learning experience and psychological tools: Vygotsky's and Feuerstein's perspectives in a study of student learning. *Educational Psychologist*, 30(2), 67–75.
- Lantolf, J. P., & Poehner, M. E. (2004). Dynamic assessment: Bringing the past into the future. *Journal of Applied Linguistics*, 1, 49–74.
- Lantolf, J. P., & Poehner, M. E. (2011). *Dynamic assessment in the foreign language classroom: A teachers' guide (2nd ed.)*. University Park: Center for Advanced Language Proficiency Education and Research, The Pennsylvania State University.

- Lantolf, J. P., & Poehner, M. E. (2013). The unfairness of equal treatment: Objectivity in L2 testing and Dynamic Assessment. *Educational Research and Evaluation, 19*, 141–157.
- Lantolf, J. P., & Poehner, M. E. (2014). *Sociocultural theory and the pedagogical imperative in L2 education. Vygotskian praxis and the research/practice divide*. London: Routledge.
- Lantolf, J. P., & Poehner, M. E. (Eds.) (2008). *Sociocultural theory and the teaching of second languages*. London: Equinox Publishing.
- Lee, C. (2010). An exploratory study of the interlanguage pragmatic comprehension of young learners of English. *Pragmatics, 20*(3), 343–373.
- Loukusa, S., Leinonen, E., & Ryder, N. (2007). Development of pragmatic language comprehension in Finnish-speaking children. *First Language, 27*(3), 279–296.
- Malmir, A., & Derakhshan, A. (2020). The socio-pragmatic, lexico-grammatical, and cognitive strategies in L2 pragmatic comprehension: The case of Iranian male vs. female EFL learners. *Iranian Journal of Language Teaching Research, 8*(1), 1–23.
- Matsumura, S. (2003). Modelling the relationship among interlanguage pragmatic development, L2 proficiency, and exposure to L2. *Applied Linguistics, 24*(4), 465–491.
- Mirzaei, A., Hashemian, M., & Khoramshekouh, A. (2016). L2 learners' enhanced pragmatic comprehension of implicatures via computer-mediated communication and social media networks. *Iranian Journal of Applied Linguistics (IJAL), 19*(1), 141–180.
- Mohammad Hosseinpur, R., & Bagheri Nevisi, R. (2018). L1-based instruction: Does it work for learning pragmatics in the EFL context? *The Journal of Asia TEFL, 15*(1), 233–241.
- Moradian, M., Asadi, M., & Azadbakht, Z. (2019). Effects of concurrent group dynamic assessment on Iranian EFL learners' pragmatic competence: A case of requests and refusals. *Research in Applied Linguistics, 10*(2), 106–135.
- Perez, C. J. (2017). Pragmatic comprehension of English refusals by Spanish-English bilinguals. *LSU Doctoral Dissertations*. Retrieved December 21st from http://digitalcommons.lsu.edu/gradschool_dissertations/4102

- Plappert, G. (2019). Not hedging but implying: Identifying epistemic implicature through a corpus-driven approach to scientific discourse. *Journal of Pragmatics*, 139(1), 163–174.
- Poehner, M. E. (2007). Beyond the test: L2 Dynamic Assessment and the transcendence of mediated learning. *The Modern Language Journal*, 91, 323–340.
- Poehner, M. E. (2008a). Both sides of the conversation: The interplay between mediation and learner reciprocity in dynamic assessment. In J. P. Lantolf, & M. E. Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (pp. 33–56). London: Equinox Publishing.
- Poehner, M. E. (2008b). *Dynamic assessment: A Vygotskian approach to understanding and promoting L2 development*. Berlin: Springer.
- Poehner, M. E. (2009a). Dynamic Assessment as a dialectic framework for classroom activity: Evidence from second language (L2) learners. *Journal of Cognitive Education and Psychology*, 8, 252–268.
- Poehner, M. E. (2009b). Group dynamic assessment: Mediation for the L2 classroom. *TESOL Quarterly*, 43, 471–491.
- Poehner, M. E., & Infante, P. (2015). Mediated development as inter-psychological activity for L2 education. *Language and Sociocultural Theory*, 2, 161–183.
- Poehner, M. E., & Lantolf, J. P. (2005). Dynamic assessment in the language classroom. *Language Teaching Research*, 9(3), 233–265.
- Poehner, M. E., & Lantolf, J. P. (2010). Vygotsky's teaching-assessment dialectic and L2 education: The case for dynamic assessment. *Mind, Culture, and Activity*, 17(4), 312–330.
- Poehner, M. E., & Lantolf, J. P. (2013). Bringing the ZPD into the equation: Capturing L2 development during computerized dynamic assessment. *Language Teaching Research*, 17, 323–342.
- Roever, C. (2012). What learners get for free (and when): Learning of routine formulae in ESL and EFL environments. *ELT Journal*, 66, 10–21.
- Rose, K. (2000). An exploratory cross-sectional study of interlanguage pragmatic development. *Studies in Second Language Acquisition*, 22(1), 27–67.
- Rose, K. R. (2009). Interlanguage pragmatic development in Hong Kong, phase 2. *Journal of Pragmatics*, 41(11), 2345–2364.
- Ross, S. J., & Kasper, G. (Eds.) (2013). *Assessing second language pragmatics*. Basingstoke: Palgrave Macmillan.

- Sarani, A., & Izadi, M. (2016). Diagnosing L2 receptive vocabulary development using dynamic assessment: A microgenetic study. *Journal of Teaching Language Skills*, 35(2), 161–189.
- Sarani, A., & Talati-Baghsiahi, A. (2017). Explicit instruction of pragmatic features: Its impact on EFL learners' knowledge of hedging devices in academic writing. *Issues in Language Teaching*, 6(1), 29–53.
- Schauer, G. A. (2009). *Interlanguage pragmatic development: The study abroad context*. London: Continuum.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(1), 129–158.
- Shrestha, P., & Coffin, C. (2012). Dynamic assessment, tutor mediation and academic writing development. *Assessing Writing*, 17(1), 55–70.
- Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 471–483). Mahwah, NJ: Lawrence Erlbaum.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson Inc.
- Taguchi, N. (2002). An application of relevance theory to the analysis of L2 interpretation processes: The comprehension of indirect replies. *International Review of Applied Linguistics*, 40(2), 151–176.
- Taguchi, N. (2003). *Pragmatic performance in comprehension and production of English as a second language* (Unpublished doctoral dissertation). Northern Arizona University, Flagstaff.
- Taguchi, N. (2005). Comprehending implied meaning in English as a foreign language. *Modern Language Journal*, 89(4), 543–562.
- Taguchi, N. (2007). Development of speed and accuracy in pragmatic comprehension in English as a foreign language. *TESOL Quarterly*, 41(2), 313–338.
- Taguchi, N. (2008a). Cognition, language contact, and the development of pragmatic comprehension in a study-abroad context. *Language Learning*, 58(1), 33–71.
- Taguchi, N. (2008b). Pragmatic comprehension in Japanese as a foreign language. *The Modern Language Journal*, 92, 558–576.

- Taguchi, N. (2008c). The role of learning environment in the development of pragmatic comprehension: A comparison of gains between EFL and ESL learners. *Studies in Second Language Acquisition*, 30(4), 423–452
- Taguchi, N. (2009). Comprehension of indirect opinions and refusals in L2 Japanese. In N. Taguchi (Ed.), *Pragmatic competence* (pp. 249–274). New York, NY: Mouton de Gruyter.
- Taguchi, N. (2013). Comprehension of conversational implicature in L2 Chinese. *Pragmatics & Cognition*, 21(1), 139–157.
- Taguchi, N. (2014). Development of interactional competence in Japanese as a second language: Use of incomplete sentences as interactional resources. *The Modern Language Journal*, 98(2), 518–535.
- Taguchi, N. (2017). Interlanguage pragmatics. In A. Barron, P. Grundy, & G. Yueguo (Eds.), *The Routledge handbook of pragmatics* (pp. 153–167). Oxford: Routledge.
- Taguchi, N. (2019). *The Routledge handbook of second language acquisition and pragmatics*. New York, NY: Routledge.
- Taguchi, N., & Roever, C. (2017). *Second language pragmatics*. Oxford: Oxford University Press.
- Taguchi, N., & Yamaguchi, S. (2019). Implicature comprehension in L2 pragmatics research. In Taguchi, N. (Ed.), *The Routledge handbook of second language acquisition and pragmatics* (pp. 31–46). New York, NY: Routledge.
- Taguchi, N., Gomez-Laich, P. M., & Arrufat-Marqués, M. J. (2016). Comprehension of indirect meaning in Spanish as a foreign language. *Foreign Language Annals*, 49(4), 677–698.
- Taguchi, N., Li, S., & Liu, Y. (2013). Comprehension of conversational implicature in L2 Chinese. *Pragmatics and Cognition*, 21, 139–157.
- Tajeddin, A., & Zand-Moghadam, A. (2012). Interlanguage pragmatic motivation: Its construct and impact on speech act production. *RELC Journal*, 43(3), 353–372.
- Tajeddin, Z., Tayebipour, F. (2012). The effect of dynamic assessment on EFL learners' acquisition of request and apology. *Journal of Teaching Language Skills*, 31(2), 87–118.
- Takahashi, S., & Roitblat, H. L. (1994). Comprehension process of second language indirect requests. *Applied Psycholinguistics*, 15(4), 475–506.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.

Zand-Moghadam, A., & Adeh, A. (2020). Investigating pragmatic competence, metapragmatic awareness and speech act strategies among Turkmen-Persian bilingual and Persian monolingual EFL learners: A cross-cultural perspective. *Journal of Intercultural Communication Research*, 49(1), 22–40.

Appendix A: Garcia's (2004) Pragmatic Comprehension Listening Test

Thank you for participating in my Pragmatic Comprehension study. Please do not write in your booklet. Please make sure you circle your answers in the correct spot on your answer sheet. (Note: * indicates the correct answer.)

CONVERSATION 1

Directions: Listen to the conversation between a male student and a female clerk in a university office. On your answer sheet, circle the letter that corresponds with your answer choice.

1. Consider the whole dialogue. What does the woman think? [PC, Implicature General]

- a. She thinks the man is lying.
- b. She thinks the man is argumentative.
- c. She thinks the man is honest.*
- d. She thinks the man is wrong.

2. The man says, "Hi. I need to pay uh summer housing - my dormitory room." [PC, Speech Act-Request]

What is another way for the man to say this?

- a. I need money for my housing bill.
- b. I'd like to pay my housing bill.*
- c. You have to help me with my housing bill.
- d. I cannot pay my summer housing bill.

3. The man says, "Oh OK that's not right. I got to get that fixed." [PC, Speech Act-Request]

What is another way for the man to say this?

- a. You have to change my housing bill.
- b. My room needs to be fixed.
- c. Please help me fix this problem.*
- d. I will fix my housing bill myself.

4. The woman says, "But you're going to need to check with them and make sure that they remove the rest of that." [PC, Speech Act-Suggestion]

What is another way for her to say this?*

- a. You really ought to check with the housing office.
- b. I'm going to check with the housing office.
- c. You will check with the housing office.
- d. Write a check to the housing office.

5. Read this exchange between the man and the woman:

Man: Housing office, all right.

Woman: Do you know where they are?

What is the woman trying to do? [PC, Implicature Specific]

- a. To be helpful.*
- b. To get rid of the man.
- c. To give him directions.
- d. To take his money.

CONVERSATION 2

Directions: Listen to the conversation between a female student and a male professor. On your answer sheet, circle the letter that corresponds with your answer choice.

6. Consider the whole conversation. How does the student feel? [PC, Implicature General]

- a. She's excited about the new job.*
- b. She's uncertain about the new job.
- c. She's unhappy about the new job.
- d. She's unhappy about the old job.

7. The student says, "Oh, bookstore's working out fine. I just, I--I don't know-- this pays almost double what the bookstore does."**What is she trying to say? [PC, Implicature Specific]**

- a. I deserve a higher paying job than the bookstore.

- b. I won't make more money at the new job.
- c. I have a good job, but I want a better one.*
- d. I want to work at both jobs.

CONVERSATION 3

Directions: Listen to the conversation between a male student and a female professor. On your answer sheet, circle the letter that corresponds with your answer choice.

8. The student says, "um, if you wouldn't mind, I'd appreciate it if you could, write a um, letter of recommendation for me."

What is another way for him to say this? [PC, Speech Act-Request]

- a. You would mind writing me a letter of recommendation.
- b. You have to write me a letter of recommendation.
- c. I'd be happy to write you a letter of recommendation.
- d. Would you please write me a letter of recommendation?*

9. The professor says, "Actually, the other thing I was gonna recommend too is to uh, give me uh, if you want me to look at it sometime, your uh, your cover letter, or your statement."

What is another way for her to say this? [PC, Speech Act-Offer]

- a. I can review your cover letter if you want.*
- b. I need to revise your cover letter.
- c. You should revise your cover letter.
- d. I was going to reviewing your cover letter.

10. The professor says, "if you haven't done it yet, I'd really recommend you, uh, we do have a career office on campus that has some software, so if you've never done a resume before it's a good place to start."

What is she trying to say? [PC, Speech Act-Suggestion]

- a. They will write your resume at the career office.
- b. You've got to go to the career office to start your application.
- c. I think you ought to visit the career office.*
- d. You won't have a good resume unless you go to the career office.

CONVERSATION 4

Directions: Listen to the conversation between a male student and a female student. On your answer sheet, circle the letter that corresponds with your answer choice.

11. Consider the whole conversation. What does the woman think? [PC, Implicature General]

- a. She has a lot of work to do.*
- b. She is avoiding the man.
- c. She dislikes her class.
- d. She dislikes the man.

12. The woman says, "I would but I've got to, uh, I have this huge paper due Monday--got to get going on it."

What is another way for her to say this? [PC, Implicature Specific]

- a. I don't want to, I'm too busy.
- b. I will have my paper done.
- c. I have to go now.
- d. I want to, but I can't.*

13. After the woman describes her paper topic, the man says, "OK, OK."

How does the man feel about the topic of her paper? [PC, Implicature Specific]

- a. He already knows about the topic.
- b. He's not interested in the topic.*
- c. He dislikes the topic.
- d. He doesn't understand the topic.

CONVERSATION 5

Directions: Listen to the conversation between a female student and a male office worker. On your answer sheet, circle the letter that corresponds with your answer choice.

14. Consider the whole dialogue. How does the student feel? [PC, Implicature General]

- a. She is angry towards the office worker.
- b. She is angry towards her professor.*
- c. She thinks the office worker is wrong.
- d. She thinks the office worker doesn't know his job.

15. Consider the whole dialogue. What does the office worker think? [PC, Implicature General]

- a. He thinks the student is lying.
- b. He thinks the student is argumentative.
- c. He wants the student to go away.

d. He wants to help the student.*

16. Read the following exchange:

Office Worker: Hmm, he might be out today, or teaching, or--

Student: Do you know if he teaches a class today? 'Cause that's not on his schedule.

What is another way for the student to respond? [PC, Speech Act-Correction]

- a. I don't think that's right. It's not on his schedule.*
- b. Well then his schedule is wrong.
- c. He should be teaching today.
- d. Well then his schedule should be changed.

17. The student says, "Yeah, I guess that would be helpful."

What is another way for her to say this? [PC, Implicature Specific]

- a. You should be more helpful.
- b. I'm trying to be helpful.
- c. I would like to have the number.*
- d. Don't you think I would need it?

18. The office worker says, "I might be able to track him down for you. Now that I think of it, I don't think he is teaching class right now."

What is another way for him to say this? [PC, Speech Act-Offer]

- a. If you want, I'll find him.
- b. I may be able to find him.*
- c. I can trying find him if you want.
- d. If he's not in class, I can't find him.

19. The office worker says, "Yeah. So I would try to give him a call first. Tell him that you need to uh - get in touch with him."

What is another way for him to say this? [PC, Speech Act-Suggestion]

- a. You ought to call him.*
- b. You should have called him.
- c. I will call him for you.
- d. I should try calling him.

CONVERSATION 6

Directions: Listen to the conversation between a female professor and a male student named Scott. On your answer sheet, circle the letter that corresponds with your answer choice.

20. Consider the whole dialogue. How does Scott feel? [PC, Implicature General]

- a. He is angry towards the professor.
- b. He is angry towards himself.
- c. He thinks the professor is being helpful.*
- d. He thinks the professor can't answer his questions.

21. Consider the whole dialogue. What does the professor think? [PC, Implicature General]

- a. She thinks Scott is a lazy student.
- b. She thinks Scott is argumentative.
- c. She thinks Scott is not smart enough.
- d. She thinks Scott needs to work harder.*

22. Scott says, "OK I just pretty much have a question on like the term paper and stuff"

What is another way for him to say this? [PC, Speech Act-Request]

- a. Can I ask you a question about the term paper?*
- b. Can I ask questions in my term paper?
- c. I can answer the questions for my term paper.
- d. I have answered your questions about the term paper.

23. Read the following exchange:

Scott: But it did get some kind of reaction from us. Is that like why we got into the war?

Professor: Yeah, I mean you have.. you have to back up a little bit. It's... it's.. more complicated than that.

What is another way for the professor to say this? [PC, Speech Act-Correction]

- a. Yes, that's right.
- b. You're not right.
- c. You have too much information.
- d. You're almost right.*

24. The professor says, "But that's part of it and you need to look at, you know, what...what were President Wilson's ideas about the war and ."

What is another way for the professor to say this? [PC, Speech Act-Suggestion]

- a. You should include more information than that.*
- b. You've included the most important part.
- c. You should write about another topic.
- d. You don't have enough information to write a good paper.

Definitions of Pragmatic Constructs

Speech Acts (SA)

Comprehension of a speech act involves understanding what the speaker wants the hearer to do, or what the speaker wants the hearer to know. Speakers use speech acts in order to change the world around them.

Speech Act Subtypes

Requesting (R): Speaker asks the hearer to do something that will benefit the speaker.

Advising (A): Speaker asks the hearer to do something that will benefit the hearer.

Offering (O): Speaker is proposing to provide a service that will benefit the hearer.

Correcting (C): Speaker is providing information that is contrary to the hearer's information.

Conversational Implicature (CI)

Comprehension of conversational implicature involves understanding the attitude of the speaker and what the speaker intends to convey. Speakers use conversational implicature in order to convey their thoughts, feelings, and attitudes.

Implicature Subtypes

General (G): These items are related to the overall attitude and intention of the speaker based on a global understanding of the context and conversation.

Specific (S): These items relate to single utterances that require the hearer to infer the speaker's meaning.