The Effect of Pronunciation on Performing Religious Rituals of Illiterate Prayers: Studying Surah's al-Tawhid and al-Hamd

Mohsen Rafiei
[1] Assistant Professor of Theology and Quranic Sciences.
Department of theology, Faculty of Humanities, Farhangian University, Qom Campus, Qom, Iran.
dr_mohsen_rafiei@yahoo.com

Abstract

The effect of language on culture has been an interesting issue in applied linguistics. One of the main critical domains of culture-related language issues is pronunciation. The importance of pronunciation in some cultures is doubled when its importance goes beyond the daily use of language. Many illiterate Muslims in non-Arab countries must perform their religious duties in accurate Arabic pronunciation. Since illiterate learners can not be treated with regular and traditional educational intervention to complete this incumbent religious task, the current research has employed dynamic intervention, an approach adopted from the socio-cultural theory of Vygotsky (1978), for instructing a sample of these people in Iran. First, the main pronunciation problems of these participants were identified. Then using a native speaker's judgment, the effect of this educational intervention was calculated in a pretest-posttest design. A paired t-test was used to interpret the collected data. The findings showed that dynamic intervention has a meaningful effect on the improvement of pronunciation in the Iranian illiterate participants of the study. This study could have implications for language teachers, language learners, and researchers in different fields of sociolinguistics and applied linguistics.

Keywords: Dynamic Intervention, Illiterate Learners, Pronunciation, Socio-Cultural Theory.

Introduction

Arabic is a very important language for not only those millions of people who speak this language in west Asian and African countries but also for about half-billion non-Arab Muslims who are required to perform their religious rituals in accurate Arabic. According to Muslims' religious commandments, the accuracy of pronunciation for performing daily religious duties including daily prayers is a must and at least, according to Shiite resources, inaccuracy of pronunciation invalidates the prayers performed (Mosavi-Khomeini, 2013), though the criteria for acceptability and accuracy of pronunciation is still subject to vigorous debate. At the same time, many research findings have shown that adult learners of Arabic confront several common pronunciation problems in their Arabic language acquisition process because they are faced with a rich consonant inventory involving unfamiliar places of articulation for consonants (Hayes-Harb and Durham, 2016; Jongman, et.al, 2011 and Saadah, 2011). Even considering a minor role for critical period hypothesis and changes in the vocal tract after physical puberty makes this challenge tougher for adult learners because Muslims must perform religious duties just after puberty (Mosavi-Khomeini, 2013).

In the case of Iranian Muslims, despite geographical and cultural affinity with Arab countries, many adult speakers have difficulties in the accurate pronunciation of Arabic sound systems. This challenge is raised when these speakers are required to pronounce Arabic consonants during

performing religious rituals. According to Amayreh and Dyson (1998), Arabic consonants have a distinguished and difficult place and manner of articulation, and some of these consonants are not fully acquired until the age of six by Arabic first language learners. Thus, foreign or second language learners, despite fluency in Arabic grammar or vocabulary, may encounter major difficulties in perceiving and producing some consonants appropriately. Also, findings from Satori and his colleagues (2007) stand firm behind the fact that some Arabic consonants are mispronounced most of the time, even by Arabic native speakers because the distinction between such sounds is not easily recognized by listeners. These mispronunciations may change the meaning in some situations.

For example, in daily prayers, pronouncing one consonant for another invalidates meaning and renders the praying unacceptable. In addition to that, the emphatic consonants have plain equivalent consonants in Arabic and these plain consonants are very difficult for learners to acquire them and for instructors to teach them (al-Sabaan, 2015).

Furthermore, the absence of diacritics brings about ambiguities, in a way that a single written form may correspond to numerous underlying forms that are pronounced differently (Kirchhoff, et.al, 2002). Though Odisho (2005) has found that formal instruction and approaches to production and perception of Arabic consonants have not submitted firm and objective evidence, the problem is intensified in those Muslim contexts in which some religious peoples that are charged with performing religious duties are almost illiterate and therefore training them with widespread instructional approaches of pronunciation is a formidable or impossible task.

Therefore, the current research is an attempt to employ a new method for teaching pronunciation that not only diagnoses the pronunciation problems which render religious duties invalid but also treats them and enjoys the feasibility of application for those who are functionally illiterate, at least, in language and linguistics. Thus, delving into the literature and considering the pitfalls associated with traditional approaches toward teaching pronunciation, this study has availed itself of graduated prompting from the domain of dynamic intervention and cognitive modifiability for identifying and removing problems of Muslim prayers in pronouncing Arabic consonants which affect the accuracy and acceptability of their religious rituals. Thus, the following research question is formulated that whether graduated prompting promotes Arabic pronunciation of Iranian Muslim illiterate prayers?

1. Literature Review
1.2 an attempt to put the theoretical ideas of Vygotsky into the effect of practice, Campione and Brown (1995) gave birth to a rubric for counting the number of hints each learner requires to solve problems, presented to them in an approximating fashion. According to Lidz (2003), the logic behind this graduated prompt procedure is helping the learners to solve a task gradually. However, Benjamin (2000) has shed more light on the kind of intervention or mediation provided to the learner in the graduated prompts approach by stating that in the graduated prompt approach, hints are determined in advance and range from general to specific and when the learners reach the level of independent task solution, the intervener refrains from given further hints. According to Tzuriel (2001), to obtain the surety of internalization and transfer, once a task is accomplished, one more version of the task is given to the learner and then the intervention starts. Then the number of prompts given for the new task is calculated and is therefore served as an indication for the transfer of learning. This

idea is adopted from the socio-cultural theory of learning according to which, the supported scuffled talk from the side of more significant others can bring the emerging functions into the light, meaning that what the learner can do at present with assistance can be done by him/her in future while unassisted (Benjamin, 2000).

1.3 Practical Literature
A short review of the literature indicates that robust empirical studies submit pieces of evidence on the positive effect of different approaches of dynamic intervention on different dimensions of language learning both in Iranian and non-Iran contexts (Ajideh and Nourdad, 2012; Birjandi, et.al, 2013; Jarrahzade and Tabatabaei, 2014; Poehner 2005 and 2008; Anton, 2009; Navaro and Lara, 2017, etc). Though emphasizing another aspect of the Arabic language, in the same line of research, Farokhipour, et.al (2019) conducted a study in the Iranian context and investigated the effect of the dynamic intervention on reading fluency of readers of religious texts. They had found that traditional approaches toward reading fluency such as teacher modeling have not been very successful. Therefore, they used mediated interaction as a new instructional strategy toward language learning for removing problems encountered in the reading fluency of the participants of the study. Their findings showed that dynamic intervention promoted reading fluency of Iranian Quranic readers more than traditional approaches. However, Yang (2017) investigated the effect of the dynamic intervention on learning pronunciation of English and found that mediated intervention not only promoted pronunciation to a good extent but also improved learners' perspective toward learning in some intellectual factors. Employing this procedure in an Arabic learning context, Fahmy (2013) investigated the effect of dynamic assessment on adult learners of Arabic and

concluded that this procedure was proved successful in diagnosing problems of learners in different skills and dimensions of language and also helped them to remove them.

The current research, however, is different and innovatory in at least the following areas. It is among rare linguistic experimental researches that have shed light on a real-life linguistic problem in an expanded global cultural context and then employed an innovatory approach within applied linguistics to treat it. Secondly, rarely researches on language learning and instruction are conducted outside foreign or second language learning context, if at all. However, the participants of the current research are ordinary non-language-learners who are challenged with serious language difficulty. On top of that, these participants are functionally illiterate, at least, in linguistics.

2. Method
2.1 Design
In this study, a sandwich format and interventionist model of dynamic assessment which is inherently a quasi-experimental design were used to investigate or calculate the causal effect of the intervention on the participants. In interventionist dynamic assessment, the mediator uses standardized administration procedures and forms of assistance that bring about quantifiable results for within and between groups comparison and future prediction (Poehner, 2008). In this model, the graduated prompts were offered by the mediator through a series of graded and sequenced standardized hints selected from an adopted mediational inventory which started from most implicit ones to most explicit ones in a continuum. Here the role of the mediator is calculating frequency and kind of the hints that are required for a learner to answer an item or group of items correctly (Poehner, 2008, pp.18-19). Also, according to Haywood and Lidz (2007), in a sandwich format which is also called

test-train-test design, the procedure was divided into three different phases of pre-test, intervention, and post-test.

22 Participants

In the current study, eight lower-rank employees who were enrolled in a make-up Arabic reading fluency course (aimed at promoting fluency in reciting Quran and prayer invocations) in a state institution in Iran were selected through convenience sampling. They were all in the last decade of their service and almost homogenous in their educational level and almost illiterate. These employees were enlisted in this course based on an oral placement test and therefore, they were almost identical in their proficiency level in the Arabic language.

2.3 Instruments

Due to the aims of this research, several instruments were used in this study. The main instrument used in this study for graduated prompting was a standard mediation inventory of dynamic intervention adopted from Poehner (2005). This regulatory scale included fifteen different mediatory steps from most implicit to most explicit ones that were used for assisting learning during the intervention phase of the research. A self-developed checklist was also used by the mediator to take note of type, class, and frequency of mistakes and to score pre-test and post-test.

2.4 Procedure

The participants were already assigned to an adult beginner class based on an oral placement test of religious sources. To identify pronunciation problems and decipher phonemic mismatch, a native Arab mediator was used in the experiment phase. Considering the findings of Wright (2006), in this study a native speaker's judgment was preferred over detection software and detection machines due to physiological, regional, socioeconomic,

socio-dialectal, age, and speaking style variation among participants of the study. An oral pre-test from the content of double-units morning prayer was taken by the mediator. The pre-test served both as a baseline for statistical calculations, tracking improvement, and a diagnostic tool through which major pronunciation problems of the participants were detected. Then, after a week interval, the participants underwent an intervention phase (dynamic assessment) that was tuned with the encountered problems, where each problem was treated with regulatory prompts in a graduated fashion from most implicit to most explicit. These prompts were selected from the adopted inventory and tailored to the immediate context. Then, to trace cognitive modifiability, improvement, and internalization of the learning, the participants took part in a non-dynamic oral post-test of the same prayer content. Using a self-developed checklist, the mediator scored each student in pre-test and post-test. These data were collected and analyzed through paired samples t-test in SPSS (version, 21).

Pre-Test	Intervention	Post-Test
• Base-line	• One Week	• Tracing
• Diagnosing	Instruction	Change
Pronunciation	• Dynamic	• Comparing
Problems of	Assessment	Scores (T-Test)
prayers		

3. Results and Discussion

According to Brown (1995) a variety of factors and causes that contribute to the formation of a deviant form in learners' language including negative transfer, intra-lingual errors within the target language, the sociolinguistic context of communication, psycholinguistic or cognitive strategies, and countless effective variables. However, what is the cause of these errors is not the primary concern of the dynamic assessment of learning abilities. As it is stated above, in the feed up phase, the goal of the current research had been systematic diagnosis and

documentation of pronunciation errors of prayers and then offering the most efficient and viable mediational feedbacks through graduated prompting which removes these problems. Thus, the major pronunciation errors found in the performance of the participants during the pre-test are listed in table 1.

Table 1. Major pronunciation errors found in the performance of the participants during a two-unit morning prayer

Erroneous Phoneme	Altered word		Correct Arabic Word		Description
	Form	*Meaning*	*Form*	*Meaning*	
/ħ/ ح	الرِهمان	ointment rubber	الرِحمان	merciful	/ ħ/ or /ح/ and /h/or /ه/ are two unvoiced non-emphatic fricatives in Arabic. The earlier is pharyngeal while the latter is glottal. In Persian both of them are pronounced glottal /ه/
	الهِمد	death	الحِمد	praise	
/ʕ/ ع	الاِلمین	sufferers	العِالمین	both worlds	/ʕ/ or /ع/ is an Arabic voiced and non-emphatic fricative which is pharyngeal but /ʔ/ or /ʼ/ is glottal and an un-voiced stop which in looser Persian pronunciations is even pronounced as the vowel /a/ or /ʼ/
/dʕ/ ض	الزِالین	shaky	الضِالین	astray ones	In Persian, we have only one phonemic representation for all these Arabic consonants which is /z/, a voiced non-emphatic fricative that is pronounced alveo-dentally. But in Arabic /ð/ or /ذ/ is an inter-dental consonant, /ðʕ/ or /ظ/ is alveo-dental but is pronounced non-emphatically and /dʕ/ or /ض/ is a voiced emphatic stop and therefore different in its manner of articulation
	الظِالین	shadowed			
	ذاِلین	abject			
/sʕ/ ص	سِمد	astonished	الصِمد	needless	In Persian /Ө/ or /ث/ which is an inter-dental fricative in Arabic and /sʕ/ or /ص/ which is an emphatic alveo-dental fricative in Arabic are both pronounced as /s/ or /س / which is a non-emphatic alveo-dental fricative.
	ثِمد	rancid water			

Yet, to answer the question of the research, the participants underwent an intervention phase in which these problematic areas were touched and remedied through graduated prompting of the intervener. Then, to assess the efficacy of the intervention and internalization of learning through graduated prompting, the participants took a part in a non-dynamic oral post-test and were scored by the intervener based on the checklist. Their scores in pre-test and post-test were collected and analyzed through paired samples *t*-test. The obtained results are shown in table 2.

Table 2. Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pretest - Posttest	-6.222	2.438	.813	-8.096	-4.348	-7.656	8	.000

As it is shown in table 2, a paired-samples *t*-test was conducted to compare pronunciation scores in pre-test and post-test conditions. There was a significant difference in the scores for pre-test (M=7.67, SD= 2.44) and post-test (M=13.89, SD=2.97) conditions; t (9) = -7.69, p = 0.000.

These findings are in line with Farokhipour, et.al (2019) who concluded that dynamic assessment intervention is a better instructional tool for promoting the learning of oral reading fluency than teacher modeling exercise. They also found that dynamic intervention, not only promotes learning significantly but also proved better than traditional approaches toward reading fluency among Persian learners of Arabic in reciting Quranic texts. The obtained results are also consistent with Fahmy (2013) who conducted research on Arabic learners and found that integrating dynamic assessment with task-based language teaching promotes the oral proficiency and structural control of the participants. Considering the very fact that participants of the study were almost illiterate, any instructional intervention aimed at promoting proficiency needed to be free from any meta-linguistic and abstract rule explanation. Taking this issue into account, dynamic intervention through graduated prompting which promoted learning of the participants through scaffolding in the immediate context is also in line with theories of cognitive modifiability of Feuerstein (1980) based on which mediated learning experience is essential for development and learning and that the quality and extent of mediation determine future performance in a way that a mediator intervenes with an intention in mind and the learner, though cognitively weakened (almost illiterate here), becomes engaged in reciprocal interaction with the mediator and therefore internalizes learning (transcendence). Furthermore, these findings are in line with Tzuriel's cognitive modifiability battery (2001).

4. Conclusion

According to Rafiei and Sharifi (2013), Arabic and Persian are different at least, in 10 phonemes, due to their place or manner of articulation. Most of these contrasted phonemes are presented in the content of daily prayers and therefore bring about major pronunciation problems for Persian speakers who are required to perform their daily prayers and other religious rituals mostly in Arabic. Because a significant number of Iranian populations do not have any special meta-linguistic or linguistic awareness about the Arabic language, traditional approaches toward the instruction of pronunciation almost failed to solve this problem. Since dynamic intervention has profound roots in educational psychology and cognitive modifiability, we used graduated prompting from the same approach to diagnose major pronunciation problems and then evaluate the efficacy of the approach for solving the problem. The findings showed that the intervention proved successful in finding and treating major pronunciation problems of Persian Muslim prayers to a significant extent.

The current study employed a native mediator to diagnose segmental features of pronunciation. Further research is required to investigate the same effect on supra-segmental features such as rhythm and intonation and inter-phonemic characteristics such as blending, stress, metathesis, etc. These findings imply language learners, language teachers, researchers, and those involved with the issuance of religious commandments and Islamic jurisprudence discipline.

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