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Automaticity Level of Language Performance in Iranian English Language Teachers

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Abstract: The present study attempted to reveal whether Iranian English teachers would reach automatic level of language performance. A total of 30 teachers at different language institutes in Bushehr, Iran as EFL teachers took part in this study. The purpose of this study was to determine automaticity level of English teachers in language performance. The outcomes of this study showed that 44% of English teachers had automatic level in language performance and 56% of English teachers did not have automatic level in language performance. Also, the results of this study showed that the main reason of non automaticity in Iranian English Teachers was the lack of interest to use English in unfamiliar questions that was about 24%. The results of the study revealed that Iranian EFL Teachers did not reach automatic level of language performance and they used Persian in unfamiliar questions.

*Key words***:** English teachers in Iran, automatic processing, control processing.

1. Introduction

In countries such as Iran, where English is not the primary language, it is difficult to develop the ability of the English teachers to a standard level. Lack of English input in the daily life of the teachers can be considered one of the major problems. In comparison to countries such as India, English teachers in Iran have no opportunity to expose English language in everyday life. This can have negative effect in their automatic level of language performance. Automatic process is instinct, unaware, and without effort. On the other hand when a person has the ability to do something independently and spontaneously, he /she has the automaticity in doing a work. Samples of automaticity can be activates such as, walking speaking, and riding a bicycle. Schneider (1984) argued that automatic processes are not uncontrollable but rather that control is difficult and requires substantial effort. Shiffrin and Schneider's model of the development of automaticity was adopted by Mclaughlin as an explanation for the developrnent of skilled behaviour in second language learners (Mclaughlin, 1987, 1990; Mclaughlin, Rossman, & Mcleod, 1983). It differs from Logan's in not inferring two knowledge sources at the representational level. Hence, automaticity is the person's ability to recall something or answer a question with little effort and a great deal of accuracy. In fact, he /she doesn't need to complete attention or think to a subject .So when a person   has ability to express something effortless, understand intuitively, and remember something without help(just by notice) she /he has automaticity in his /her behavior. In order to understand the automaticity level of English teachers, the present study aimed at investigating the automaticity level of language performance in Iranian English teachers. In order to reach the purpose of

this study, the researcher proposed the following research question?

RQ: Do Iranian English language teachers have the automatic level of language performance in their language classrooms?

2. Review of the Related Literature

Several scholars gave different definitions related to automatic and controlled processing. According to McLaughlin (1983), attention-processing model connects processing mechanisms with categories of attention to formal properties of language. Consequently there are four cells. The first one refers to 'focal automatic processes' like the student's performance in a test situation or a violin player performing in a concert. The second one characterizes 'focal controlled processes'' such as the learner's performance based on formal rule learning. The next cell refers to 'peripheral controlled processes' such as the phenomenon of learning skills without any instruction. The last cell focuses on 'peripheral automatic processes' and can be related to a learner's performance in situations of communication. 'Controlled processes are "capacity limited and temporary", and automatic processes are "relatively permanent" (McLaughlin et al., 1983, p. 142). Automatic processes mean processing in a more accomplished skill which means that the brain is able to deal with numerous bits of information simultaneously. Posner and Snyder (1975) reviewed evidence showing that "automatic" priming effects can be blocked by effortful processes (Logan, 1980). It differs from Logan's in not inferring two knowledge sources at the representational level. Automaticity is assumed to develop as a consequence of speed up of rule based representations. Through the years, some proponents of the capacity view came close to undermining a fixed, feature-based definition of automaticity. Schneider et al. (1984) examined 12 criteria and concluded that none was necessary or sufficient for the distinction between automatic and non-automatic processes; however, they still pointed to control and resource demands as being the least problematic. Shiffrin (1988) evaluated several criteria for automaticity, ultimately retaining not one as generally applying to all automatic processes. He eventually came to favor a gradual view. In the following section, we discuss the essence of the gradual view by considering Logan's (1985) answer to the problems posed by the lack of co-occurrence among automaticity features. Logan (1985) offered an alternative to abandoning the concept of automaticity. He (re)introduced it as a continuum and (re)emphasized that the automaticity of a process is determined by the amount of training. He also suggested that "each property has its own time-course of change with practice" (Logan, 1985). Controlled processes are "capacity limited and temporary" and automatic processes are" relatively permanent" (McLaughlin et al., 1983).

Automaticity

Automaticity is a concept with a long-standing history in psychology (James, 1890; Wundt, 1903). It has been invoked in domains as diverse as perception (MacLeod, 1991), memory (Jacoby, 1991), social cognition (Wegner & Bargh, 1998), learning (Cleeremans & Jime´nez, 2002), motivation (Carver & Scheier, 2002), and emotion (Scherer, 1993). James (1890), Jastrow (1906), and Wundt (1903) offered some of the earliest descriptions of automaticity, and many of their ideas have reemerged in contemporary accounts. Processes were considered automatic to the extent that they operated independent of attentional resources, and the development of automaticity was described as a gradual reduction in the need for attention with practice (Hasher & Zacks, 1979; LaBerge & Samuels, 1974; Logan, 1979; Posner & Snyder, 1975; Shiffrin & Schneider, 1977). This is called the *capacity view* of automaticity; some authors have suggested that learned automatic processes may eventually behave as preattentive automatic ones (Gibson, 1969; LaBerge, 1973). Others have rejected equating learned processes with preattentive ones, because they differ with respect to the origin of their capacity independence (innate or acquired) and because they possess different functional properties (Hasher & Zacks, 1979; Treisman, Vieira, & Hayes, 1992). Logan (1992) has proposed reserving the term *automatic* exclusively for learned automatic processes.

Controlled Processing

The base operations of controlled processing include: (1) altering the gain of specific modules (attention); (2) attending to high priority messages; (3) changing feedback (categorization, buffering, and clearing of a module message vector); (4) comparing vectors; (5) sending reinforcement signals; (6) sending an output vector to the inner loop; (7) configuring the Data

Matrix (setting up a dynamic set of transmitting modules); (8) binding new associations; (9) performing goal based executive operations; (10) using context memory to return to previous tasks; and (11) recalling information from declarative memory (Schneider,1999).Again, controlled processing can be implemented as a sequential recurrent network that performs serial operations of a task, such as those required when solving logic problems or performing visual search (before training). Although controlled processing is implemented using connectionist units, it performs operations like a production system (Lebiere & Anderson, 1993). So, controlled processing is usually a slow, limited, sequential, and effortful task. People need attention, concentration, time and effort in doing something in controlled process; in that way, these processing are in contrast to automatic processing.

3. Method

This study concentrates on the automatic level of Iranian English teachers in language performance. The methodology in this study comprises of two stages: The first stage of this study is data collection (through interview) and then is analysis of data. In this study the data are collected in order to a) Classification of automaticity and non-automaticity level of language performance in Iranian English teachers ; b); Comparison of automaticity and non-automaticity level of language performance in English teachers c) to suggest remedial measures to overcome non- automaticity level of language performance in English teachers .

Participants

The participants for the present study were 30 English teachers at different levels in Bushehr. The subjects were randomly selected from different institutes and the teachers were also both male and female. Fifteen of the teachers were male and the rest were female. The teachers selected from different English institutes and they were in different level of knowledge and proficiency. A total of 16 teachers (53.3%) had 7 to 9 years of ELT experience. While 8 teachers (26.6%) had experience of teaching of 8 to 14 years, only 6 teachers (20%) had above 15 years of ELT experience. Most of teachers had age range from 26 to 36. In order to collect data, the researcher visit some institute in Bushehr. The participants were chosen from Zabansara, Dialogue, and Kish English language institutes.

Instruments

The instruments utilized in this research were such as) a General English Proficiency Test   in the form of short interview for asking some questions; b)A recorder in order to record the voice of English teachers and gather data c) analysis of data . The test was selected to assess automaticity's level of English teachers in answering questions and grasp whether English teachers prefer to use English or Persian in automatic answering to questions . The researcher recorded the voice of teachers , in this way she can listen again to these voice and recognize the automaticity level of English teachers in language performance. So data were collected in this way in order to determine automaticity of Iranian English teachers. Then, independent t-test was used to determine mean and standard deviation of Iranian English teachers related to their automaticity level.

Procedures

In this research, at first the researcher visits some institutes in Bushehr. In order to collect data, the researcher asks English teachers some proficiency test in the form of interview. The time for each interview was about 10 minutes. The interview was in English language. These questions were about different subjects and somehow related to their classroom.

To achieve the objectives of this study, theses questions (of interview) were randomly selected .After interview, the researcher records the answer of interviewee(teacher) and then again she asks different questions(but at the same range) from other English teachers and again records their answers. The researcher continues this process. In this research, the role of the General English Proficiency Test in the form of short interview for determining the automaticity level of English Teachers was used as the pedestal function. It means that whether Iranian English teachers have automaticity level of language performance in a un pre-determined condition and they can answer the question in English language or they shift to their native language (Persian). Then the researcher listen again to these records voice and analyses them one by one in order to recognize automatic level of English teachers in answering questions. Then she notes theses analyses carefully and

takes a general conclusion about English teachers' automaticity level in language performance.

In this study, the researcher write down carefully the number of English teachers who have automaticity level in language performance . Also she notes the number of teachers who use Persian language in language performance . Then she classifies, compares, and suggests remedial measures in relation to automatic level of Iranian English teachers. Also, common reasons of non-automaticity of English teachers were expressed. The analysis of work in this study was concerned with the following steps:

-Classification of automaticity and non-automaticity level

In the first step, an attempt was made to classify automaticity and non-automaticity level of language performance in English teachers. So the researcher use interview in order to classify automaticity level of English teachers in different institute of Busheher and base on determine automaticity level of Iranian English teachers.

-Comparison of automaticity and non-automaticity level

A further attempt was made to study and compare of automaticity and non-automaticity performance in English teachers. According to this comparison, reasons of automaticity and non automaticity of English teachers become clear.

-Suggestion of remedial measures to overcome non-automaticity level.

In the this step of this study, an attempt was made to suggest remedial measures to overcome the non-automaticity performance of Iranian English teachers. The aim was to help Iranian English teachers to improve their foreign language and use English language flawlessly in the classroom.

-Expression of common problems of English teachers in automatic level

In this step, common problems of English teachers in automatic level were expressed. The aim was aware of usual difficulty of teachers in automatic answer to question. In this way, the researcher ranged these difficulties and classified the troubles according to the number of their uses.

4. Results

This study dealt with the automaticity level of language performance in Iranian English teachers**.** An attempt was made here to recognize whether Iranian English teacher have automatic level in language performance or they usually have control level in their performance when they answering unexpected questions. The analysis of recorded interview in this study shows that Iranian English teachers shift their language to Persian in unanticipated questions. Finding of this study shows that English teachers not only change their language to mother tongue in answering to unexpected questions but also in explanation of something, comparison of two things, or definition of objects. So the results of this study shows that most of Iranian English teachers prefer to apply their mother tongue in special condition. Iranian English teachers believe that in this way they can express their emotions, thoughts and ideas better than in a foreign language. The results revealed that Iranian English teacher will not reach automatic level of language performance. So the hypothesis of the study was supported.

Table 1

Automaticity Level of Language Performance in Iranian English Teachers

English Teachers	Automatic Level of language performance
Yes	44%
No	56%

Table 1 shows the automatic and non-automatic level of language performance in Iranian English teachers. Also figure

1 shows these data through diagram. The result of this study shows that 56%of Iranian English teacher had not automaticity level of language performance. Also, in this study, 44% of Iranian English teacher had automaticity level of language performance in language performance. So, according to results, the large number of English teachers doesn't have automaticity in language performance.
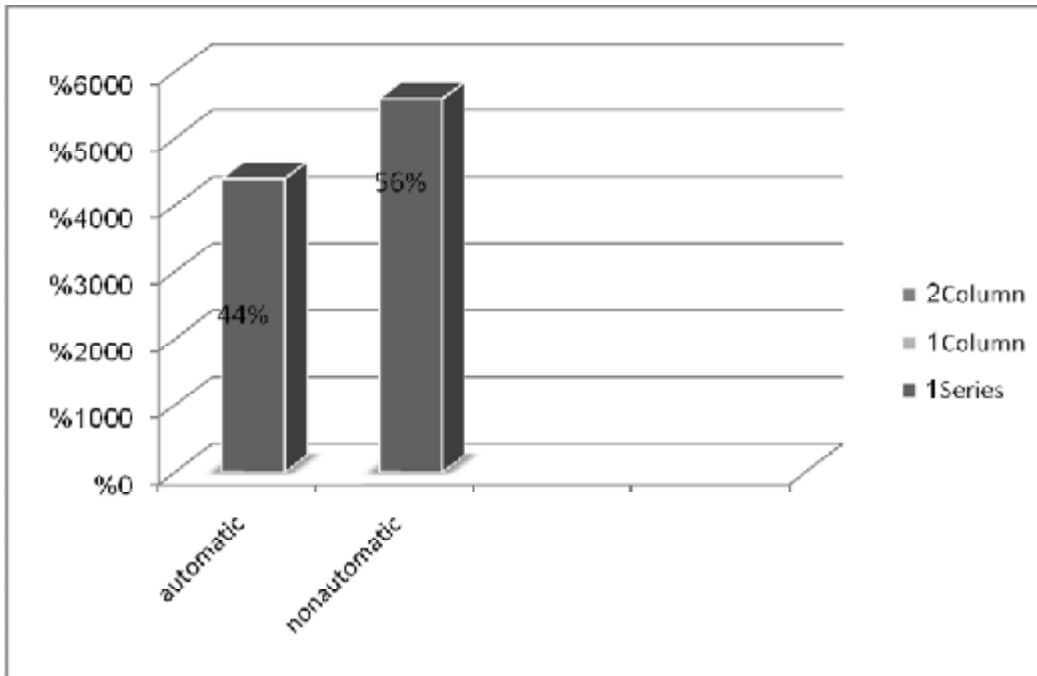

Figure 1. Teacher's automaticity level in English

To sum up, Table 1 and Figure 1 show that 44% of Iranian English teachers have automaticity in English while 56% of them don't have automaticity level of language performance in English. It means that most of English teachers can't automatically answer in English and they prefer to use their native language.

Table 2

Group Statistics for the Automaticity Level of Iranian English Language Teachers

Automaticity level performance	N	Mean	Std. Deviation	Std. Error Mean
Atomicity	17	6.48	0.19	0. 13
Non- automaticity	13	4.12	0.34	0.32

Table 2 shows that mean of automatic and non- automatic English teachers were different. Independence T-test shows that mean in English teachers who have automatic answer were 6.4863 but mean in teachers who have non automaticity in answering questions were 4.1243. Standard deviation scores of English teachers who have automaticity were 0.1984 and those who have non-automaticity were 0.3416. Also standard error mean in teachers with non-automaticity were 0.321 and in teachers with atomicity were 0.321. So, there are meaningful differences between automaticity and non-automaticty of English teachers in answering questions.

Table 3

Independent-Samples T- Test for the Atomicity and Non-atomicity Groups

| Level | Test for | equality | of Variances | | | | | |
| | | | | T-test for equality of Means | | | | |
Level	F	Sig		t-value	df	Sig.2 tailed	Mean Dif	Std. Error Dif
Automaticity					29	.03	22.12	9.423
Non- Automaticity	.043	781		1.473	26.12	.03	22.12	9.331

Table 3 shows the result of the Independent-Samples t-test. As it can be seen, there was a statistically significant difference between the automaticity and non-automaticity groups, *t* (29) = 1.43, *P* < .05. Therefore, the researcher safely rejects the related null hypothesis.

Table 4

Common Problems of English Teachers in Automatic Level of Language Performance in Iran

Problems	Percent
Problem of finding appropriate terms	20%
Lack of interesting to use English in unfamiliar questions	24%
Lack of motivation	15%
Habiting to use Persian	16%
Lack of ideas on particular topic s	8%
Focusing on grammar	9%
Running of time	8%
Having anxiety in answering questions	6%
Lack of self –confidence	4%

Table 4 shows some common problems of English teachers in Iran that cause they don't reach to automaticity level. According to this table, the main reason of non atomicity in Iranian English teacher was the lack of interesting to use English in unfamiliar questions that was about24%. Another important reason of non atomicity was the problem of finding appropriate terms that was 20%. The last important cause was habiting in use of Persian that was about16% that were one of the main reasons of non automaticity of Iranian English teacher in answering questions. Therefore, the first hypothesis of the study was supported. Another important problem in non automaticity of English teachers were lack of motivation that was about 15%.Therefore Iranian English teachers don't reached automatic level of language performance. Also the second hypothesis of the study was supported because results in these tables show that English teachers prefer to use Persian in unexpected situations. Some other common reasons in non automaticity of English teachers according to table(4) were lack of motivation, lack of ideas on particular topics, running of time, lack of self –confidence and other reasons that was mentioned in the table.

5. Discussion

Automatic processes mean doing something very fast and without any effort. On the other hand, it means doing something successfully without any thought (automatically). The automatizing of this multiplicity of data is accomplished by a process of restructuring in which the components of a task are co-ordinate, integrated, or reorganized into new units, thereby allowing the old components to be replaced by a more efficient procedure' (Brown 2002). Hasher and Zacks (1979), and Posner (1978) defined automatic processes as being effortless, unconscious, and involuntary. Automaticity refers to effortless and uncontrolled process. In fact automaticity means reduction of attention for doing practice. On the other hand, it is fast and equal process. According to Seger (1994), implicit learning may be automatic in the sense of being learning without awareness. But control process is slow and requires more effort. Automatic processes mean that the brain is able to deal with numerous bits of information simultaneously. The outcome of this research showed that the Iranian English teachers were not reach automatic level of language performance. The result of the research indicated that in general, the Iranian English teachers, in special condition, change their language to native language.

In contrast to many researches that emphasis on automaticity of learners in different aspects of foreign language learning, this study emphasis on automaticity of Iranian English teachers and stated that they don't have automaticity in English. In fact, most of English teachers apply Persian in answering to English questions. One reason for this change is that English as foreign language in Iran taught in schools and institutes but it doesn't use as official or second language. So, it doesn't use in social life or in every day situation. Therefore, in this condition, the teacher has no opportunity for exposure in English language and frequent use of it. Therefore, the source of this change (change language to Persian by English teachers) could be because of lack of exposure to English language, absence of drill and practice, different cultures, lack of imagination in English, complexity of English, shortage of responsibility, and lack of good method and strategies. The data provided by the analysis of English teachers' performance in interview will help teachers, researchers, and syllabus designers to recognize situations where teachers use native language. Using such studies help them to acquire new insights about automatic or control level of language performance and realize problematic area where Iranian English teachers have difficulty in speaking. Accordingly, foreign language teachers should focus on common reasons of non-automaticity and try to overcome them by using various materials and methods. They can conduct remedial procedures by using exercises and skills related to increase automaticity level of language performance. Also, English teachers could use English in institute environment, speak English with their friends and students, listen to VOA, and look at English TV programs to increase automatic level of English language performance. An important implication of this study is that the results of this study might be lead to encourage of teachers' self-awareness in teaching and increase their awareness in evaluation of themselves. They can eliminate or decrease their failure in non automaticity in answering unpredictable questions by acquaintance with frequently used words. It is also suggested that teachers should raise their knowledge about the important criteria of teaching and become acquaintance with broaden range of vocabulary in order to be able to remember suitable words in different positions effortless. English teachers should reinforce different aspects of English language so that they can think in English easily. Finally the result of this study suggested that, for increasing automaticity, self- assessment of English teacher is very useful.

6. Conclusion

This study investigated automatic level of language performance in Iranian English teachers. For Iranian teachers, English Language is used as a foreign language. In this study, as results of analysis of English teachers 'performance, 56% percent of English teachers had automatic performance and 44% of English teachers don't had automatic performance in answering questions. The results revealed that Iranian English teachers will not reach automatic level of language performance. The outcome of this study shows that the main reason of non atomicity in Iranian English teacher was the lack of interesting to use English in unfamiliar questions that was about 24%. The second important reason of non-atomicity of

English teachers was the problem of finding appropriate terms that was 20%. The third important reason of non automaticity of Iranian English teacher in this research was use to speaking Persian, in unpredictable situations that was about 16%. Also mean, standard error and standard deviation of teachers with automatic and non automatic level were different. There are many reasons for non-automaticity performance of Iranian English teachers such as lack of exposure in English, lack of imagination, and differences in cultures. Another source of non-automaticity performance in Iranian English teachers in this research could be lack of acquaintance with vocabulary, interference of native language, and lack of enough practice in speaking . Thus, English teachers should choose effective methodology to achieve automatic level in language performance such as familiarity with useful ways of learning English, memorization and remembrance of vocabulary, and pay attention to more practice in English. In addition, such studies help teachers to acquire new techniques in order to increase automatic level of language performance.

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