CULTURAL ORIENTATION AND READING COMPREHENSION MODELS: THE CASE OF IRANIAN RURAL AND URBAN STUDENTS

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Abstract: The present study attempted to investigate the effect of rural and urban orientations on top-down and bottom-up reading models of the Iranian EFL students. To do this, the researcher selected two groups of EFL learners, one rural and the other, urban. To determine the socio-cultural status of the subjects, a demographic questionnaire was given to both groups. Then, the subjects were made homogeneous by administering a language proficiency test, Nelson. It is noteworthy that Nelson test had already been standardized. After that previously validated ten reading passages including top-down and bottom-up items were administered to both groups. The experiment lasted for ten sessions and the statistical analyses used in this study comprised a t-test to determine the homogeneity of the groups, a two-way ANOVA and Scheffe test. The results showed that in addition to bottom-up model, the urban students made use of top-down strategy including inferences, skimming for the main ideas, guessing the meaning of words from context, activating background knowledge, and focusing on the author's message, whereas rural subjects showed great reliance on texts and the application of bottom-up processing i.e. they heavily relied on the main content of the text, they never incorporated the knowledge of the world as well as their prior knowledge to answer reading comprehension questions.

Key words: Reading comprehension, top-down, bottom-up, culture

Özet: Bu çalışma, İngilizce'yi yabancı dil olarak öğrenen İran asıllı öğrencilerin yukarıdan aşağı ve aşağıdan yukarı okuma modelleri kullanımında şehir ya da kırsal kesim kökenli olmanın etkisini araştırmayı amaçlamaktadır. Bu amaçla, araştırmacı biri şehirde biri de kırsalda olmak üzere İngilizce'yi yabancı dil olarak öğrenen iki grup seçmiştir. Katılımcıların sosyokültürel konumunu belirlemek için her iki gruba da bir demografik bilgiyi toplayan anket uygulanmıştır. Daha sonra, katılımcı gruba Nelson dil yeterlilik testi uygulanarak grup içi homojenlik sağlanmaya çalışılmıştır. Nelson testi, standardize edilmiş bir testtir. Daha sonra, metni yukarıdan aşağıya ve aşağıdan yukarıya çözümlemeye dair maddelere sahip önceden belirlenmiş on adet okuma parçası her iki gruba da uygulanmıştır. Deney on aşamada. Sonuçlar göstermektedir ki, şehirdeki öğrenciler, metin anlamada aşağıdan yukarıya akışına ek olarak, yukarıdan aşağıya stratejileri de kullanmışlardır. Bu stratejilerden bazıları, metinden anlam çıkarma, ana fikri bulma, metinden kelime tahmininde bulunma, geçmiş deneyimlerle bağlantı kurma ve yazarın anafikrine odaklanmadır. Oysa ki, kırsaldaki katılımcılar metne ve aşağıdan yukarıya çözümlemeye yüksek ölçüde bağlı kalmışlardır. Örneğin, metnin ana içeriğine çok fazla bağlı kaldıkları ve okuma parçasına ait soruları cevaplarken mevcut bilgi ve genel kültürleriyle hiç bağdaşım kurmadıkları görülmüştür.

Anahtar kelimeler: Okuma anlama, yukardan aşağı, aşağıdan yukarı, kültür

1. Introduction

Learners of a second or foreign language may rarely find chances to communicate with native speakers orally, but they can read different texts in different subjects with varying degrees of detail and difficulty. In the contemporary world, technology provides the scientific findings appear in the form of written texts. So, the need for reading and extracting information from these texts seems to be vital. As stated by Bernhardt (1991), the ability to read is the most stable and durable of the second language modalities.

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Rivers (1981) propounds that a reading is a most important activity in any language class, not only as a source of information and a pleasurable activity, but also as a means of consolidating and extending one's knowledge of the language (p.259). Strevens (1977) also emphasizes the great importance of reading to the learners for two reasons: "first of all this skill provides the learners with access to a great quantity of further experience of the language. The second reason is presenting a window onto the normal means of continuing the learners' personal education by reading skill." Through reading, the learners would be able to develop a sufficient language base that enables them to produce the spoken or written messages which they are eager to communicate to others. Chastain (1988) believes that "without this knowledge, students are not likely to be successful in the typical language class in which all four language skills are stressed" (p.218).

To recreate the writer's message, the application of a number of reading comprehension models seems to be essential for any reader. The concepts of top-down and bottom-up processing as strategic models of reading comprehension have always been on the focus of researchers for many years. The top-down model includes skimming, scanning, activating background knowledge, predicting, thinking of the author's main idea, finding clues, contextual guessing, and associating image which have specified this model/processing as "conceptually driven". Bottom-up processing, on the other hand, mainly stresses on literal comprehension, surface meaning, translation into L1 and use of dictionary which have specified this model as "data driven" (Madden & Nebes 1980, Dubin & Bycina 1991, Carrell 1991, Stanovich 1980, Chastain 1988).To Hayashi (1999), most of the students in an EFL setting are apt to focus on bottom-up processing (data driven) particularly at an early stage of learning while the need for engaging in Top-down processing is not deemed seriously in the views of these learners.

Language pedagogy has got at the point that language and culture are interrelated, that is, it is not possible to teach language without culture. In order to recreate the writer's intended meaning, a set of reading comprehension strategies appears to be necessary. On the other hand, Therefore, Culture learning is necessary for the students to become familiar with the aspects that help them in better understanding the people and their way of life (Chastain, 1988).

Parry (1996) in a study on two separate groups of language learners, the Nigerian and Chinese, claims that the reading model which each group used depended on their language background and culture. She also adds that "Nigerian students showed a preference for top-down method of solving comprehension [questions] whereas the Chinese group reported a strong tendency to use bottom-up processing" (p. 665). Parry (1996) concludes that "cultural background is an important factor in the formation of individual reading strategies…" (p. 665).

Apart from conducting research on quite two separate groups of subjects e.g. Chinese and Nigerian- by Parry (1996), the present study has merely focused on Iranian EFL learners. Our main goal is to investigate the impact of rural and urban orientation on Iranian EFL learners' tendencies to use top-down or bottom-up models of solving reading comprehension questions.

2. Statement of the problem

Many researchers emphasize the efficiency of teaching reading strategy for improving students' performance on comprehension. According to Brown (1994), more proficient readers find their own way, taking charge of their learning and use various types of strategies effectively whereas others do not use strategies effectively even though they are taught how to do so.

With regard to the importance of top-down and bottom-up reading comprehension models, this study attempts to investigate the Iranian rural and urban EFL students' preferences on applying these two models to comprehend reading texts.

3. Significance of the study

Reading and comprehension is not bounded to the text. In other words, any no text carries meaning by itself. So, in order to recreate the writer's message, the reader should apply comprehension strategies. As the primary objective of reading is comprehension, Mohamad (1999) suggests three comprehension strategies. He, then, divides the strands of the comprehension into "literal" "interpretive" and "critical" comprehension. He states that the first level involves surface meanings. So, the teachers can ask students to find information and ideas that are explicitly stated in the text (bottom-up processing).

With regard to the second level, students go beyond what is said and read for deeper meanings. Students need to be able to see relationships among ideas, for example, how ideas go together and also see the implied meanings of these ideas. Interpretive or referential comprehension includes thinking processes such as drawing conclusion, making generalizations and predicting outcomes.

The third level focuses on evaluating ideas and information which are mainly used in advanced levels. Thus, to encourage the learners not to focus on applying a specific reading comprehension model, the teachers should make significant efforts to provide the students with different reading assessments to test their reading abilities. Like any foreign language instructional setting, the importance of reading comprehension is seriously taken into account in Iran. Therefore, it seems to be crucial for Iranian EFL learners to be familiar with different reading comprehension models to optimally solve reading comprehension questions as well as to recreate the writer's message.

4. Method

The main participants in the study were 160 male Iranian rural and urban students studying at pre-university centers in Malayer and the suburb villages. The age limit of the subjects was 17 to 18. To determine the subjects' cultural behavior and residential status, first a demographic questionnaire was given to a total of 600 rural and urban students (each group contained 300 students). 117 subjects out of 300 in each group were randomly selected from a total of 234 based on Morgan's Randomization Table.

In order to determine the homogeneity of the groups (rural & urban) regarding their level of language proficiency, a standardized Nelson Test Form 200 A was used. 160 subjects (80 in each group) whose scores were one standard deviation above and below the mean were selected and assigned as the main participants of the present study.

4.1. Procedure

First of all, a pilot group of 20 took both Nelson 200A Test and another language proficiency test, CELT. The purpose of this administration was to standardize Nelson 200A

Test against CELT. The correlation coefficient results (70.71) showed an acceptable degree of correspondence between Nelson and CELT.

A demographic questionnaire was given to a total of 600 rural and urban students to determine their socio-cultural status. Then 234 male subjects were randomly selected based on their responses. Then the standardized Nelson 200A Test was given to a total of 234 Rural and Urban students (117 Ss in each group) in order to determine the homogeneity of the subjects.

The subjects whose scores were one standard deviation (SD) above and below the mean were selected and others whose scores were out of this range were excluded from the study. The results indicated that 80 subjects in each group scored one SD above / below the mean. So, they were selected as the main subjects of the study.

The results of the T-test obtained from the mean differences of each group performance on Nelson Test indicated that the two groups showed no significant difference in terms of language proficiency. Table 1 has illustrated the T-test results.

Table 1 T-test obtained from the mean differences of each group performance on Nelson Test

Variable	No.of pairs	corr	2 tail sig	Mean	SD	SEM
Urban				25.2653	3.340	.477
	80	.039	.788			
Rural				24.0612	3.198	.457

Paired Differences

Mean	SD	SEM	t-Value	df	2-tail sig
1.2041	4.532	.647	1.86	79	.089

95% CI

After determining the homogeneity of the rural and urban groups regarding language proficiency, ten reading passages which were validated and piloted before, were administered to the rural and urban subjects.

It is noteworthy that the reading passages comprised five texts including Top-down items and five other texts consisting of Bottom-up items. By top-down or bottom-up items we mean that these items were constructed according to the features of these two processing models. For example, a top-down item to be answered requires the student's activating his/her background knowledge, making inferences, deduction and so on. The study lasted for ten sessions and each group received one passage per session.

The study involves two independent variables and one dependent variable. The independent variables consisted of origination and item type, each of which comprised two levels. In other words, origination comprises two levels: Urban and Rural and item type, also, consists of Top-down and Bottom-up items. The subjects reading scores were regarded as the dependent variable in this study.

5. Results and Discussion

To test the null hypothesis, the researcher attempted to investigate whether there is any difference among the following groups :

Group 1   Urban Top-down (UT)
Group 2   Urban Bottom-up (UB)
Group 3   Rural Top-down (RT)
Group 4   Rural Bottom-up (RB)

So, the researchers applied a two – way ANOVA for statistical calculations.

Table 2: Mean scores obtained from Rural and Urban Students on both Top-down and Bottom-up items

	Origination (Factor B)		Effect of item type
	Urban	Rural	
Item type (Factor A) Top-down	$X^{**}= 15.82$	$X= 14.02$	$X=14.92$
Bottom-up	$X= 18.59$	$X=16.72$	$X=17.65$
Effect of Origination	$X= 17.20$	$X=15.37$	

$XG=16.28$

F factor A= S² factor A/ S² within   effect of item type

F factor B = S² factor B/ S² within   effect of origination

F factor (A x B) = S² interaction / S² within   origination x item type

Table 3: ANOVA for the effects of item type and origination

Source	Ss	d.f	Ms	F
Between groups item type(A)	326.576	1	326.576	**29.273
Origination (B)	138.902	1	138.902	12.450**
A x B **	1.843	1	1.843	0.165
within groups	2141.96	317	11.156	
Total	2609.281	320		

$P < .05$

As ANOVA table indicates, the F values for Factors A and B strongly exceeds the critical value. This means that one group did work better than the other on, at least, one level. To show the sources of differences among the means, the researchers applied Scheffe test. This test also helped the researchers analyze the differences among the means.

Table 4: Scheffe test results for finding the sources of differences

	RT	UT
RT		
UT	*	
RB	*	
UB	*	*

Based on Scheffe test results, each asterisk (*) shows the source of difference between as well as within these two groups. Now, let's analyze the specified differences:

1. RT x UT: The difference between rural and urban subject's scores on Top-down items is significant. Since the calculations showed, Urban subjects outperformed on top-down items than the rural ones

2. RB x RT: The difference between rural students' performances on Top-down and Bottom-up items is also significant. Rural subjects did better on Bottom - up items rather than top-down ones.

3. RT x UB: The significant difference between rural students' scores on Top-down and Urban students scores on Bottom-up is clear. Urban students' scores on Bottom-up items were higher than rural ones on top-down items.

   4. UB x UT: The difference between urban students reading scores on Bottom - up items are higher than their performances on Top-down items.

As Scheffe test indicated, there was no significant difference between rural and urban students' performances on applying Bottom-up reading comprehension model. In other words, both groups were, to some extend, the same on Bottom-up items but their performances on Top-down items were significantly different. The findings of this study suggested that in addition to Bottom-up processing, Urban students made use of inferences, deduction, skimming for the main ideas, guessing the meaning of words from the context, activating background knowledge whereas rural subjects showed a great tendency on Bottom -up strategy and clicking on the text itself.

Nevertheless, the exact relationship between origination and the strategy used in reading comprehension is quite clear. Therefore, the null hypothesis, which stated rural and urban Originations don't affect reading performances of the Iranian EFL learners, is rejected.

6. Conclusion

Reading has widely been used in various areas of second and foreign language teaching, learning, and testing. In this part, the contribution of this study to language teaching, testing, and syllabus design is discussed. According to Oxford (1990), the instructors should provide the learners with different strategies to apply when encountering with an educational problem. Therefore, the teachers can provide both rural and urban students with a number of reading comprehension strategies to solve reading comprehension questions. With regard to the findings of this research, teachers should encourage rural students not to focus on a single reading strategy. Motivation is one of the most important factors in any learning-teaching environment, so when the students are required to express their opinions toward the texts, this factor is met.

The syllabus designers should also provide the learners (rural and urban) with proper and fruitful texts which foster the application of different reading strategies among the learners. In the field of testing, reading texts should not lead to the application of a single strategy for comprehension.

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*The character X in this study stands for mean