Saudi Female EFL Learners' Cognitive Styles and Reading Comprehension: Implications for Reading Instruction and Strategies

By

Dr. Mazeegha Ahmed Al Tale'

English Language Department

Faculty of Languages and Translation

King Khalid University

Kingdom of Saudi Arabia

maltale@kku.edu.sa

Dr. Hala Mohamed Osman Salih

English Language Department

Faculty of Languages and Translation

King Khalid University

Kingdom of Saudi Arabia

hsaleh@kku.edu.sa

Abstract

The aim of this study is to investigate the cognitive styles of Saudi female EFL learners and their relationship to academic performance in reading comprehension, with a focus on implications for classroom teaching methods and strategies in reading comprehension skills. One hundred and forty Saudi female EFL students participated in the study. A questionnaire, a cognitive style test, classroom observation and a reading comprehension test were used to collect the data of the study. It was concluded that most students employ mixtures of field-dependent and field-independent cognitive styles, resulting in the broad categorization of three types of learners: field-dependent dominant, field-independent dominant and mixed. The study also shows that mixed-field students significantly out-performed both field-dependent and field-independent ones in reading comprehension. Based on these findings, recommendations for teachers and future researchers are presented.

Keywords: Cognitive styles, field-dependence, field-independence, English as a Foreign Language (EFL), teaching strategies, lifelong learning.

الملخص:

تهدف هذه الدراسة إلى دراسة الأنماط المعرفية للطالبات السعوديات بقسم اللغة الإنجليزية كلغة أجنبية وعلاقتها بالأداء الأكاديمي لفهم القراءة، مع التركيز على تطبيقات طرائق التدريس واستراتيجيات المهارات اللازمة في مادة القراءة والاستيعاب. وقد شارك في الدراسة مائة وأربعون طالبة سعودية. وتم استخدام استبانة واختبار للأساليب المعرفية والملاحظة واختبار قراءة استيعابية في جمع بيانات الدراسة. وخلص الباحثان إلى أن معظم الطالبات يستخدمن مزيجًا من الأساليب المعرفية المعتمدة على المجال والمستقلة عن المجال، مما يصنفهن إلى ثلاثة أنواع من المتعلمات: المتعلمات ذوات الأسلوب المعرفي المعتمد على المجال، المتعلمات ذوات الأسلوب المعرفي المستقل عن المجال والمتعلمات ذوات الأسلوب المعرفي المختلط. كما خلصت الدراسة أن المتعلمات ذوات الأسلوب المعرفي المختلط تفوقن بشكل كبير على المتعلمات ذوات الأسلوب المعرفي المعتمد على المجال والمتعلمات ذوات الأسلوب المعرفي المستقل عن المجال. وبناء على هذه النتائج، تم تقديم بعض التوصيات للمعلمين والباحثين.

الكلمات المفتاحية: الأساليب المعرفية، الاعتماد على المجال، الاستقلال عن المجال، اللغة الإنجليزية كلغة أجنبية، استراتيجيات التدريس، التعلم لمدى الحياة

1. Introduction

Learning foreign languages requires readiness and motivation on the part of learners. In recent years, English as a Foreign Language (EFL) teaching has attracted the attention of scholars due to the increased number of learners of English as a foreign language, and also to the difficulties EFL teachers face in trying to help their students acquire the different language skills. Although EFL has been taught to Saudi students for a very long time, local students are still facing difficulty in learning it, especially in classroom settings. They are also still generally frustrated and unmotivated to learn it (Al Tale', 2016).

Applied linguists have devised plenty of methods and strategies that are meant to increase readiness and motivation for language learning, which may be grouped together within the growing field of the psychology of learning (Larsen-Freeman, 2000). Due to the importance of that field of inquiry for ESL/ EFL learning and teaching processes, approaches which aim to optimize learners' psychological states and cognitive abilities for acquiring languages have become an area of rich investigation in the field of applied linguistics (Wu & Alrabah, 2009; Al-Khatnai, 2011; Hassanein, 2015; Al-Tale', 2016).

Reading is a critical, receptive skill for learning a second or foreign language. It is also crucial for learners to comprehend what they read in order to be able to acquire the target language. Applied linguists consider receptive skills such as reading and listening important inputs for the development of language outputs (productions), which are manifested in speaking and writing skills. Steven Krashen, in his theory of second language acquisition, states that "comprehensible input is the crucial and necessary ingredient" for the acquisition of language (Krashen, 2002, p. 9). Based on the fact that several individual differences and characteristics influence learning and performance in an academic setting, one of the proposed solutions for making teaching more effective is to match the psychological characteristics of the learner with the content, method, and media of the

instruction (Rezaeia & Katzb, 2004).

The concept of cognitive styles has continued to be investigated by educational researchers for more than 45 years (Kahtz & Kling, 1999; Nozari & Siamian, 2015; Par, 2018; Roberge & Flexer, 1984; Salmani-Nodoushan, 2006; Witkin & Goodenough, 1981). That concept highlights critical individual differences among EFL/ ESL learners, which eventually affect their reading comprehension and strategy preferences. Moreover, it has been noted by researchers that the type of the cognitive styles displayed by learners affect the way they approach different texts and thus their level of comprehension of those texts (Fadhillah, 2013; Par, 2018; Salmani-Nodoushan, 2006; Suyitno, 2017). It can be inferred from those previous studies that in order to understand particular texts, readers need to utilize strategies suitable for their cognitive styles. Furthermore, they need their teachers to address their cognitive styles in a helpful manner. The present paper aims at investigating the effect of field-dependence/ field-independence cognitive styles on Saudi female EFL learners' academic performance in reading comprehension. It also aims at offering some pedagogical implications for teaching reading

skills based on this investigation of students' cognitive styles and their connection to academic performance.

2. Cognitive Styles (Field-dependence/ Field-independence)

The concept of cognitive style was introduced by Witkin et al (1954) to describe the phenomenon that different individuals have different preferences for organizing stimuli, and for constructing meanings for themselves out of their experiences. Field-dependence/ field-independence cognitive style distinction is the ability or lack of ability to extricate key figures embedded in a more complex background (Blanton, 2004). Thus, individuals who are able to identify embedded figures in a large complex background are field-independent ones, whereas those who lack that ability are to be regarded as field-dependent ones. Witkin et al (1970) indicates that while field-dependent individuals tend to depend on external prompts and are less able to identify an embedded figure in an organized field, field-independent ones tend to rely on internal prompts, and can identify an embedded figure in a more complex field (Witkin, Gooddenough & Otman, 1979). Therefore, as Hall (2000) describes, while field-independent learners are frequently

described as "analytical, competitive, individualistic, task-oriented, internally referential, intrinsically motivated, hypothesis testing and detail oriented," field-dependent ones are referred to as "group-oriented, global, sensitive to social interactions and criticisms, extrinsically motivated, externally referential, non-verbal and passive learners who prefer external information structures" (p. 6). Witkin and Goodenough (1981) emphasize that field-dependence/ field-independence cognitive styles should be viewed as a continuum, with the individuals at the two ends of the continuum exhibiting different features and traits. Witkin (1976) created the Group Embedded Figures Test (GEFT) to differentiate between field-dependence and field-independence. Another test which has been developed by Witkin & Goodenough (1977) for the same purpose is the rod and frame test. It consists of a rod within a field. That rod could be perceived as vertical or horizontal, based on that field. If the individual is field-dependent, he or she will decide on its being vertical or horizontal based on the shape in which it is located. If he or she is field-independent, he or she will decide on its being vertical or horizontal regardless of the shape in which it is located.

3. Review of Related

Literature

There has been a continued and increasing interest in the investigation of students' cognitive styles (field-dependence/ field-independence) among scholars from all over the world. The previous literature on cognitive styles and EFL learning and teaching are mainly concerned with the effect of the learners' cognitive styles on language acquisition, vocabulary teaching and retention, listening comprehension ability, writing performance, individuals' inter-language pragmatic competence, and reading comprehension (Cheng et al.; 2017 ; Khodadady & Zeynali, 2012; Mall-Amiri & Arabgol, 2015; Nosratinia & Adibifar, 2014; Nozari & Siamian, 2015; Wu, 2018).

The researchers will now summarize briefly the studies which have dealt particularly with EFL students' cognitive styles and reading comprehension. Salmani-Nodoushan (2006) examined the hypothesis that cognitive styles (field (in)dependence) would affect Iranian EFL learners' overall and task-specific performance on task-based reading comprehension tests. The results indicate that cognitive style led to a significant difference in participants' performance of true-false, sentence completion, outlining,

skimming, and elicitation tasks in all proficiency groups. Al-Hajaya and Al-Khresheh (2012) conducted a study to investigate the effect of a cognitive learning style-based reading program on the achievement of Jordanian freshmen with English majors. The results revealed that there were no statistically significant differences in the students' mean scores on the reading achievement test between the analytic learning style group and the global learning style group due to the instructional strategy or the learning style. However, the only factor that affected students' achievement and motivation for reading in English was the interaction between the instructional strategy and the cognitive learning style. Similarly, Fadhillah (2013) investigated whether achievement in reading comprehension by students with field-independent styles is higher than those with field-dependent styles. The results revealed that field-independent students' achievement in reading comprehension was higher than that of field-dependent ones. The results also indicated no interaction between reading strategies and students' cognitive styles, and that field-independent cognitive style students are better in reading comprehension, regardless of the strategy they used.

In the same vein, Nozari & Siamian (2015) investigated the relationship between cognitive styles (field (in)dependence) and English text reading comprehension, EFL learning, academic achievement as well as academic course election. The participants were 305 junior high school students (both girls and boys) in Sari City, Iran. The Group Embedded Figures Test (GEFT) was used to divide them into field-dependent (FD) and field-independent (FI) students. Regression analysis was used. The results indicate FD cognitive styles significantly led to changes in reading comprehension scores, EFL learning and academic achievement. It was concluded that the more field-independent students were, the higher their reading comprehension skills in learning English, and the more academic achievement will result. Using the same GEFT, Par (2018) *examined the effect of* FI and FD cognitive styles on EFL learners' critical reading skills. The subjects were 60 undergraduate EFL students who had taken and passed the Critical Reading course. The Critical Reading Comprehension Test (CRCT) was also used to measure the students' critical reading skills. The results indicate a statistically significant difference between FI and FD students in their critical reading skills.

To the researchers' knowledge, no one to date has investigated the effect of the Saudi female EFL students' cognitive styles on their reading comprehension. Thus, the present study is an attempt to contribute to the literature conducted on field-dependence/ field-independence cognitive styles and their relationship to EFL reading performance.

4. Hypotheses of the Study

Based on the concept of field-independent/ field-dependent cognitive styles, the researchers' teaching experiences, as well as the related literature, the researchers propose to test the following hypothesis:

1. Saudi female EFL students at King Khalid University display different cognitive styles.
2. Field-independent students are better than field-dependent students in their academic performance of reading comprehension.

5. Methodology of the Study

5.1. Participants

The present study employs data obtained from 140 Saudi female EFL students at King Khalid University (KKU), during the first academic semester of 2018-2019. The participants, both those who were given the questionnaire and the cognitive style test, and those who were observed, were female level-two students in the English department, which offers a bachelor degree in the English Language. The ages of the participants ranged from 18 to 19 years old. These students were studying at level two of the listening, speaking, reading and writing English language skills. This specific level was chosen due to the simple fact that a large number of students were registered in it. They were also not very new beginners, as they had completed the first level of the course, and would be studying those skills for the coming three semesters including the semester under investigation. In particular, the reading course was based on the *Well Read 2 Student Book: Skills and Strategies for Reading Student Guide* series (Pasternak and Wrangell, 2007).

5.2. Materials

The researchers used a reading comprehension test to collect the data related to the students' academic performance in reading skills (see Appendix A). They also used a questionnaire and a cognitive style test to collect study data related to the learners' cognitive styles. The questionnaire consists of two parts. The first part consists of multiple-choice questions designed to elicit the participants' demographic

information. The second part consists of 12 items arranged in a Likert scale ranging from 1 (often) to 3 (seldom) (see Appendix B). Most of these items were taken from Houghton College's website: https://www.houghton.edu/students/center-for-academic-success-and-advising/study-advisement/general-study-information/learning-styles-field-dependency/. The researchers modified in a Likert scale similar to that of Barsch Learning Style Inventory, with the same scoring procedures. With regard to the cognitive style test, it consists of two embedded figure items and one rod and frame test item (see Appendix C). In addition, classroom observation of the participants was also used to collect the data of the study about the students' cognitive styles. It was used to verify the results of the test and questionnaire.

For data analysis, Microsoft Excel was used to compute the means of the students' answers to the questionnaire's items and to the cognitive style test, and to draw the graphs that display the computed means for their cognitive styles. The SPSS program, version 23, was used to conduct a one-way analysis of variance to measure the mean scores of academic performance in reading comprehension of the three groups

(field-dependent dominant students, field-independent dominant ones, and mixed ones), and to test the significance of the difference in the means of the students with the three types of cognitive styles.

5.3. Procedures

The researchers distributed the questionnaire and the cognitive style test, which were translated into the students' native language (Arabic) in order to make sure that they did not have difficulty in understanding the questions. The researchers also asked the students not to be hesitant in asking for any clarification. Since the participants were drawn from five different classes, each group was given the questionnaire separately, but they were all given the same amount of time to complete it (30 minutes), and the same opportunity for clarification. After collecting the answers from the students, the mean number of each student's orientation towards field-dependent or field-independent was computed, and drawn into graphs using Microsoft Excel, which was also used to draw the figures of the cognitive styles and academic reading comprehension performance scores. The researchers then used the SPSS program, version 23, to conduct a one-way analysis of variance of the mean scores of reading comprehension of the three groups of

students (field-dependent dominant, field-independent dominant and mixed) to test the significance of the difference in the means of those students.

6. Results

6.1. Saudi female EFL students' cognitive styles

The results of the study partially confirm its first hypothesis, which is that Saudi female EFL students at King Khalid University display different cognitive styles. It was found that Saudi female EFL level-two students at King Khalid University display three types of field-dependent and field-independent cognitive styles in a continuum ranging from field-dependent cognitive style to mixed cognitive styles. In other words, each one of the participants is not totally field-dependent or field-independent. Rather, she tends to exhibit a variegated mixture of the two cognitive styles investigated: field-dependent and field-independent. The group of participants whose field-dependence scores were higher than their field-independence ones are referred to as "field-dependent dominant," whereas those whose field-independence scores were higher than field-dependence ones are referred to as "field-independent-dominant." The third group of participants who have the same scores for both field-dependence and field-independence are referred to as "field-mixed" ones. These results are shown in the following figures:

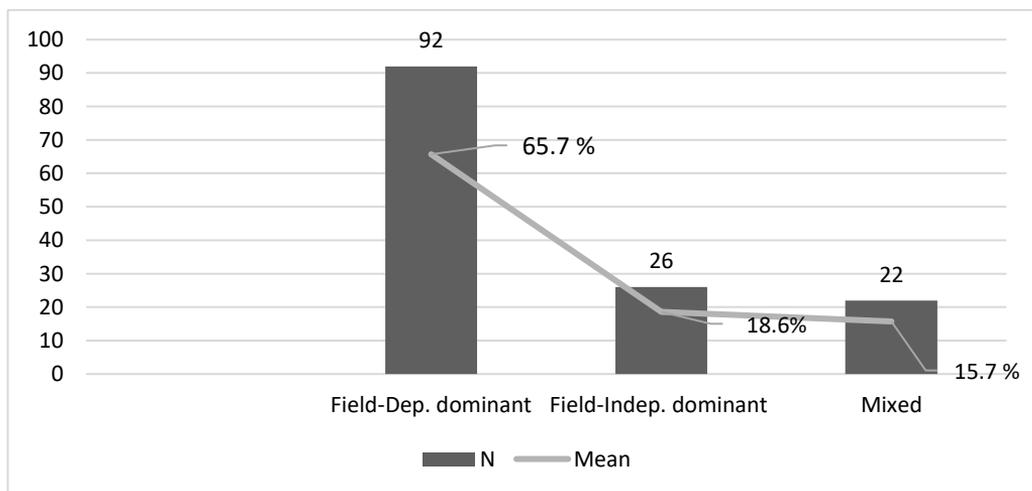

Figure 1: Participants' cognitive styles

As shown in figure 1 above, the participants are divided into three types of cognitive styles: Field-dependent dominant students (65.7%), field-independent dominant students (18.6 %), and field-mixed

ones (15.7 %). Most of the investigated students are field-dependent dominant students, fewer are field-independent dominant ones and the least amount display mixed cognitive styles.

Figure 2: Different mixtures of cognitive styles

As shown in figure 2 above, the participants display different portions of one of the two investigated cognitive styles: field-dependent and field-independent. Few of them have the same portion of both cognitive styles (mixed cognitive style). The classroom observation validated the results of the cognitive style questionnaire and test. The investigated students exhibited different types of behavior which indicate that they have different mixtures of the two cognitive styles. Sometimes, they tend to rely on the surrounding field (classroom, teachers and colleagues) in their behaviors. Other times, they prefer to keep silent and independent in their behaviors.

6.2. Cognitive styles and academic reading comprehension performance

The results of the study reject its second hypothesis, which is that field-independent students at King Khalid University are better than field-dependent ones at their academic performance in reading comprehension. It was found that field-mixed cognitive style students have higher scores than both field-dependent dominant and field-

independent dominant ones. It was also found out that field-independent dominant ones have lower marks than both field-dependent dominant and mixed ones. These results are shown in the following table:

Table 1: Comparison of Reading Comprehension Performance among Different Cognitive Styles

Cognitive style	N	Mean Score	SD	F	Sig.
Field-Dependent dominant	92	43.37	3.974	8.340	.000
Field-Independent dominant	26	42.62	4.355		
Mixed	22	46.73	1.882		

As shown in the above table, there is a significant difference in academic reading performance among field-dependent dominant students (M=43.37, SD=3.974), field-independent dominant ones (M=42.62, SD =4.355) and mixed-cognitive style ones (M=46.73, SD =1.882), F(2, 137)=8.340, P <.000. The effect size was moderate (eta squared=.11). Scheffe's post-hoc tests showed that the mixed-cognitive styles students scored significantly higher in academic performance than both field-dependent dominant students and field-independent dominant ones, p<.05; whereas the field-dependent dominant students and the field-independent ones did not differ from each other significantly, p>.05 (.673).

7. Discussion, Conclusion, and Implications

The results of this study conclude that Saudi female EFL students display variegated mixtures of field-dependent and field-independent cognitive styles. This conclusion differs from those of previous studies which divided EFL students into two types: field-dependent and field-independent (Fadhillah, 2013; Nozari & Siamian, 2015; Par, 2018). It is natural and logical that an individual has psychological traits in a continuum ranging from one extreme to another. The conclusion that most of the participants were found to be field-dependent dominant might be due to the fact that most of the investigated participants encountered difficulty in figuring out the embedded figure in the shapes they were given. Another influencing factor was that most of the college students under investigation were not very active in the classroom possibly due to the teachers sticking to the traditional methods of teaching, thus not encouraging students to be active

and interact with the field around them.

Moreover, while the first conclusion that the field-mixed students outperformed both groups is different from that of some previous studies concluding that field-independent students are better than field-dependent ones in reading comprehension, the second conclusion, that the field-independent dominant and the field-dependent dominant students did not differ from each other significantly in reading comprehension performance, is not new (Al-Hajaya & Al-Khresheh, 2012; Roberge & Flexer, 1984).

The findings of this study have practical implications for language teaching, especially for reading comprehension learning. It is recommended that EFL teachers use more developed teaching materials and strategies suitable for both field-dependent and field-independent students. It is also recommended that EFL teachers should be aware of their students' cognitive styles, encourage them to interact in the classroom and enlighten them about their cognitive styles. This procedure will enhance their overall classroom involvement and life-long future self-learning. It will also help EFL students and teachers to develop suitable materials for effective teaching and learning.

Language teachers of reading can use more strategies suitable for field-dependent students, such as group work, games and discussions. They should also encourage their students to be active learners in the classroom, and be engaged in the learning process by interacting with their teachers and classmates. Some suggested teaching strategies for field-dependent dominant students are classroom group reading activities, showing the passages on PPT and asking them to read it loudly and discuss it with their teacher and colleagues, attracting the students' attention by using technology in teaching (e. g. English films and videos), and reading interesting short stories during lecture time and asking the students to do the same. As for field-independent dominant students, teachers can give them reading assignments based on their level, give them good learning resources, such as links and websites to improve their reading skills, and change the place of lectures to be outside the classroom (e.g. in the library, in the activity room…etc.) to avoid boring and routine classes and to give the students the feeling of autonomy.

The findings of the study also have important implications for future researches. To support the findings of the study or reject them, researchers

can further investigate the cognitive styles of other female Arab or non-Arab EFL learners. In addition, to complement the findings about the cognitive styles of Saudi female EFL learners, researchers can investigate the cognitive styles of Saudi male EFL students. With more studies of the relationship between cognitive styles of EFL learners and learning language skills, theoretical-practical findings about the topic can be utilized more fully.

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Appendices

Appendix A

Read the text, then answer the following questions:

1. Popcorn, also known as popping corn, is a special variety of corn. Each kernel contains a tiny drop of water. When it is heated, the water expands causing the kernel to explode and flip inside out. Most US popcorn is grown in Nebraska and Indiana, and increasingly in Texas.

2. Native Americans first discovered popcorn thousands of years ago in Guatemala or Mexico. It was popped in China during the Song Dynasty (960-279) as well as in Sumatra and India long before Columbus reached the Americas. In 1948 and 1950, anthropologist Herbert Dick and botanist Earle Smith discovered ears of popcorn in the Bat Cave of west central New Mexico. The ears measured from smaller than a penny to about 2 inches. They were carbon dated to be about 5,600 years old.

3. In 1519 when he invaded Mexico, Hernando Cortes first saw popcorn when **he** met the Aztecs. Popcorn was important to the Aztecs as food, as decoration for ceremonial headdresses and necklaces, and as ornaments on statues of **their** gods. Around 1612, French explorers around the Great Lakes met Iroquois who used heated sand in a pottery vessel to make popcorn.

4. There is an unproven theory that an Indian named Quadequina brought a deerskin bag of popped corn for first Thanksgiving feast on October 15, 1621.

5. Colonial housewives served popcorn with sugar and cream for breakfast. Some colonists used a cylinder of thin sheet-iron that revolved on an axle in front of the fireplace to make popped corn.

6. In 1885, Charles Cretors of Chicago, Illinois, invented the first popcorn machine. Street vendors were soon pushing steam or gas-powered poppers through fairs, parks, and expositions. Today much of the popcorn you buy at movies and fairs is popped in machines manufactured by the Cretors family. In 1914, in Sioux City, Iowa, Cloid H. Smith created America's first branded popcorn (Jolly Time), and for the first time, popcorn was available in grocery stores.

Decide the topics of the above text and its paragraphs:

1. What is the topic of the text?
   a. _____ The History of Popcorn   b. _____ Popcorn   c. ____ The First Popcorn Machine
2. What is the topic of paragraph 1?
   a. _____What is popcorn   b. _____ Popcorn   c. _____ Popcorn History in Nebraska and India
3. What is the topic of paragraph 6?
   a. _____ The First Popcorn Machine   b. _____ Popularity of Popcorn in America   c. _____ Popcorn around the world

## Write *MI* for main idea and *SD* for supporting details.

4. What are the main idea and the supporting details of paragraph 3?
   a. _____Invaders and explorers discovered the earliest examples of popcorn.
   b. _____ Popcorn was important to the Aztecs as food.
   c. _____ Iroquois used heated sand to make popcorn.

Answer the following questions from the text:

5. What did the Aztecs use popcorn for?
6. Who first discovered popcorn?
7. Popcorn is _____.
   a. 50 hundred years old   b. Thousands of years old   c. A new invention
8. Popcorn is the official snack of _____.
   a. The state of Illinois   b. America   c. Aztecs Indians
9. The pronoun **he** in paragraph 3, line 1 refers to_____.
   a. Hernando Cortes   b. Mexico   c. popcorn
10. The pronoun **their** in paragraph 3, line 3 refers to_____.
    a. Aztecs   b. decoration   c. gods

Preview and scan the following timeline:

The History of Internet

http://www.superchooha.com/when-did-the-web-become-social-a-history
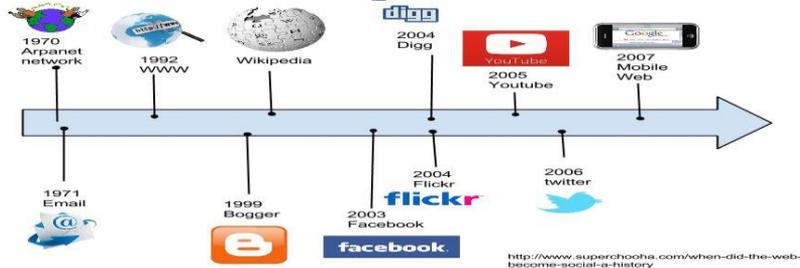
Choose the correct answer:

1. Which network came in 1999?
   a. Blogger   b. Flickr   c. Twitter   d. Email
2. In which year did "Email" start?
   a. 1907   b. 1791   c. 1179   d. 1971
3. Which network came in 2006?
   a. Twitter   b Mobile web   c. Digg   d. Youtube
4. When did "Facebook" start working?
   a. 2008   b. 2004   c.2006   d. 2003
5. When did the "WWW" start working?
   a. 1992   b. 1920   c. 1290   d. 1092
6. The latest network is_____.
   a. Twitter   b. Facebook   c. Wikipedia   d. Mobile Web

Appendix B

Dear students,

This questionnaire is designed to obtain information about the way you perceive information for learning English as a foreign language. Answer all the questions below**.** There are no correct or wrong answers.

Part 1: Demographic Information

A.   Fill in the blanks below: (all information required)
       Full name: …………………………………….ID (required): ………
       Age: ……… Level: ………...GPA: …….……..
B.   Choose the appropriate answer.
Have you studied **Reading** last semester?   ☐ Yes   ☐ No
Which Reading? ☐Reading 1   ☐Reading 2   ☐ Other (Mention):……….

Part 2:

Please check √ the appropriate line after each statement. There are no correct or wrong answers.

No.	Statement	5 Often	3 Sometimes	1 Seldom
1	I like to study alone.			
2	I study with friends or in a group.			
3	I like to study in a quiet place.			
4	I enjoy my studies and do not need any outside motivation to study.			
5	I am not overly motivated to study unless I have deadlines to meet.			
6	I tend to procrastinate over my study.			
7	I am usually prepared to participate during lectures.			
8	I prefer teachers who provide careful course outlines and objectives.			
9	I prefer teachers who encourage class discussion and activities.			

10	I prefer teachers who use lectures and textbook reading as a method of teaching.			
11	I enjoy classes that have class discussion and group activities.			
12	I enjoy virtual classes where I can attend the lecture alone in a quiet place.			

Scoring Procedures:

Place the point value on the line next to the corresponding item below. Add the points in each column to obtain the preference score under each heading. OFTEN = 5 points   SOMETIMES = 3 points   SELDOM = 1 point

| Dependent		Independent	
NO.	PTS	NO.	PTS
2		1	
5		3	
6		4	
8		7	
9		10	
11		12	
Field-Dependent Cognitive Style=		Field-Independent Cognitive Style=	

Appendix C

Dear students,

This test is designed to obtain information about the way you perceive information for learning English as a foreign language. There are no correct or wrong answers. The test has nothing to do with levels of intelligence. It is just a cognitive test.
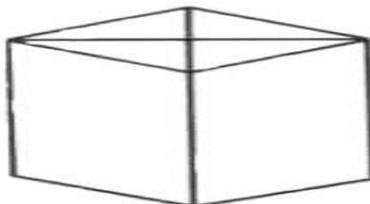
Answer the following questions:

A.   Shadow the hidden tent figure within the more complex figure.

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Hidden "tent" figure

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Dr.C.C. Kan, psychiater

B.   Shadow the shape x within the more complex figure.
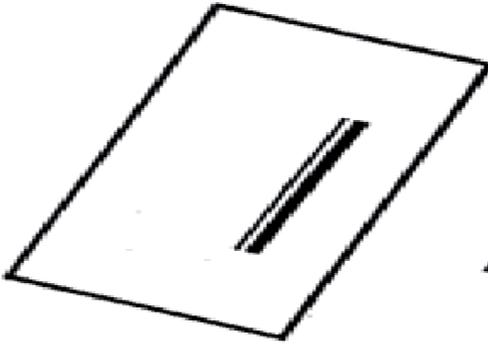
Here is a simple form which we have labeled "X":

×
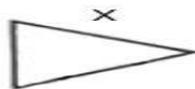
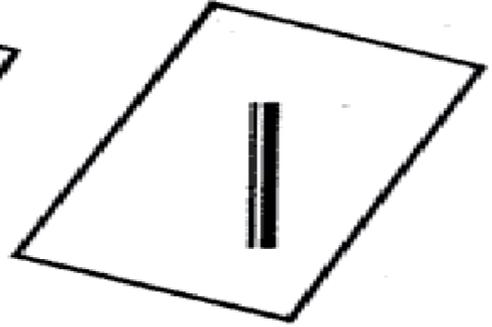This simple form, named "X", is hidden within the more complex figure below:

C.   Choose the correct answer about the following shapes.

1. _____ The rod is vertical in A. Aالعصا عمودية في
2. _____ The rod is vertical in B. Bالعصا عمودية في

<div align="center">A.   B.</div>

Your participation in this questionnaire is highly appreciated!