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# ON THE ROLE OF INDIVIDUAL LEARNER DIFFERENCES IN THE TEACHING/LEARNING OF FOREIGN LANGUAGES: THE DIMENSION OF FIELD DEPENDENCE / FIELD INDEPENDENCE. WITH MORALS FOR EFL TEACHING

The aim of this article is to present and discuss the results of a correlational study, the subject matter of which is the relationship between the cognitive style of field dependence / field independence and reading comprehension. The paper attempts to stress the role of individual learner differences in the process of second language acquisition. The emphasis, therefore, is placed on the application of psychological issues to the educational context. The reader is presented with empirical research results as well as with an in-depth analysis of these findings, followed by implications for the EFL classroom.

KEY WORDS: cognitive style, field dependence, field independence, reading comprehension, second language acquisition, individual learner differences.

# 1. Field dependence / field independence in the light of individual learner differences

It is generally admitted that the application of psychological issues to educational problems has been of crucial importance for the successful teaching and learning process. Educators are expected to notice the exceptional relationship between learners' cognitive functioning and linguistic functioning, as well as to individualize their instruction in order to meet the requirements of particular students. It should take the form of a programmed teaching phenomenon, which allows educators to accommodate individual learner differences (IDs), and in which students are able to work at their own pace and use the materials they find comprehensible. It is believed that the knowledge of IDs is essential for a better understanding of learners' needs and the proper adaptation of teaching methods. Ellis (1994) notices that L2 learners differ in the rate of acquisition and that this difference is the result of individual factors. Among these there is the dimension of field dependence (FD) / field independence (FI), which belongs to the group of cognitive styles<sup>1</sup>.

The notion of a cognitive style has been thoroughly discussed by Brown (1987) as one of three major constructs applied by every individual who "approaches a problem or learns a set of facts or organizes a combination of feelings from a unique perspective". Styles differ across individuals characterizing their way of perceiving the world, facing tasks, feeling, and thinking. Equipped with cognitive styles individuals consciously use certain methods to approach particular problems.

<sup>&</sup>lt;sup>1</sup> ELLIS, R. The Study of Second Language Acquisition. Oxford, 1994, p. 473-474.

These methods are called *strategies*. The third construct, *process*, is perceived as the most general concept. While styles and strategies differ across individuals, processes tend to be universal and common to all. Language learners engage in certain universal processes, such as *transfer* of information from their native language (NT) to a target language (TL), *interference* (when an item from NT is incorrectly transferred, and thus incorrectly associated with an item to be learned) and *overgeneralization* (when a learner generalizes particular rules beyond legitimate bounds)<sup>2</sup>.

Cognitive styles, often called *learning styles*, are defined by Keefe (1979):

Learning styles are the characteristic cognitive, affective and physiological behaviours that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment <...>. Learning style is a consistent way of functioning that reflects underlying causes of behaviour<sup>3</sup>.

A cognitive / learning style, thus, refers to the characteristic ways in which individuals approach problem-solving situations. These ways are thought to be relatively fixed. However, as Little and Singleton (1990) stress, it is possible to shape the learning style of individual learners in order to help them meet the requirements of particular learning tasks4. The knowledge how to influence the cognitive abilities of learners in a skilful way should be treated by teachers as one of the most essential targets. Even if they do not choose to shape the cognitive styles of their learners, they can still aim at the proper and meaningful modification of teaching techniques, which will help them match learners' individual requirements and differences.

The already mentioned dimension of FD / FI derives from the work of Witkin, Oltman, Raskin, and Karp (1971). They provide the following description of this construct, which will be adopted for the purpose of this paper as a working definition.

In a field dependent mode of perceiving, perception is strongly dominated by the overall organization of the surrounding field, and parts of the field are experienced as 'fused'. In a field independent mode of perceiving, parts of the field are experienced as discrete from organized ground <...>. 'Field dependent' and 'field independent', like the designations 'tall' and 'short' are relative<sup>5</sup>.

In the light of psychological analysis, the FD / FI dichotomy concerns visual perception and an individual's capacity to separate particular figures from the background. It is assessed by the Group Embedded Figures Test (GEFT), developed by Witkin, Oltman, Raskin and Karp (1971). GEFT is a perceptual psychological test, in which the subject's task is to locate a previously seen simple figure within a larger complex figure that has been organized to obscure or embed the simple figure. An example of such a simple form hidden in a complex one is presented below.

A field independent person will be able to focus on the relevant details and ignore confusing information in the context. A field dependent person, on the other hand, will be distracted by all additional lines and figures and will prove to be largely influenced by the context of surroundings. Thus, the former will be successful in the above task. What needs to be stressed at this point, however, is that the notions of field dependence and field independence represent poles in a con-

<sup>&</sup>lt;sup>2</sup> BROWN, J. D. Principles and practices in second language teaching and learning. Rowley, Mass, 1987, p. 103.

<sup>&</sup>lt;sup>3</sup> KEEFE, J. W. Student Learning Styles: Diagnosing and Prescribing Programs. Reston, 1979, p. 4.

<sup>&</sup>lt;sup>4</sup> LITTLE, D.; SINGLETON, D. Cognitive Style and Learning Approach. In Learning Styles, 1990.

<sup>&</sup>lt;sup>5</sup> WITKIN, H.; OLTMAN, P.; RASKIN, E.; KARP, S. A Manual for The Group Embedded Figures Test. Palo Alto; California, 1971, p. 12.

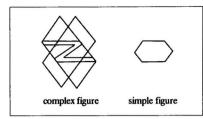


Figure 1. A sample item from GEFT

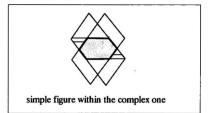


Figure 2. The answer to the task provided in GEFT

Field dependence	Field independence		
1 Personal orientation	1 Impersonal orientation		
i. e., reliance on external frame of reference in processing information	i. e., reliance on internal frame of reference in processing information		
2 Holistic learner	2 Analytic learner		
i. e., perceives a field as a whole; parts are fused with background	i. e., analyses a field in terms of its component parts; parts are distinguished from background		
3 Dependent	3 Independent		
i. e., the self-view is derived from others	i. e., sense of separate identity		
4 Socially sensitive	4 Not so socially aware		
i. e., more skilled in interpersonal / social relationships	i. e., less skilled in interpersonal / social relationships		

Table 1. Principal characteristics of a FD / FI cognitive style<sup>6</sup>

tinuum rather than alternatives. Individuals vary in the extent to which they lean towards FD or FL. It is not desirable, therefore, to classify them as better or worse learners because of their greater or smaller field sensitivity. The goal is to analyze their cognitive tendencies, predict the areas of learning in which they may encounter problems and help them solve these problems. The principal characteristics of field dependent and field independent learners are compared in the following table.

A field independent learner perceives the discrete parts of a field. This ability makes him or her skilful at analytical thinking. As a FI learner's social skills are poorly developed, s/he prefers to work independently. This kind of learner is intrinsically motivated and unresponsive to social reinforcement. A field dependent student, on the other hand, is characterized by a global way of perceiving the particular aspects of a field. Having social skills highly developed, the learner is extrinsically motivated and responsive to social reinforcement. Therefore, s/he will need much more attention from the teacher and the peer group than a field independent student.

Now we come to the question how this general description applies to the problem of reading comprehension in the EFL classroom. As has already been explained, while taking GEFT, individuals are asked to find particular simple fig-

<sup>&</sup>lt;sup>6</sup> ELLIS, R. Understanding Second Language Acquisition. Oxford, 1985, p. 115.

Study	Subjects	Aims	Measures of learning	Results
Stansfield & Hansen (1983) <sup>7</sup>	253 college students	Is there a rela- tionship between FD / FI & the acquisition of Spanish as L2?	All measures of L2 proficiency; but mainly – cloze test	<ul> <li>positive, though modest, correlations between GEFT scores and measures of Spanish proficiency;</li> <li>most notable correlation between student FI and cloze test;</li> </ul>
Hansen (1984) <sup>8</sup>	Adult learners of L2 English from different Pacific island cultures	Is there a rela- tionship between field sensitivity and a cloze test?	Cloze test	significant relationships between FI and cloze performance found however, there was considerable variation according to sub-group; ealso, effects of FI largely disappeared when scholastic attainment partialled out
Jamieson (1992) <sup>9</sup>	46 adult L2 English learners representing 16 countries	Is there a relationship between L2 proficiency and R / I & FD / I?	TOEFL – all three parts: listening test, grammar test, reading test	<ul> <li>FI – positively related to proficiency in English as a second language;</li> <li>however FI / D – not predictive of L2 improvement over the course of a semester</li> </ul>
Elliot (1995) <sup>10</sup>	43 adult langu- age learners (20 males, 23 fema- les) studying Spanish at In- diana University	Is there a relationship between FI and improvement in pronunciation?	Measurement of pronunciation – 2 tests: pronunciation pretest & posttest	<ul> <li>At the beginning of the semester: FI – was found to be a significant predictor of pronunciation accuracy; however, the differences in pronunciation ability related to FI were neutralized during the course of semester</li> </ul>
Salmani- Nodoushan (2002) <sup>11</sup>	60 Iranian students (all majoring in ESL)	Is there a relationship between FD / FI & results of communicative tests?	Measurement of communicative tests: 1990 version of IELTS and CT (main tool for data collection)	<ul> <li>FD individuals performed better on both tests: CT &amp; IELTS rather than FI subjects;</li> <li>FD / I may be regarded as a source of variance in CT;</li> </ul>

Table 2. Survey of chosen studies which have investigated the effect of FD / FI on SLA

ures in complex ones. These complex figures form a field of distracting items. A similar process takes place in the reading activity. The field here is constituted by a written text with some items familiar to the learners and some items that are new, for instance unknown words, fixed phrases or grammatical constructions. If the presence of unfamiliar items does not make it impossible to answer questions about familiar items, learners prove to be field independent. Otherwise, they are considered to be field dependent.

What follows is a presentation and a brief discussion of some previous empirical research findings concerning the relationship between the cognitive style of FD / FI and second language acquisition.

<sup>&</sup>lt;sup>7</sup> STANSFIELD, C.; HANSEN, J. Field Dependence – Independence as a Variable in Second Language Cloze Test Performance. In *TESOL Quarterly*, 1983, 17 (1), p. 29–38.

<sup>&</sup>lt;sup>8</sup> HANSEN, L. Field Dependence – Independence and Language Testing: Evidence from Six Pacific Island Cultures. In TESOL Quarterly, 1984, 18 (2), p. 311-324.

<sup>&</sup>lt;sup>9</sup> JAMIESON, J. The Cognitive Styles of Reflection / Impulsivity and Field Independence / Dependence and ESL Success. In *The Modern Language Journal*, 1992, 76, p. 491-501.

<sup>&</sup>lt;sup>10</sup> ELLIOT, A. R. Foreign Language Phonology: Field Independence, Attitude, and the Success of Formal Instruction in Spanish Pronunciation. In *The Modern Language Journal*, 1995, 79, p. 530-543.

<sup>&</sup>lt;sup>11</sup> SALMANI-NODOUSHAN, M. A. Field Dependence / Independence and Iranian EFL Learner's Performance on Communicative Tests. Tehran, 2002.

Table 2 summarizes the focus, measures and results of five different studies. All of them shed some light on the nature of the relationship existing between cognitive styles and second language learning. It may be observed that each of the researchers does find correlation between GEFT scores and measures of language proficiency. However, only Salmani-Nodoushan (2002) emphasizes that this relationship is indeed a strong one<sup>12</sup>.

The researchers use different instruments to collect data. Although in two of the presented studies a reading test is used, it only constitutes a part of the general test measuring language proficiency. Therefore, none of the researchers focuses exclusively on the specific nature of the relationship between FD / FI and reading comprehension. Exploring this particular type of relationship is the aim of the present empirical study.

# 2. The study

The empirical study described in this paper was carried out in accordance with SLA methodology and statistical procedures. An in-depth analysis of former studies presented in the literature was the basis for the formulation of the research questions and for the generation of the hypotheses. Every attempt was made to ensure that the sampling procedure should yield reliable research results and generalizations. Viewed from different perspectives, the study in question may be classified as:

- a primary research (rather than a secondary one), as it derives from primary sources of information;
- a statistical study (rather than a case study), as it does not focus on one or

a few subjects but deals with group phenomena; the researcher uses statistical analyses in order to rule out accidental results;

- a cross-sectional study, as it considers "a group of people as a cross section of possible behaviours at a particular point in time" (Brown, 1999)<sup>13</sup>;
- a quantitative study, as it is designed to test a hypothesis through the use of objective instruments and appropriate statistical analyses;
- a focused description, as it is used by the researcher to observe and discuss a particular set of variables or issues;
- 6) a correlational study, as the researcher measures certain learner characteristics and correlates them with the learner's second language proficiency; in this kind of study the interrelationship of two variables is studied at the same time.

The aim of the study was to investigate whether there was any relationship between FD / FI and the results of second language reading comprehension (RC) tests. An additional objective was to establish whether FD / FI was correlated with age and sex. For the purpose of the study, a null hypothesis (which the researcher hopes to reject on the basis of the outcomes obtained from the study) and an alternative hypothesis (which the researcher will accept when evidence exists to establish its truth) were formulated.

- H<sub>0</sub>: there is no relationship between FD / FI and the results of reading comprehension tests;
- H<sub>1</sub>: there is a relationship between FD / FI and the results of reading comprehension tests.

<sup>12</sup> SALMANI-NODOUSHAN, footnote 11.

<sup>&</sup>lt;sup>13</sup> BROWN, J. D. Understanding Research in Second Language Learning. A Teacher's Guide to Statistics and Research Design. Cambridge, 1999.

Once the hypotheses were advanced, the participants and instruments were selected, and the statistical procedures were determined.

## 2.1. The participants

The sample study included 216 subjects, 95 of whom were male and 121 female. They were all secondary school students from Kielce: 101 second form students (16-year-olds) and 109 fourth form students (18-year-olds). The population to which the findings of the research would be generalized consisted of students for whom English as a school subject was obligatory. Secondary school students who learnt English as an optional subject, as well as students of technical and vocational schools had been excluded from the population.

A multistage cluster sampling procedure was used in the study. By means of a cast of dice three schools were sampled in the first stage. They were primary sampling units. In the second stage, by means of a cast of dice as well, six classes, secondary sampling units, were chosen. From each school two classes were sampled, one second form and one fourth form.

### 2.2. The instruments

Data collection procedures for this study were characterized by a high degree of explicitness. The Group Embedded Figures Test (GEFT), mentioned earlier in this paper, was used to classify subjects' field sensitivity. As has already been stated, the test contains simple and complex figures (18 forms of each type). The simple forms are printed on the back cover of each GEFT booklet so that they cannot be exposed simultaneously with the complex figures. The score is the total number of simple forms correctly traced in the booklet. The ease of administrating and scoring the test, as well as the evidence given in literature with respect to its reliability and validity, make GEFT a satisfactory instrument in research requiring group testing, and for this reason, it was chosen as an instrument for measuring FD / FI in the present study.

Because of a considerable difference at the level of language proficiency represented by the two age groups of subjects, two reading comprehension (RC) tests were used, one for the 16-yearolds and the other for the 18-year-olds. Both tests contained some grammatical and lexical elements not known to the subjects of the study. The subjects were made to move round the field which did not raise serious language difficulties, but which contained several unknown elements. It had been hypothesized that those who would be distracted by unknown elements, and thus would have difficulties with doing the test, would also score a small number of points from GEFT. Therefore, they would prove to be field dependent. On the contrary, those who would not feel lost among unfamiliar elements and who would score more points in the RC test, would prove to be field independent. In order to select proper RC tests, a few teachers of English from the schools in which the study was carried out had been consulted. The information about the level of language difficulty the students represented had been obtained. As a result, the 16-year-olds took a pre-intermediate reading test whereas the test for the 18-year-olds was on an upper-intermediate level.

For every student a booklet of GEFT and a copy of a RC test were prepared. The subjects were asked to enclose information about their age and sex. They were also asked whether they had any extracurricular lessons of English.

## 2.3. The procedure

The meetings with the groups of students took place in September 2003. Each meeting lasted

about 90 minutes (20 minutes for GEFT, 60 minutes for RC and 10 minutes for the instructions). Three statistical procedures were used for the analysis of the data gathered. The first was a chisquare test for the verification of the research questions and the advanced hypothesis. The second procedure was the use of Crammer V coefficient, which enabled the researcher to estimate the strength of the interaction between the variables. Finally, the third procedure was the use of the coefficient of correlation r, which helped to indicate the direction of the interaction between the variables. Figure 3 presents the variables used in the study.

# 3. Findings

The findings of the study are presented in the following order:

- the relationship between an independent variable and moderator variables (i.e. GEFT results according to age and sex; see: 3.1.),
- the relationship between a dependent variable and moderator variables (i.e. RC results according to age and sex; see: 3.2.),
- the relationship between an independent variable and a dependent variable (i.e. a correlation between GEFT results and RC results; see: 3.3.).

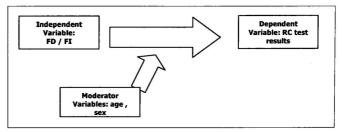


Figure 3. Variables used in the study

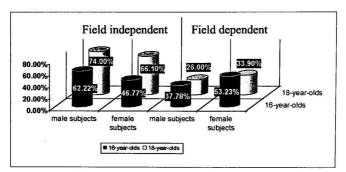


Figure 4. The percentage of FD / FI students according to their age and sex

3.1. The results of GEFT according to age and sex

88 students, out of 216 examined by means of GEFT, proved to be field dependent. They constitute 40.74% of all the subjects of the study. The rest of the students (59.26%) were field independent. It can also be observed at this point that the level of subjects' field independence increases with age. Thus the older a student is the more field independent s/he proves to be. The GEFT scores were also examined with respect to the moderator variable of sex. It has been proved that in both age groups male participants tend to be more field independent than females. The relationship between an independent variable of the study (GEFT results) and moderator variables (age, sex) is illustrated in Figure 4.

3.2. The results of RC according to age and sex

Figure 5 presents the results that the subjects obtained from the reading comprehension test. Both age groups and both sexes are taken into account. Four equal class intervals have been created in order to present the number of points the subjects scored from the RC test. These are: 0-5, 6-11, 12-17, 18-23. The percentage of people is given according to each class.

It may be observed that in the 0-5 class of RC there are only female subjects (11.29 % of 16-year-olds and 1.69 % of 18-year-olds). In the 6-11 class of RC the percentage of male subjects is smaller than the percentage of female subjects (for 16-year-olds: 33.33 % < 45.16 %; for 18-year-olds: 20.00 % < 28.81 %). In the 12-17 class there are more 16-year-old men than 16-year-old women (55.56 % > 37.10 %). However, in the group of 18-year-olds there are more women than men (57.63 % > 44 %). It would seem that in the older age group women achieve better results than men. One finds this is not true when the 18-23 class of RC is analyzed. The percentage of 18-year-old men in this class is much bigger than 18-year-old women (36.00 % > 11.68 %). As this is also true for the younger group (11.11 % > 6.45 %), one can come to the conclusion that male subjects achieve statistically better results from RC tests than females.

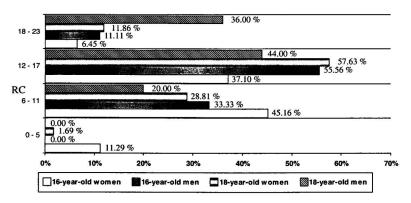


Figure 5. RC test results according to age and sex

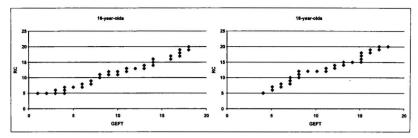


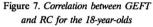
Figure 6. Correlation between GEFT and RC for the 16-year-olds

So far the GEFT results and RC results according to two moderator variables have been given. However, the main relationship that is to be analyzed is between an independent and a dependent variable.

# 3.3. The correlation between GEFT results and RC results

The following figures (Fig. 6 & Fig. 7) present the results that participants of both age groups achieved from GEFT and RC.

It is irrefutable that the GEFT results and the RC results are correlated. The more points subjects scored from GEFT, the more they scored from RC. However, in order to verify the hypothesis by means of statistical procedures, namely the chi-square test, the coefficient of correlation r and Cramer V coefficient, the data need to be gathered in a contingency table. In this kind of table the data are classified according to two criteria, in this case these are GEFT results and RC results, and are illustrated by means of equal class intervals. In the present study the subjects could score 0-18 points from GEFT and 0-20 points from RC. The researcher decided to create four equal classes of points. For RC these were: 0-5 points, 6-11 points, 12-17 points, 18-23 points, whereas for GEFT the classes were: 0-4 points, 5-9 points, 10-14 points, 15-19 points. The last



class, both for GEFT and for RC, went beyond the actual number of points the subjects could score from the tests, which was conditioned by the necessity of creating equal class intervals. This fact, however, did not influence the credibility and validity of the research results. The data gathered in contingency tables of the present study are shown in the following figures (Fig. 8 & Fig. 9)

The preliminary analysis of the above figures led to the following conclusions:

- Subjects who scored a small number of points from GEFT, scored a small number of points from RC.
- Subjects who scored a large number of points from GEFT, scored a large number of points from RC.
- 3) There are no subjects who scored a small number of points from GEFT (0-4 class interval) and a big number of points from RC (18-23 class interval).
- 4) There are no subjects who scored a small number of points from RC (0-5 class interval) and a big number of points from GEFT (15-19 class interval).

### 3.4. Statistical analysis of study results

The final verification of the advanced hypothesis is possible through the proper use of statistical

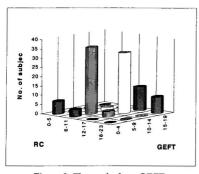


Figure 8. The results from GEFT and RC achieved by the 16-year-olds

procedures. In this paper only the final calculations, done on the basis of data gathered in a contingency table, will be presented. The calculations were carried out separately for every research question.

1) Is there a relationship between FD / FI and the results of RC tests?

 $H_0$ : there is no relationship between FD / FI & RC

 $H_1$ : there is a relationship between FD / FI & RC

The hypothesis was verified separately for both age groups with the use of the chi-square test and Cramer V coefficient. On the basis of data gathered it was calculated that for the 16-yearolds  $\chi^2$  equals 178.74, whereas for the 18-yearolds it equals 193.16. The value of  $\chi^2 \alpha$ , which comes from the percentiles of chi-square distribution, equals 16.919. As in both age groups  $\chi^2$ >  $\chi^2 \alpha$ ,  $H_0$  is rejected. Therefore it has been proved that there exists a relationship between FD/FI and the results of RC tests both for the 16year-olds and for the 18-year-olds. The alternative hypothesis has been accepted.

To estimate the strength of this relationship the value of Cramer V coefficient needed to be

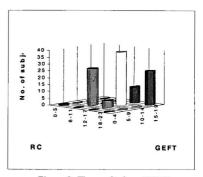


Figure 9. The results from GEFT and RC achieved by the 18-year-olds

calculated. For the 16 year-olds V = 0.75, whereas for the 18-year-olds V = 0.77. As the value of Cramer V coefficient may vary from 0 to 1.0 it should be noticed that the relationship between FD / FI and RC is a strong one (V = 0.75; 0.77).

 Is field independent subjects' performance on the reading comprehension test better than that of field dependent individuals?

In order to determine whether FI subjects achieve better results from RC test than FD subjects the coefficient of correlation r needed to be estimated. With the help of the values of covariance and standard deviations of the variables used in the study it was calculated that both for the 16year-olds and for the 18-year-olds r = 0.88. The coefficient of correlation may range from - 1.00 to 1.00 (with values above 0.0 the correlation is directly proportional, whereas with values below 0.0 it is inversely proportional). As in this study for both age groups r = 0.88, the correlation is directly proportional. It means that the more subjects score in GEFT, the more they score in RC. The correlation is illustrated in Figure 6 and Figure 7 (presented earlier on page 12).

3) Is field dependence / field independence related to age?

H<sub>0</sub>: FD / FI is not related to age H<sub>1</sub>: FD / FI is related to age

The outcomes of the calculations are the following:  $\chi^2 = 13.04$ ,  $\chi^2 \alpha = 7.81$ , V = 0.25

As  $\chi^2 > \chi^2 \alpha$ , H<sub>0</sub> is rejected. Therefore, the alternative hypothesis has been accepted. FD/FI is related to age, though the relationship is not a strong one as V equals only 0.25.

 4) Is field dependence / field independence related to sex?
 H<sub>0</sub>: FD / FI is not related to sex.

 $H_1$ : FD / FI is related to sex.

The outcomes for the 16-year-olds:  $\chi^2 = 12.78$ ,  $\chi^2 \alpha = 7.81$ , V = 0.35. The outcomes for the 18-year-olds:  $\chi^2 = 9.57$ ,  $\chi^2 \alpha = 7.81$ , V = 0.28.

As in both groups  $\chi^2 > \chi^{20}$ , H<sub>0</sub> is rejected. It has been proved that FD / FI is related to sex, though the relationship is not a strong one (for the 16-year-olds V equals 0.35, for the 18-yearolds V equals 0.28).

### 4. Discussion and implications for teaching

Taking into account the outcomes obtained from the study and the results of statistical procedures, it can be stated that there exists a relationship between field dependence / field independence and the results of reading comprehension tests. It has been proved that the relationship is strong as even a small change in the numerical value of GEFT leads to a change in the numerical value of RC. What is more, it has been observed that the relationship is directly proportional. Therefore, the more field independent the subjects are, the better their results from reading comprehension tests are. Conversely, the fewer points one gets from GEFT (the more field dependent s/he proves to be), the fewer points s/he gets from RC. The correlation has been described as high positive.

As far as moderator variables are concerned. the relationship between age and sex of the subjects and their GEFT results has also been confirmed (though it is not strong). Older subjects prove to be more field independent and, as such, they score more points from RC. Female subjects are more field dependent and this is the reason why they receive statistically worse results from reading comprehension tests. The role that the sex factor plays in the modification of the relationship between independent and dependent variables is more significant in the group of the 16-year-olds than in the group of the 18-year-olds. It may be concluded that the role sex factor plays as a moderator variable weakens with age of the subjects.

Can the findings of this study be regarded as supporting the hypothesis that individual approaches lead to more successful language learning and teaching? It has been statistically proved they can. As the study was carried out in accordance with SLA methodology, its findings should be regarded as reliable, and as such they can contribute to the process of shaping one's programmed teaching or learning phenomenon. The question how skilful teachers are in understanding and manipulating students' individual differences constitutes an important, one may even say the most important, variable of the learning-teaching process.

In the present paper attention has been focused on cognitive styles, which, as has already been stated, should not be treated as stable characteristics of particular individuals. Although certain ways of approaching a task give greater success to one student than to another, it is possible for any individual to evoke appropriate styles in different contexts and to benefit from them. The teacher's role is to help students use different styles according to the tasks that are to be performed. What can therefore be done to help field dependent learners become more field independent? What can be done to help them achieve better results from reading comprehension tests? Is there any reason for making field independent students become more field dependent? The following suggestions may serve as the answers to these questions. However, more research in the field should be done to state whether the implications can be treated as reliable or not.

It has been proved that field independent students are more successful in reading activities than field dependent learners. Reading comprehension tests are usually constructed in a way that suits field independent students rather than field dependent ones. Although there may be some questions concerning the general ideas of a reading passage (those questions are eagerly answered by FD learners), the majority of exercises requires the ability of finding details in a field of confusing information. The idea is to comprehend the text in spite of the presence of unfamiliar, grammatical or lexical, items. The task would be easy to perform for FI learners and would cause trouble to FD ones. The latter would like to be given translations of new lexical items and explanations as far as grammar of the text is concerned. Once they are given all necessary information and once they understand the general idea of the text, which is to be analyzed, they can look for details. This would be the most welcome procedure of a reading lesson for FD students. However, as the current methods of teaching reading depart from this procedure, other steps can be taken in order to help students cope with the tasks efficiently. The teachers could consider giving more scanning tasks to field dependent subjects, making them become more field independent. What can also be taken into consideration is a careful balance of whole-class, small-group and individual activities. Whole-class activities help each student become an accepted member of a group, develop common goals, share information and solve problems together. Small-group work is better suited

to the varying abilities, needs and interests of smaller groups within the class as a whole. Individualized activities are essential if students are to develop certain skills and attitudes, and learn how to work independently.

It has been stressed in the present paper that field dependent learners prefer group work to individual activities. They like to work with others to achieve a common goal. They like to assist others and they are sensitive to opinions and feelings of others. Field independent persons, conversely, prefer to work independently. They are inattentive to social environment when working. They like to gain individual recognition. As these are field dependent learners who seem to have problems with reading comprehension tasks in a classroom, certain steps can be made in order to help them feel more secure and help them gain some kind of reinforcement from their learning environment. The goal can be achieved with the help of so called differential-ability grouping in which students who differ in ability are placed in the same group and help each other solve different problems. Creating small groups, of three or four, in which there would be both field dependent and field independent learners working together, would be a good idea for a post-reading phase of the lesson. This could raise the objection that the FD learners are favoured because FI learners do not appreciate group work. However, as the group of field independent individuals is privileged as far as reading comprehension tasks are concerned, some concessions can be made to field dependent learners. Other criticisms of having these students work together on an assignment are that better learners would be held back by slower ones, that most of the work would be done by one student and that the members of the group, especially the FD persons, would not learn how to work individually. Certainly, all these drawbacks are present when group work is poorly organized. However, they can be avoided if there

is sufficient teacher-student planning. The students should recognize their responsibility to the group and to the class for doing a fair portion of the work. The question whether better students should help the slower ones has always been regarded as controversial and so far no unequivocal answer has been given. However, the generally accepted belief that stronger individuals should help the weaker ones can turn out to be effective in a classroom. While working in small groups, field dependent learners will feel more secure. Given the help of FI learners, they will be more successful in doing reading comprehension exercises and learning how to cope with unfamiliar items in a field of a reading passage.

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UŽSIENIO KALBŲ MOKYMO / ĮSISĄVINIMO PROCESO PRIKLAUSOMUMO / NEPRIKLAU-SOMUMO NUO LAUKO DUOMENŲ REIKŠ-MĖ ATSIŽVELGIANT Į MOKSLEIVIŲ INDI-VIDUALIAS YPATYBES. PRAKTIŠKI PATA-RIMAI ANGLŲ KALBOS MOKYTOJAMS

### Santrauka

Šiamestraipsnyje pateikiama koreliacinių tyrimų atliktų 2003 m. rugsėjo mėnesį trijose Kielcų miesto bendrojo lavinimo vidurinėse mokyklose rezultatai. Moksliniuose tyrimuose dalyvavo 216 moksleivių. Atliktų tyrimų esmė – ištirti priklausomumo / nepriklausomumo ryšį tarp duomenų lauko (vieno iš kognityvinio stiliaus) ir sąmoningo skaitymo. Atliekant tyrimus buvo naudojami tokie būdai: nepriklausomo kintamumo būdas – testo rezultatai apibrėžiantys tiriamų vienetų (testas GEFT) priklausomumą / nepriklausomumą nuo duomenų lauko; priklausomo kintamumo būdas – rezultatai apibrėžiantys sąmoningo anglų kalbos skaitymo lygį (testas RC), modeliuojamo kintamumo būdas – apibrėžiantis priklausomumą nuo amžiaus ir lyties. Can FI learners benefit from the proposed learning situation? It is assumed they can as they will be forced to work in a group and to cope with others in order to achieve a common goal. It will help them become more skilled in interpersonal / social relationships. This type of classroom activity may make them appreciate the idea of group work.

Being aware of students' cognitive abilities, trying to accommodate their individual needs, helping them evoke particular learning styles in different learning situations should be perceived by contemporary educators as essential factors in an effective teaching process.

# Anna Jantarska

Akademia Świętokrzyska im. Jana Kochanowskiego w Kielcach

ROLA ZALEŻNOŚCI / NIEZALEŻNOŚCI OD POLA DANYCH W NAUCZANIU / PRZYSWA-JANIU JĘZYKÓW OBCYCH NA TLE CECH OSOBOWYCH UCZNIA. PRAKTYCZNE WSKA-ZÓWKI DLA NAUCZYCIELI JĘZYKA AN-GIELSKIEGO

## Streszczenie

W niniejszym artykule przedstawiono wyniki badania korelacyjnego przeprowadzonego we wrześniu 2003 roku w trzech kieleckich liceach ogólnokształcących na próbie liczącej 216 uczestników. Badano istnienie i siłę związku pomiędzy zależnością / niezależnością od pola danych (jednym ze stylów kognitywnych) a czytaniem ze zrozumieniem. W badaniu wykorzystano następujące zmienne: zmienną niezależną – wynik testu określającego zależność / niezależność od pola badanych jednostek (test: GEFT), zmienną zależną – wynik testu określającego poziom czytania ze zrozumieniem w języku angielskim (test RC), zmienne modyfikujące – wiek i płeć uczestników. Na podstawie wnikliwie przeprowadzonych analiz Statistinės analizės pagrindu straipsnyje įrodomas stiprus ryšys tarp tiriamo kognityvinio stiliaus ir sąmoningo skaitymo. Nustatoma, kad šio ryšio stiprumas kinta priklausomai nuo amžiaus ir lyties. Tyrimų rezultatai patvirtina individualaus užsienio kalbų mokymo proceso būtinumą ir gali turėti įtakos šio proceso formavimui.

REIKŠMINIAI ŽODŽIAI: kognityvinis stilius, priklausomumas nuo duomenų lauko, nepriklausomumas nuo duomenų lauko, sąmoningas skaitymas, užsienio kalbos įsisavinimas, individualūs moksleivių skirtumai. statystycznych udowodniono istnienie silnego związku pomiędzy badanym stylem kognitywnym a poziomem czytania ze zrozumieniem. Ustałono, iż siła tego związku zmienia się wraz z wiekiem i jest zależna od płci. Uzyskane wyniki badań potwierdzają potrzebę indywidualizacji procesu nauczania języka obcego i mogą mieć wpływ na sposób kształtowania tego procesu przez poszczególnych nauczycieli.

SŁOWA KLUCZE: styl kognitywny, zależność od pola, niezależność od pola, czytanie ze zrozumieniem, przyswajanie języka drugiego / obcego, różnice indywidualne uczących się.

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