

The impact of individual differences on foreign language learning : the case of first year LMD students of English at Batna-2 university

By Zitouni Khadidja-Samira

Doctoral Student at Batna 2 University

Supervised by: Prof. Nedjai Mohamed-Salah

Resumé

Le présent document cherche à examiner comment les différences entre les apprenants interagissent avec le succès ou l'échec dans le processus d'apprentissage. Par conséquent, l'objectif principal de cette recherche est de tenter d'expliquer les principales différences entre les individus et d'exposer dans quelle mesure ces différences ont un impact sur l'apprentissage des individus. Pour vérifier la validité et l'efficacité de notre étude, nous avons administré au hasard un questionnaire auprès de cinquante apprenants d'anglais langue étrangère à l'Université Batna-2. Après avoir recueilli des données liées à leurs différences au niveau du genre, de la situation familiale, de la date de naissance, de la motivation académique, de la personnalité et du style cognitif, les apprenants ont été soumis à un test de performance pour voir si leurs différences ont vraiment un impact sur leur apprentissage. Les résultats obtenus indiquent en effet que les différences individuelles, en particulier dans le genre, le type de personnalité et la motivation académique, influent dans une large mesure sur le processus d'apprentissage des langues étrangères.

Mots-clés: Différences . Apprentissage .Langues étrangères, Genre . Situation dans la

Abstract

The present paper seeks to examine how learners' differences interact with success or failure in the learning process. Therefore, the main objective of this research is to attempt to explain the main differences between individuals and to expose the extent to which these differences have an impact on individuals' learning. To check the validity and effectiveness of our study, we have randomly administered a questionnaire to fifty learners of English as a foreign language at Batna-2 University. After collecting data related to their differences at the level of gender, family position, date of birth, academic motivation, personality and cognitive style, learners have been submitted to a performance test to see whether their differences do really have an impact on their learning. Results obtained do in fact indicate that individual differences, especially in gender, personality type and academic motivation, impact to a great extent the foreign language learning

process.

Keywords: Individuals' differences, foreign language learning, gender, the position in the family, personality, anxiety, academic motivation, date of birth, cognitive style.

Introduction

Learning a language vary enormously from one learner to another. This is true for both first language and second/foreign language acquisition although there exists a remarkable difference. Concerning mother tongue language acquisition, children differ in their rate of acquisition, but all attain full achievement, except for those with mental deficiencies or environmental deprivation. However, in second/foreign language acquisition, learners differ in the speed of acquisition as well as in the achievement's level. How can these individual differences in achievement be explained?

Evidently, this study considers some of the cognitive and personal factors which consist of gender, family position, date of birth, academic achievement, personality and cognitive style. In addition, it seeks to understand how these different factors are related and how they interact with learners' experience in learning a foreign language.

Literature overview

The inquiry of individual differences dates back almost to the emergence of the modern psychology (like Cattell, 1890; Cattell & Farrand, 1896). Thereupon, interest in individual differences has increased since the 1970s till it has become an important aspect of investigation in second/foreign language learning (Horwitz, 2000). Basically, the literature reveals that individual differences that are inherent in the learner can predict success or failure in the learning process. These differences consist of gender, position in the family, date of birth, anxiety as well as personality variables such as academic motivation and cognitive style.

Gender differences.

The influence of gender on learning is as much a complex issue that most studies appear to be contradictory. However, almost all researchers do agree on the point that there exist gender differences in both ability and achievement (Gustafsson and Undheim, 1996). Additionally, it seems that parents and teachers are not only the ones who treat boys and girls differently but boys and girls, in their turn, respond differently to the same treatment. Some of the differences between genders can be summarised as follow:

- Boys are better at tasks requiring spatial or mathematical abilities whereas girls at those requiring verbal fluency (Turner, 1977).
- Girls learn to count earlier than boys. However, boys show higher educational attainment during secondary school (Maccoby, 1966).
- Creative girls are closer to their fathers, and creative boys reported to be closer to their mothers (Helson, 1971). This finding shows that girls with higher achievement motivation were more likely to have 'hostile' (unfriendly and non-nurturant) mothers.

Moreover, girls and boys possess different patterns of achievement. Indeed, girls are more likely to achieve better grades in the early years of school and score higher on IQ tests than boys do. But this position is reversed in the secondary school. These differences in achievement are noticeable in the fact that boys are more autonomous and selective. They perform well only in subjects they like (Sontag & Kagan, 1967). Girls, on the other hand, achieve a similar standard in all subjects. In addition, boys are more realistic when they judge their own performances. Girls are more afraid of failure and often retreat from an intellectual challenge (Sontag & Kagan, 1967).

The child's position in the family.

Besides gender differences, birth order of children in the family and age space can also affect the learning process in general, and academic achievement in particular. Accordingly, scholars agreed that first-borns are more likely to achieve eminence. Adams (1972), for instance, claims that “the most consistent finding in this area has been the greater educational attainment, including college attendance, among first-borns, (including onlies)” (p. 414). Likewise, first-borns are found to have higher IQs than later-borns. This seems to be true due to the fact that mothers interact differently with their first-born children concerning their achievement level (Turner, 1977). In fact, they are more supportive and cautious with boys, but more demanding, exacting and intrusive with girls.

Concerning age space, Rosenberg and Sutton-Smith (1969) maintain that boys' cognitive achievement can be higher for first-borns if there is a large age space between them and their siblings. Hence, large age spacing in boys maximises and reinforces the opportunity for gender typical independence and automatically facilitates their cognitive functioning. In the opposite, girls who had sisters close to them in age achieve higher scores. This is explained in terms of dependency, for the fact that close age spacing increases the opportunity for gender-typical dependency in girls and facilitates their cognitive functioning.

Date of birth. The effect of birth on learners' performance is argued by different researchers (Sutton, 1967; Freyman, 1965). Generally speaking, people born early in the year are more vigorous and eminent whereas those born in summer are educationally backwards and are more likely to be in lower streams. Furthermore, Freyman (1965), after analysing the records of over 8,000 children, concludes that people born between May and August were educationally at a disadvantage which was exacerbated by streaming.

Anxiety.

The factor of anxiety is so central to the learning situation. It is more likely to hinder school achievement than to facilitate it. Accordingly, Holt (1964) remarked that sometimes intelligent children act unintelligently. His diagnostic was that these children are scared. Additionally, the higher level of anxiety correlates with lower IQ, lower school achievement and lower self-esteem. But high IQ subjects also proved to have a high level of anxiety. Hence, anxiety hinders low IQ subjects but improves the scores of IQs.

Leaning, personality and cognitive style.

Achievement may depend on the personality of the learner and his cognitive style. Learners may be calm, moody, nervous, restless and so on (Turner, 1977). Thus, it is worth mentioning that each type of personality has its effect on learning. Now as concerns cognitive styles, they are ways of approaching learning and problem-solving tasks. Messick (1989) stated that "cognitive styles are for the most part, information-processing habits. They are characteristics modes of operation which, although not necessarily completely independent of content, tend to function across a variety of content areas" (p. 10). This definition is not the only one. The identification of cognitive styles has been a matter of fierce debate among researchers. According to their cognitive styles, learners are either 'field dependent' or 'field independent'.

Academic motivation.

Motivation correlated more closely with school attainment than did reasoning ability. People who are motivated to succeed are likely to do better than others who are not. It is necessary to clarify that not all forms of motivation are equal even if they lead to the same result of increasing achievement (Entwistle, 1968). Thus, Different people are motivated in different ways and hence need different forms of stimulation. Of course, aspects that have motivated one child may, in fact, act as a disincentive to another. Achievement

motivation as exhibited to school has three components: cognitive drive, the ego-enhancing and the motive of affiliation (Ausubel, 1968). In the cognitive drive, the learner finds the task intrinsically interesting or wishes to be competent in it (Ausubel, 1968). Concerning the ego-enhancing, the person is motivated not by intrinsic interest and desire but by extrinsic rewards such as status and praise (Ausubel, 1968). The motive of affiliation concerns the individual who attempts to gain the satisfaction of those with whom he wants to affiliate. But, in reality, if the child affiliates with those who do not value academic achievement, he can be affected negatively (Ausubel, 1968).

Therefore, Individual differences, such as gender differences, date of birth, age space, anxiety and so on, impact learners both positively and negatively. Therefore, individuals have been described as field independent or field dependent, depending on whether they separate details from the whole or see things more holistically. There are many questions about how personality difference and cognitive style interact with success in the learning process. Thus, many researches have dealt with in order to explain the main differences among individuals and to expose to what extent these differences have an impact on individuals' learning.

Methodology

The present research into individual differences in foreign language learning is carried out through a quantitative method. It explores two data sources which consist of a questionnaire and a performance test. The questionnaire was administered to collect data related to variables that determine individual differences like gender, position in the family, date of birth, academic motivation, personality and cognitive style. The performance test, on the other hand, endeavours to uncover whether these personal variables have any impact on foreign language learning.

The population targeted for this study is first-year LMD students from English department at Batna-2 University. Since it is difficult to conduct the study with the whole population, which consists of 796 students, we have randomly selected 50 students to be our sample.

The questionnaire.

Data collected from the questionnaire are visually depicted in the following tables.

Item 1. Please, indicate your gender

Table 1. Leaners' gender

| Male | Female |
|-------------|---------------|
| 11 | 39 |

Item 2. What is your position in the family?

Table 2.The position in the family

| Position | First | Second | Third | Fourth | Fifth | Sixth | Seventh | Eighth | Last |
|------------------|-------|--------|-------|--------|-------|-------|---------|--------|------|
| Frequency | 12 | 08 | 13 | 02 | 00 | 00 | 00 | 00 | 15 |

Item 3. In which month have you born?

Table 3.Date of birth

| Month | Frequency |
|--------------|------------------|
| January | 05 |
| February | 06 |
| March | 08 |
| April | 03 |
| May | 05 |
| June | 01 |
| July | 04 |
| August | 07 |
| September | 03 |
| October | 05 |
| November | 02 |
| December | 01 |

*Item 4.*Are you anxious?

Table 04.Anxiety

| Yes | No |
|------------|-----------|
| 28 | 22 |

Item 5. Which type of personality do you hold?

Table 5. Personality type

| Personality type | Openness to experience | Conscientiousness | Extraversion | Agreeableness | Emotional Stability |
|-------------------------|------------------------|-------------------|--------------|---------------|---------------------|
| Frequency | 07 | 13 | 14 | 11 | 05 |

*Item 6.*where do you get your academic motivation?

Table 6. Academic motivation

| Source of motivation | Parental encouragement | Personal motivation |
|----------------------|------------------------|---------------------|
| Frequency | 16 | 34 |

The performance test.

The tool of performance test was designed depending on a CCL module that learners have been taught for two semesters. The objective behind this tool is to check if individual differences really affect the process of foreign language learning. Hence, data collected are elucidated as follow:

Table 7. The relationship between learner' gender, anxiety and personality with their performance

| | Gender | | Anxiety | | Personality type | | | | |
|---------|--------|--------|---------|----|------------------|-------------------|--------------|---------------|---------------------|
| | Male | Female | Yes | No | Openness | Conscientiousness | Extraversion | Agreeableness | Emotional Stability |
| [0-5] | 03 | 02 | 04 | 01 | 02 | 00 | 02 | 00 | 01 |
| [6-10] | 04 | 09 | 13 | 00 | 04 | 02 | 03 | 08 | 00 |
| [11-15] | 03 | 20 | 11 | 12 | 01 | 05 | 08 | 03 | 02 |
| [16-20] | 01 | 08 | 00 | 09 | 00 | 06 | 01 | 00 | 02 |

Data collected in this table show that gender may, indeed, have an impact on the achievement of learners. As it is demonstrated in the table above, the lowest grades were obtained by males and the highest ones were obtained by females. This could be related with what has already been suggested by researchers that males are better at tasks requiring spatial or mathematical abilities and females at those requiring verbal fluency.

Also, the anxiety variable seems to impact the learners' performance deeply. In this vein, the majority of participants who indicated that they are anxious have obtained marks ranged from zero to ten. However, those with good marks were not anxious. Thus, anxiety factor may well influence the learning process negatively.

Concerning the personality type, it is obvious that learners' personality has a considerable effect on the learning process. Hence, the elite class was obtained by those with consciousness type and the lower class by those with openness to experience type. Therefore, learners' way of thinking and performance are bounded by their personality.

Table 8.

The relationship between learners' position in the family and motivation with their performance

| | Position in the family | | | | | Academic motivation | |
|---------|------------------------|--------|-------|--------|------|------------------------|---------------------|
| | First | Second | Third | Fourth | Last | Parental encouragement | Personal motivation |
| [0-5] | 00 | 01 | 02 | 00 | 02 | 01 | 04 |
| [6-10] | 01 | 00 | 10 | 01 | 02 | 06 | 07 |
| [11-15] | 08 | 05 | 01 | 00 | 08 | 07 | 16 |
| [16-20] | 03 | 02 | 00 | 01 | 03 | 02 | 06 |

Position in the family is another influential factor. In this regard, almost all first-born learners have got good marks. The worst marks, however, were obtained by those in the third position. Actually, this could be explained from the point that first-born learners are more independent and self-estimate than the

third-born ones. Additionally, learners who get their academic motivation from their personal desire are more likely to

achieve better than those who are supported and encouraged by their parents. This is related with the intrinsic and extrinsic stimulation.

Table 9.The relationship between learners’ date of birth with their performance

| | Date of birth | | | | | | | | | | | |
|---------|---------------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| | January | February | March | April | May | June | July | August | September | October | November | December |
| [0-5] | 00 | 00 | 01 | 00 | 01 | 00 | 02 | 01 | 00 | 00 | 00 | 00 |
| [6-10] | 00 | 03 | 00 | 02 | 01 | 00 | 00 | 04 | 00 | 03 | 00 | 00 |
| [11-15] | 03 | 02 | 05 | 01 | 03 | 00 | 01 | 02 | 02 | 02 | 02 | 00 |
| [16-20] | 02 | 01 | 02 | 00 | 00 | 01 | 01 | 00 | 01 | 00 | 00 | 01 |

As already mentioned in the literature review, date of birth has a strong impact on the individual performance. Indeed, data obtained in this item proved that participants who are born early in the year perform better. Yet, it might be fair to state that date of birth should be taken into consideration while investigating learners’ performance.

Conclusion

The activity of teaching is found to be more interpersonal than professional phenomena. In fact, to be successful requires the teacher to understand, as thoroughly as possible, the behaviour of the learner. Of course, investigating learners' performance and achievements is an important step to all academics and educational researchers. In doing so, the present work suggests some internal and external factors that may influence the foreign language learning process. Hence, among these factors some have been proved to be highly influential whereas others need to be more investigated. In fact, gender, personality type and academic motivation are found to have a deep impact on the learners' performance. Concerning date of birth, anxiety and position in the family are other factors that may also influence, in a way or another, the foreign language learning process. Therefore, the individual difference is a crucial issue to be considered in learning or teaching a foreign language.

References

- Adams, B. N. (1972). Birth order: a critical review. *Sociometry* 35 (3): 411-439.
- Ausubel, D. P. (1968). *Educational psychology: a cognitive view*. New York: Holt, Rinehart and Winston.
- Cattell, J. (1890). Mental tests and measurements. *Mind*, 15, 373-380.
- Cattell, J. & Farrand, L. (1896). Physical and mental measurements of the students of Columbia University. *Psychological review*, 3, 618-648.
- Entwistle, N. J. (1968). Academic motivation and school attainment. *British journal of educational psychology*, 38 (2): 181-188
- Freyman, R. (1965). Further evidence on the effect of date of birth on subsequent school performance. *Educational research* 8(i): 58-64.

- Gustafsson, J.E. & Undheim, J.O. (1996). Individual differences in cognitive functions. In D. C. Berliner, & R.C. Calfee (Eds.). *Handbook of educational psychology* (pp. 186-242). New York: Simon & Schuster Macmillan.
- Helson, R. (1971). Women mathematicians and the creative personality. *Journal of consulting and clinical psychology* 36(2): 210-220.
- Holt, J. (1964). *How children fail*. New York: Pitman.
- Horwitz, E. (2000) Teachers and students, students and teachers: an ever-evolving partnership. *The Modern Language Journal*, 84, 523–535.
- Maccoby, E. E. (1966). Sex differences in intellectual functioning. In E.E. Maccoby (ed.) *The development of sex differences*. London: Tavistock. 216-220
- Messick, S. (1989). Validity. In R.L. Linn (Ed). *Educational measurement* (3rd ed.) New York: Macmillan publishing co.
- Rosenberg, B. G. and Sutton-Smith, B. (1969). Sibling age, spacing effects upon cognition. *Development psychology* 1: 661-668
- Sontag, L. W. & Kagan, J. (1967). The emergence of intellectual achievement motives. *American journal of orthopsychiatry*, 37: 8-21.
- Sutton, P. (1967). Correlation between streaming and season of birth in secondary schools. *British journal of educational psychology* 37(4): 300-304.
- Turner, J. (1977). *Psychology for the Classroom*. London: Methuen & Co Ltd.