

Does empathy make a difference in the foreign language classroom?

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Abstract

An empirical study was conducted in a college setting involving the participation of 169 students to investigate possible relationships between emotional empathy and foreign language learning performance on the one hand, and between emotional empathy and academic achievement, on the other hand. Initially, significant correlations were identified between these variables. However, a further examination of the results revealed that gender acted as an extraneous factor, namely that abovementioned correlations could be explained by the relationships of gender with empathy, Spanish course grade and overall cumulative semester grade. Finally, implications and recommendations for future research were discussed.

Key words: academic achievement, empathy, foreign language, learner variables

Resumen

Se realizó un estudio empírico al nivel universitario con la participación de 169 alumnos con el fin de investigar las posibles relaciones entre la empatía emocional y el rendimiento en la lengua dos (evaluado a través de la nota final del curso) y entre la empatía emocional y el rendimiento académico general (medido a través del promedio general de la carrera). De principio se encontraron correlaciones significativas entre las variables del estudio. Sin embargo, al examinar con mayor detención, se encontró que el género actuaba como un factor extraño. Es decir las correlaciones encontradas pueden ser mejor explicadas a través de las relaciones del género con la empatía, las notas, y el rendimiento general. Finalmente, se discuten las implicancias y se dan recomendaciones para futuras investigaciones.

Palabras claves: rendimiento académico, empatía, lengua dos, variables de aprendizaje

1. Introduction

In the course of the last 40 years, researchers have uncovered significant correlations between foreign language (FL) performance and various learner variables, such as aptitude, learning strategies and motivation (Dörnyei1). Thanks to these findings, it has been possible to gain more insight into the language learning process and propose more effective FL teaching methods in the FL classroom(Horwitz 1).Among these factors, empathic qualities were originally expected to play an important role (Brown, *Affective Variables*231), as they seemed to embody attributes that are generally assumed to be central to FL learning and academic achievement, including interpersonal skills and a willingness to adopt the point of view of a person of a different background. Yet, after an initial spur of interest in the seventies, the study of the role of empathy in the FL classroom has received much less attention than some other affective variables, such as anxiety, motivation and attitudes. In contrast, the interest for empathy has not faded in the fields of education (where it has led to curriculum and instructional changes) and psychology (where it has contributed to the theory of emotional intelligence). In view of the prolific nature of this concept, it would seem worthwhile to revisit the potential relevance of empathy to FL learning and academic achievement. To this end, this paper first reviews previous research on this topic, then presents the results of an empirical study conducted at a Midwestern university in which the capacity for emotional empathy was measured among 169 students enrolled in a Spanish language program, and finally discusses the implications of these results.

2. Literature review

The concept of empathy emerged more than a hundred years ago in German philosophy and has since been adopted and used by many other disciplines, including behavioral science, psychotherapy, cognitive science and personality theory (Wispé 17). In general,

empathy can be defined as the capacity "to imagine oneself in the other's situation and to experience, to some degree, the emotions that the other is experiencing" (Nickerson, Butler and Carlin 43). Within this definition, a useful distinction is often made between two types of empathy, namely "a cognitive, intellectual reaction ... and a more visceral, emotional reaction" (Davis, *Measuring Individual Differences* 113). According to this categorization, cognitive empathy makes it possible to view oneself in somebody else's shoes or "to understand the other person's perspective" (Davis, *Measuring Individual Differences* 113), whereas the emotional component denotes a more immediate reaction to somebody else's feelings or "an emotional response that stems from another's emotional state" (Eisenberg and Strayer 5).

More recently, psychologists interested in the concept of emotional intelligence (EI) have revisited the idea of empathy and integrated it into a wider construct related to the ability to reason about emotions(Bar-On 363; Salovey and Mayer 185). The notion of EI itself stems from the concept of multiple intelligences (H. Gardner 10); it centers on interactions between the realms of emotion and cognition, and makes the basic claim that the ability provided by EI leads to enhancing the thought process and cognition (Mayer, Roberts and Barsade 507).Within this framework, the capacity to assess others' feelings is then viewed as a means to adapt one's behavior accordingly and build relationships more effectively. Such an approach emphasizes the social dimension of empathy, as it recognizes that this type of insight can lead to better interpersonal skills: "People who are empathic are more attuned to the subtle social signals that indicate what others need or want" (Goleman43). As it turns out, this component is also central to FL learning (Horwitz 1) and it should generally be noted that, while not making an explicit link to the field of FL learning, researchers in EI have identified many features related to empathy that are often regarded as positive factors in language learning, such as being better able to

adopt others' points of view and respect their feelings, displaying more advanced listening skills, and being ready to cooperate and negotiate meaning (Goleman 44).

With regard to the field of education, several studies indicated that empathy played a positive role in cognitive development. For instance, Feshbach and Feshbach (*Affective Processes* 1335) found a positive correlation between audio-visual measures of empathy and academic achievement among school-aged children. In a study conducted with mothers of young children, observational reports showed that a higher level of empathy was linked to more social sensitivity and social understanding (Findlay, Girardi, and Coplan 347). It was also reported that college-level students involved in service learning activities achieved better exam scores and showed higher increases in empathy scores than peers engaged in other types of projects (Lundy 23).

The possibility of a link between gender and empathy was investigated by many researchers (Myyry and Helkama 25; Toussaint and Webb 673). While findings vary, the consensus today is that women are generally more empathic than men (Mestre, Samper, Frías, and Tur 76), a trend that is more pronounced in studies involving self-report measures (Rueckert and Naybar 162). For instance, Caruso and Mayer reported that women obtained significantly higher scores than men on all subscales of an emotional empathy test. In another article, Staats, Long, Manulik and Kelley indicated that women tended to show more empathy than men in social situations (431), and Beutel and Marini suggested that the effect of gender on empathy was not linked to social class subgroups, religiosity or the perceived availability of social support (436). Roberts and Strayer have attempted to explain this trend in terms of social norm requirements, for instance in relation to the expectation of more nurturing and care-giving behaviors placed on females (449). In addition, recent studies in brain research have pointed out that gender differences in empathy may also be due to biological and neural differences between

the sexes (Knickmeyer, Baron-Cohen, Raggatt, Taylor, and Hackett 282; Rueckert and Naybar 162).

On the other hand, previous research has not revealed clear correlations between age and empathy. For instance, Lennon and Eisenberg reported that measures of empathy obtained from questionnaires seemed to progressively increase in early school years but did not show consistent patterns above 11 years old (195). Similarly, Litvack, McDougall, and Romney found that empathy seemed to increase during childhood with boys aged 8 to 11 years old (303). Garaigordobil and Maganto did not find that empathy increased with age, although they did find such a correlation in the case of teenage girls (255).

Various empirical instruments have been devised to quantify empathic characteristics. One of the first tests was proposed by Hogan and combines elements of existing psychological inventories and experimental measures, consisting of 64 questions rated on a true-false scale (307). Another early method, the Micro-Momentary Expression (MME) test, involves audio-visual sessions requiring the participants to react to a range of facial expressions (Guiora, Brannon and Dull 111). In both cases, these tests were specifically aimed at evaluating cognitive empathy, as the reactions requested from the subjects were of a detached and impersonal nature, such as mood, social dispositions and attitudes.

Another group of instruments was developed with a stronger focus on the emotional aspect of empathy. As a first example, the Questionnaire Measure of Emotional Empathy or QMEE (also referred to as the Emotional Empathy Tendency Scale or EETS) is an inventory consisting of 33 items on a nine-point Likert scale, which probes the emotional responsiveness expressed in hypothetical situations that could, for instance, incite emotional contagion and the tendency to be moved by others' behaviors and experiences (Mehrabian and Epstein 525). However, Davis (*Multidimensional Approach* 2) noted that this survey

included some items more related to cognitive empathy. A more recent measure of emotional empathy was developed by Caruso and Mayer in an effort to devise "an empathy scale whose item content was as different as possible from the cognitive measurement of emotional intelligence as an ability" (7). It is a self-report questionnaire using a five-point Likert scale enquiring about hypothetical responses eliciting suffering, positive sharing, crying, emotional attention and feeling for others. Caruso and his colleague evaluated a Cronbach's alpha reliability of 0.88 for the general scale of this test.

From the outset, it is not evident that empathy would play a role on FL learning, and if so, by which mechanism it would occur. In this regard, the concept of FL learner variables provides a general framework to describe and explore this possible relationship. This idea originated in the study of individual differences and has proven to be a critical tool to explain the variability found in FL performance and learning (Gardner, Tremblay and Masgoret³⁴⁴; Onwuegbuzie, Bailey, and Daley³; and Olivares-Cuhat, *Learning Strategies* 561). Within this field of research, various affective variables were identified, including anxiety, motivation, and attitude (Erhman, Leaver and Oxford 313). Many of these learner characteristics were found to be linked to FL performance, as demonstrated for instance by Abu-Rabia⁽⁷¹¹⁾, Gardner and Lambert (1), Matsuda and Gobel⁽²¹⁾, and Olivares-Cuhat (*Relative Importance*, n.pag). It is within this context that the potential link between student empathy and FL learning was recognized. As one of the main proponent of this idea, Brown emphasized the special relevance of this variable with respect to language learning as he observed that "language is one of the primary means of empathizing" (*Affective Variables* 235). Later, Brown (*Principles of Language Learning* 10) further expanded on this premise by describing how the ability to communicate at various linguistic levels could strongly depend on the capacity "to understand the other person's affective

and cognitive states" (165) and noted the complexity of empathic responses experienced between learner-speaker and learner-hearer in the FL learning environment.

In spite of the potential benefits of empathy on FL learning outlined by Brown (*Affective Variables*²³⁵; *Principles of Language Learning*¹⁰), few empirical studies have been conducted on this topic. Guiora, Brannon and Dull reported that a measure of empathy based on the Micro-Momentary Expression test showed a positive correlation with the ability to authentically pronounce a second language (111). However, in another study Naiman, Fröhlich, Stern and Todesco did not find a significant link between Hogan's empathy scale and language success (10).

3. The Current study

While it has been suggested that empathy is essential to FL learning (Brown *Affective Variables* 235, *Principles of Language Learning*¹⁰), little (or possibly no) empirical data has been collected in support of this idea since the research conducted by Naiman et al. (10). Still, there is evidence that empathy can promote learning in general (Feshbach and Feshbach, *Affective Processes* 1335). In addition, more recent research in the field of EI suggests that emotional empathy fosters some of the very skills that could benefit FL learners, such as the disposition to work collaboratively and respect of other people's points of view. Finally, a more contemporary self-reporting instrument for the evaluation of emotional empathy has been devised by Caruso and Mayer (n.pag). Thus, there are good reasons to reassess the possibility of a correlation between empathy and FL grade. Also, by quantifying such a relationship, it would then be possible to estimate the general relevance of an empathy measure in explaining FL performance with respect to other affective variables such as FL anxiety, motivation and attitudes.

Accordingly, an empirical study was conducted in a FL college classroom to evaluate relationships between emotional

empathy, FL performance and academic achievement. While doing so, some special attention was paid to the possible extraneous role of subject variables, since previous research has shown that gender may correlate with both empathy and academic achievement (Feshbach and Feshbach, *Empathy and Education* 85; Mestre, Samper, Frías and Tur76; Tarabashkina and Lietz 210), and an effect of age could not be entirely excluded (Lennon and Eisenberg 195).

Hence, the following questions were investigated within the framework of this study:

1. What is the level of correlation between emotional empathy and FL performance?
2. What is the level of correlation between emotional empathy and academic achievement?
3. Is the interpretation of the previous answers altered by extraneous effects associated to gender and/or age?

4. Method

4.1 Participants and site

The study was conducted in a mid-size Midwestern university with open enrollment. The sample consisted of 169 college students enrolled in Spanish courses, including 66 males and 103 females whose ages ranged from 18 to 40 ($M = 21$ and $SD = 3.9$). Among these students, 54.5% were beginners, 33.7% were intermediate and 11.8% were advanced. Spanish final grades and overall cumulative semester grades were also recorded. Participation was voluntary and all students signed an informed consent form.

4.2 Procedure

At the beginning of the semester, students were given informed consent and biographical information forms. Two weeks later, the Caruso and Mayer emotional empathy test was administered in a 30-minute session. This data was then collected, evaluated and processed with the help of the SPSS statistical software.

4.3 Instrument

A measure of emotional empathy for adolescent and adults developed by Caruso and Mayer was used in this study. This instrument was developed as part of a research program on emotional intelligence and is a self-report survey consisting of 30 items rated on a five-point Likert scale and divided into six subscales, which are best described by the following statements:

1. Suffering: "I get very upset when I see a young child who is being treated meanly"
2. Positive sharing: "Seeing other people smile makes me smile"
3. Responsive crying: "I cry easily when watching a sad movie"
4. Emotional attention: "I rarely take notice when people treat each other warmly"
5. Feel for others: "If someone is upset I get upset, too"
6. Emotional contagion: "If a crowd gets excited about something so do I" (Caruso and Mayer 11)

The mean of these sub-scales was then used to derive a general empathy scale.

5. Results

Means and standard deviations of Spanish grades, overall cumulative semester grades and empathy subscales are shown in Table 1. As it turned out, Kolmogorov-Smirnov statistics revealed that none of these data sets met the test of normality. Specifically, results indicated that the distributions had a negative skewness, which can be interpreted in terms of a shift of the mean towards higher values. With respect to grades, this could mean that these assessments were carried out in a somewhat lenient manner. As to the empathy scales, it is possible that the self-reporting nature of the instrument led to some bias in the answers provided by the students. Consequently, the use of inferential statistics in this study had to be limited to non-parametric tools such as Spearman's

rank correlation coefficient and Mann-Whitney's test.

5.1 Research question # 1

What is the level of correlation between emotional empathy and FL performance?

Based on Spearman's rho evaluations, significant correlation coefficients were found at the 0.05 significance level (two-tailed) between the final semester grade in Spanish and several subscales of emotional empathy: suffering ($\rho = 0.284$, $p = 0.000$), positive sharing ($\rho = 0.167$, $p = 0.030$), responsive crying ($\rho = 0.185$, $p = 0.016$), emotional attention ($\rho = 0.222$, $p = 0.004$), feel for others ($\rho = 0.245$, $p = 0.001$), and total empathy scale ($\rho = 0.256$, $p = 0.001$).

5.2 Research question # 2

What is the level of correlation between emotional empathy and academic achievement?

Spearman's rho statistics displayed significant correlations at the 0.05 significance level (two-tailed) between overall cumulative semester grade and the following subscales of emotional empathy: suffering ($\rho = 0.322$, $p = 0.000$), positive sharing ($\rho = 0.213$, $p = 0.005$), responsive crying ($\rho = 0.254$, $p = 0.001$), emotional attention ($\rho = 0.285$, $p = 0.000$), feel for others ($\rho = 0.302$, $p = 0.000$), and total empathy scale ($\rho = 0.315$, $p = 0.000$).

5.3 Research question # 3

Is the interpretation of the previous answers altered by extraneous effects associated to gender and/or age?

To answer this question, one should examine whether these subject variables correlated both with the independent variables (empathy subscales) and dependent variables (Spanish grade and overall cumulative semester grade) of the study. In the case of gender, this determination can be made by conducting Mann-Whitney's test to

assess whether the measures of empathy, performance and academic achievement tend to be different between genders. As a result, it was found that female students reported significantly higher emotional empathy (all subscales) and obtained higher scores (Spanish grade and overall cumulative semester grade) than male students, with a p-value amounting to 0.000 in every case. This very clear outcome demonstrates that the relationship inferred between emotional empathy and final scores could instead be explained in terms of links existing between gender and emotional empathy on the one hand, and between gender and final scores on the other hand. Regarding age, Spearman rho coefficients showed that this variable correlated significantly with several empathy subscales, namely responsive crying ($\rho = -0.171$, $p = 0.026$), feeling for other ($\rho = -0.214$, $p = 0.005$), emotional contagion ($\rho = -0.212$, $p = 0.006$), and total empathy scale ($\rho = -0.173$, $p = 0.024$), as well as with both final scores, i.e., Spanish grade ($\rho = -0.154$, $p = 0.046$) and overall cumulative semester grade ($\rho = -0.164$, $p = 0.033$). Thus, relationships found between emotional empathy and final scores could possibly be interpreted in terms of relationships between age and empathy on the one hand, and age and final scores on the other hand.

In view of the high correlations observed between gender and final scores, it is critical to control the potential influence of gender on the interpretation of the findings. To this end, it is possible to apply a non-parametric test obtained by dichotomizing the results, i.e., by dividing the test sample into two subsamples consisting of only male ($N = 66$) and female students ($N = 103$), and subsequently estimating the correlation coefficients of interest within these subsets. After such a dichotomy, Spearman's rho coefficients showed no significant correlation between Spanish grade and empathy subscales within each subsample of male and female students. Likewise, Spearman's rho coefficients did not demonstrate any correlation between overall cumulative semester grade and

empathy subscales within samples consisting only of males and females. In other words, no link was found between measures of emotional empathy and final scores after controlling for the extraneous influence of gender on the results. It can also be observed that the correlations previously observed between age and achievement were not significant any more within each of these subsamples. Thus, gender (rather than age) appears to play a strong extraneous effect on the relationships investigated in this study.

6. Discussion

While this study revealed that emotional empathy was significantly correlated with FL performance and academic achievement, a further analysis suggested that these relationships were tied to the extraneous role of gender. This outcome is consistent with previous research results: First, it is now accepted that women are generally more empathic than men (Rueckert and Naybar 162); second, it has been observed that female college students obtained higher grade point averages than their male counterparts (Conger and Long 184; Whalen, Wang, Guo, Smith and Hogan, n.pag), a trend also found to be true with respect to FL performance (Gu 35). However, it is surprising that gender almost entirely explained the relationships initially found between emotional empathy and FL performance, as well as between emotional empathy and academic achievement. Indeed, the assumption that empathic feelings played a beneficial role on FL learning was articulated in a compelling manner by Brown (*Affective Variables* 235; *Principles of Language Learning* 10). In addition, EI theorists made a strong case about the positive contributions of emotional empathy on learning in general, as well as the development of skills closely associated to FL learning (Goleman 44). What could then explain the discrepancy found between these claims and the results of this study?

A first possibility would involve the specific course content, learning

environment and instructional strategies, in that they may not have presented students with sufficient opportunities to apply their empathic skills to assist their FL learning. For instance, interactions between students may have been limited to question-and-answer format, assigned readings may have lacked emotional depictions, and too much weight may have been given to the linguistic aspects of the target language at the cost of its cultural elements. Second, it could be argued that the evaluative nature of the classroom environment may have reduced the tendency of students to show empathic feelings in the classroom. Indeed, the incessant expectation of meeting academic requirements may prompt students to be primarily concerned about their personal goals instead of attempting to take others' feelings into consideration. Third, it should be recognized that a post-secondary environment put students under constant emotional pressure as they must adapt to a range of unfamiliar situations and new demands. As a consequence, they may find it difficult to keep up with this relentless stress and therefore develop some emotional fatigue that could make them less able to express a full range of empathic reactions.

Otherwise, the current study was subjected to a number of limitations that could have masked some significant relationships. First, students may have rushed too quickly through the empathy test or answered in a way that projected a flattering but unrealistic image of themselves, a point that is often cited as a weakness of self report surveys (Fan, Miller, Park, Winward, Christensen, Grotevant and Tai 223). Second, the empathy scale used in this study may not have well captured critical features of the variable of interest. For instance, one could suggest that by only recording the ability to experience an empathic response, the emotional empathy test did not recognize the further ability to react in a constructive way, and that more meaningful results could have been obtained by integrating a measure of cognitive empathy (which assumes a mental control over the situation at

hand)to the test. Finally, it is plausible that, while being sound, the claims made about the role of emotional empathy on FL learning were overestimated, so that the related effect sizes were in fact too modest to be measured conclusively. If so, a rejection of the null hypothesis would have required statistical tests with a higher power and/or a larger sample size than were available within the framework of this study.

7. Conclusion

The current study investigated the possible role of emotional empathy on FL learning. To this end, empirical data was collected in an institution of higher education with the participation of 169 language learners. While significant correlations were found between emotional empathy and FL performance on the one hand, and between emotional empathy and academic achievement on the other hand, it turned out that these relationships could also be explained by the extraneous role of gender.

Since the data analyzed for this article was collected within the context of a traditional FL classroom setting, it could be argued that the role of emotional empathy could prove more prominent in an informal second language or natural learning setting. Indeed, this idea is supported by research conducted in the field of attitudes and motivation in L2 learning, which proposes that "a desire, willingness, or affective ability to adopt features of another cultural community and make them part of one's own behavioral repertoire ... can serve as an important influence on the individual's motivation to learn a second language" (Gardner, *Motivation* 114). From this, it follows that students endowed with positive empathic characteristics could be more able to recognize and identify with cultural differences that would, at first, promote their interest and motivation to learn a target language and, subsequently, help them become better language learners. Future research could then investigate the role of emotional empathy in a natural setting as it could

help second language learners become more proficient by fostering their ability to understand cultural values and build support networks in the target community.

Table 1
Descriptive statistics

	Mean	Std. Deviation	Minimum	Maximum
Spanish Grades	85.3	10.8	34	100
Overall Cumulative Semester Grades	3.06	0.81	0.55	4.00
Suffering	4.08	0.63	1.88	5.00
Positive Sharing	4.07	0.69	1.60	5.00
Responsive Crying	2.81	1.08	1.00	5.00
Emotional Attention	3.75	0.61	1.25	5.00
Feel for Others	3.09	0.61	1.00	5.00
Emotional Contagion	3.70	0.69	1.5	5.00
General Empathy	3.64	0.49	2.13	4.63

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