



UNIVERSIDAD DE JAÉN
Centro de Estudios de Postgrado

Master's Dissertation/ Trabajo Fin de Máster

**A study project on the effects and benefits
of *mindfulness* in a group of students'
teaching performance in a Secondary
school in Andalusia**

Student: Villodres Portillo, Mónica

Tutor: Dr. Luciano García García

Dpt.: English Philology

A study project on the effects and benefits of *mindfulness* in a group of students' teaching performance in a secondary school in Andalusia

Table of contents:

ABSTRACT	1
1. INTRODUCTION	1
2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW	3
3. RESEARCH PLAN / DESIGN	11
3.1. Formulation of hypothesis	11
3.2. Objectives	11
3.3. Research questions	12
3.4. Intervention programme	12
4. METHODOLOGY	14
4.1. Identification and description of variables	15
4.1.1. <i>Dependent variables</i>	15
4.1.2. <i>Independent variables</i>	15
4.1.3. <i>Moderating variables</i>	16
4.1.4. <i>Subject / Identification variables</i>	16
4.2. Sample / Participants	17
4.3. Instruments	18
4.3.1. <i>Interview</i>	18
4.3.2. <i>Questionnaire</i>	19
4.3.3. <i>Classroom observation worksheet</i>	19
4.3.4. <i>Tests</i>	20
4.4. Data Collection	21
4.5. Data Analysis	22
5. RESULTS AND DISCUSSION	25
6. LIMITATIONS OF THE STUDY AND LINES FOR FUTURE RESEARCH	32
7. CONCLUSION	34
8. BIBLIOGRAPHICAL REFERENCES	36
APPENDICES	40

ABSTRACT

Mindfulness, also known as “full attention” or “full awareness”, has become a fast-growing therapy in the last decade in clinical areas. However, their benefits in other contexts like education are being proved in recent times. This practice has evolved from an ancient Buddhist origin to a current mainstream psychotherapy. Many are the benefits derived from the *mindfulness* method: concentration and mental clarity, emotional intelligence, acceptance and compassion, tolerance, self-control, creation of positive thinking, etc. All these beneficial features are being also confirmed among students thanks to *mindfulness*-based intervention programs implemented in Secondary and Primary schools.

1. INTRODUCTION

The pedagogical models which have characterized second and foreign language teaching have been very varied. It is well known that ESL teachers find difficulties when introducing a new dynamics in the classroom due to the vast gamut of diversity of our students concerning their interests, needs and ways of learning. So, for example, some students are willing to experiment oral skills in the classroom, whereas others prefer more emphasis on grammar aspects.

Among all the spectre of existing theoretical models, imagination, sensations and motivation are currently core elements in teaching since they are connected with cognitive and memorising development techniques. According to the researchers, one of the techniques which draw on imagination is known as “guided visualisations” (Elizabeth Adams, 1990:189). Their own features make them feasible to be implemented in the classroom due to many reasons (Adams, 1990); some of which are summarized below:

- They are relaxing and highly rewarding for both teachers and students.
- They are an important tool to encourage creativity and they can be used as complementary activities.
- They can be worked in groups since they make students aware about their own and others.

- They do not have require special materials.
- They generate curiosity among students as implying a new way of learning in class.

As a consequence of educational experiences, considerable levels of relaxation have been registered when using guided visualisations. This fact brings to light that guided visualisations are extremely useful when we want to change personal perception of our students towards a foreign language and decrease violence in the classroom.

In this sense, based on Cognitive psychology, Constructivism, Neuropsychology and Human Learning approaches, nowadays *mindfulness* is the perfect candidate to be implemented in the classroom because it is one of the most significant contemporary issues in the pedagogical field.

As far as my job is concerned, I will zero in on the effects and potential benefits of mindfulness among students' teaching performance since this topic is directly connected to my personal experience as teacher and it is becoming an important trend within the education field. The research will be developed as follows:

This dissertation discusses the concept of *mindfulness* and how it is used by the educational community from a practical perspective to enhance academic improvement. First, a comprehensive picture of education models relevant for my research is painted, to serve as a basis on which my study is grounded, so for example theoretical perspectives like Cognitive Theory, Humanistic approaches and recent ones, such as Task-Based Language Learning, Multiple Intelligence Theory and Cooperative Learning, are associated with *mindfulness* techniques. Discussions on how the concept of relaxation has shifted from theory to practice in educational use, further exploring its advantages and difficulties and presentation of some possible improvements will be framed. In the subsequent section, hypotheses, objectives and research questions concerning my study are overviewed. Right after, methodology, variables and instruments are outlined, followed by a section in which prime focus is awarded to the data collection and analysis. Results and discussion of the research will be broken down in order to establish some conclusive ideas. A final section reports on the limitations of the study, suggestions for improvement and lines for further research. Finally, a list of referential authors who have been consulted for the elaboration of this paper will be detailed at the end of the document.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

According to P. Bou-Franch and R. Dolón Herrero (2015), the purpose of this section is “to contextualize the study, relate prior research in the field to the specific objective of the investigation, critically summarize prior research on the topic, and identify and justify in greater depth the niche which the study will address” (in M. L. Pérez Cañado, 2015:8).

Neuroscience has proved that our brain is malleable. By means of learning, we can transform it to ride a bike or speak more than one language. But, we can also become happier, more responsible and cooperative people. The field of Linguistics has overturned with the incorporation of new techniques, such as the guided visualizations and relaxing techniques in the classroom to reduce levels of violence and anxiety among our students and colleagues and train better citizens.

Structure-wise, I will follow a sieve-like one to deal with this section by delving into the term *mindfulness* and its main features to latter focus on relevant literature and scholarly work on pilot studies about *mindfulness* in teaching.

To begin with, this concept has relatively in recent times been challenged by John Kabat-Zinn, who defined *mindfulness* as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (2003:145-146). Let’s dissect this definition according to what is observed by Daniel Siegel (2007:10): On the one hand, “on purpose” means that the “state is created with the intention of focusing in the present moment”. On the other hand, the concept “nonjudgmentally” implies “not coming up with reactions that assess and react” (Siegel, 2007:10). Generally speaking, we can establish a difference between “mind full” and “mindful” as can be seen in Figure 1.



Figure 1: www.inteligenciaemocionalplena.com

Five types of meditations are used to practice *mindfulness*: breathing space meditation; body scan meditation; conscious yoga (exercises for flexibility); expanding awareness meditation, usually called “sitting meditation” and compassion meditation.

Being rooted in the traditional Buddhist Vipassana or Zen meditation, *mindfulness* techniques display these main characteristics (CEP Marbella-Coín, 2017:[10]).

- Stay focused in the present moment in the here and now, instead of being alert for the past (ruminations) or for the future (expectations, fears, desires).
- Absence of verbal interpretation where mind and body imply actively in the observation and exploration process of the present moment.
- Accept the experience, whether negative or positive, in order to see things with perspective, from a wider spectre.
- Do not avoid unpleasant sensations, but learn to tackle them.

As any other contemplative practice, *mindfulness* develops a series of abilities, such as observation; concentration; emotional decentralization, which basically means being aware of thoughts, emotions and corporal sensations that are harboured in our mind in the present moment; “be” instead of “do”; unconditional acceptance; change the attention from the “content of the mind” to the “process of the experience” and freedom.

In other words, being mindful means “not only being aware of the moment in a fuller way” (Siegel, 2007:14), but making the individual conscious of our inner world to intensify compassion and empathy feelings.

In light of the above we have to mention that the emotional component is of paramount importance within this practice. It was not until 1985 when the concept “emotional intelligence” appeared thanks to Wayne Payne’s doctoral thesis and his study about emotions and the development of the emotional intelligence. In this sense, the psychologist Daniel Goleman has devoted his study to make clear the power that emotions exert on us and the way we behave. Goleman’s goal is to know how to enhance emotional intelligence to reach an optimal performance.

This emotional dimension responds to another way of understanding the intelligence, beyond cognitive aspects, such as memory and problem-solving ability. For Goleman (2006), five are the components that support the emotional intelligence and that are very similar to *mindfulness*’ characteristics displayed above: self-awareness, self-regulation, internal motivation,

empathy and social skills. Figure 2 represents this connection:

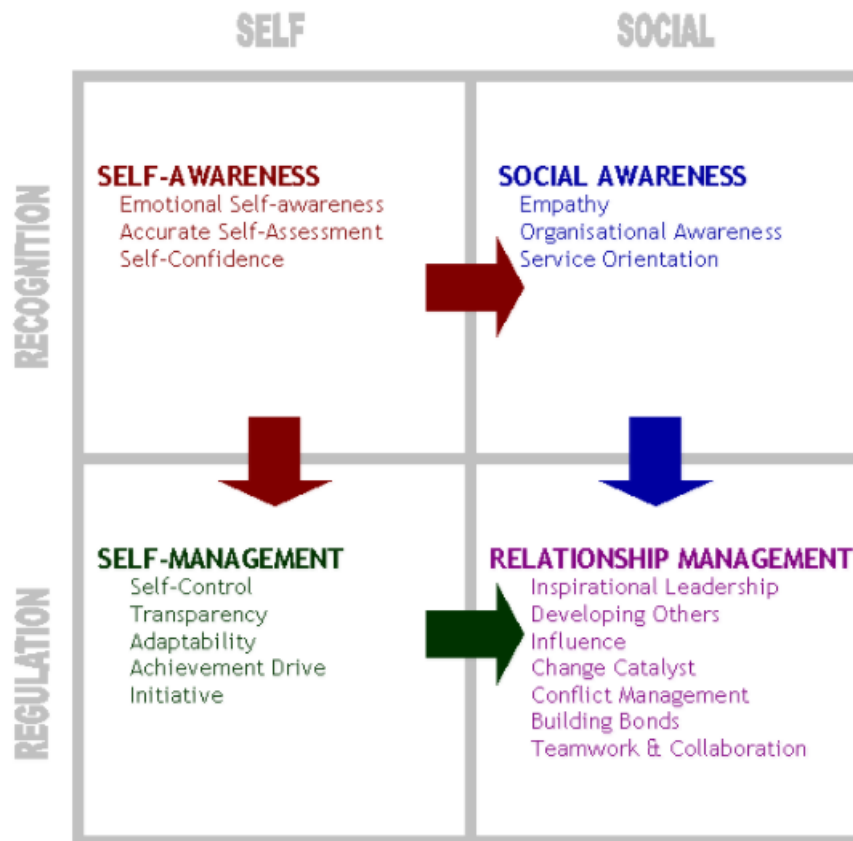


Figure 2: https://web.sonoma.edu/users/s/swijtink/teaching/philosophy_101/paper1/goleman.htm

In the case of *mindfulness*, emotional reactions imply mind and body and they are connected with the main theoretical approaches which deal with this practice (CEP Marbella-Coín, 2017: [3]):

- Neuro-physiological and biochemical: temblor, sweating, accelerated pulse, etc.
- Behavioural and expressive: avoidance, weeping, closeness, etc.
- Cognitive and experiential: good, bad, etc.

The second feature of this section will be devoted to delimit the scientific boundaries in relation to *mindfulness* and in which my study will be based, namely: Cognitive paradigm, Constructivism, Humanistic approaches and more recent ones (Neurolinguistic Programming, Multiple Intelligence Theory and Cooperative Learning).

The Cognitive Theory arose as a reaction to Structuralism and behavioural principles, because universality, creativity and innateness of the language had been disregarded; so the new principle explained the formation process of syntax making reference to meaning and the application of creative rules.

The cognitive principles came from two fields: the psychological and the linguistic areas. From Linguistics, the Cognitive Theory was influenced by the development of the Transformational-Generative (TG) and the Universal Grammar (UG), promoted by N. Chomsky. Concerning the psychological, the Cognitive Theory based on mentalist approaches.

Coming back to its rejections, Cognitive learning made use of drills, but from a different application that Behaviourism did. The aim in this case was to “infer the rules of the target language” (G. Tejada Molina, M.L. Pérez Cañado & G. Luque Agulló, 2005:173), so that students are able to connect previous knowledge with new contents, similar to the Natural Order Hypothesis proposed by Stephen Krashen in 1982.

Also, errors were contemplated in a different way from the Structuralism paradigm that demonises errors because of being responsible of deviant forms. Now, making mistakes is considered part of the learning process, rather than a deviant form.

In relation to the method, Cognitive view accepts presentation of contents from a deductive (first rules and then application) and inductive (first examples and then rules) way.

Finally, you can see in Table 1 a summary containing the features of Cognitive Code Learning (extracted from Tejada Molina, Pérez Cañado & Luque Agulló, 2005:173).

YES	NO
Conscious analysis Connection of prior to new knowledge Reflection	Memorization
Transformation and substitution drills	Repetition drills
Creation of hypotheses and rules	Habit-formation
Error show the learner is learning	Errors avoided at all costs
Inductive and deductive classroom presentation	Foster rote-learning and positive habits

Table 1: Features of Cognitive Code Learning

The second approach to be deemed in my study is the Constructivism, which is based on the cognitive psychology. Important scholar work was researched by Jean Piaget, Lev Vygotsky, Jerome Bruner and Howard Gardner. In accordance with this theoretical model, meaningful and authentic activities must be designed by the teacher to ease problem-solving activities. Links between prior and new knowledge are also established to create learning. In this sense, the author reflects on the importance of discarding pre- or misconceptions which can block the new knowledge (Adams, 2001).

In comparison to Cognitive Theory, Constructivism adds two principles (Adams, 2001): use of collaborative work to take advantage of expanding specific issues and the contemplation of content and learning process.

In the third place, academic researchers have long advocated the importance of the role of the student and his/her internal feelings as one of the most influencing factors when learning a language. Humanism departs from Audio-Lingual Theory and Cognitive Learning and emphasizes the learner's affective and emotional factors within the learning process. According to this paradigm, “it is not really possible to teach anybody anything, only to help learners in their acquisition process” (Tejada Molina, Pérez Cañado & G. Luque Agulló, 2005:180). In sum, “humanistic techniques engage the whole person including the emotions and feelings (the affective realm) as well as linguistic knowledge and behavioural skills (J.C. Richards & T. S. Rodgers, 1986:114).

Among all the Humanistic methods, I will concentrate on the Community Language Learning (CLL). C. Curran (1976) noticed the anxiety in adult learners when learning a language and his efforts concentrated in building a beneficial community among learners to reach complete students' autonomy. CLL is compared to the stages of human growth, from a stage 1 where the learner is like a child, dependent on the teacher for learning, to stage 5 in which the learner is capable of making correct use of grammar.

Although it can result beneficial for student since it “centres on the learner and stresses the humanistic side of language learning, and not merely its linguistic dimensions” (Richards & Rodgers, 1986:126), many critics have questioned the necessity for teacher training, the lack of syllabus, clear objectives and evaluation process and the preference of fluency over accuracy.

Recent approaches, which have developed in the last century, are also in connection with relaxation practice: Neurolinguistic Programming, Multiple Intelligence Theory and Cooperative Learning.

Concerning the Neurolinguistic Programming (NLP), I will base my approach on the description offered by J. Revell and S. Norman (1999:16). As they point out, NLP holds on four principles: “outcomes”, “rapport” to harmonize communication, “sensory acuity” i.e. empathizing what the other wants to transmit and “flexibility”. Furthermore, this theory is concerned with about five representational systems that coincide with the five senses. It is advocated that activities appealing each system should be incorporated (Tejada Molina, Pérez Cañado & G. Luque Agulló, 2005).

The second relevant paradigm is the Multiple Intelligence Theory. Developed by Howard Garder in 1983, identified eight kinds of intelligence: intrapersonal, interpersonal, logical-mathematical, linguistic, musical, spatial, bodily-kinaesthetic and naturalistic intelligence.

Needless to say that the appropriate allocation of activities to every student activates his/her motivation and willingness to take risks, overcome learning barriers (Tejada Molina, Pérez Cañado & G. Luque Agulló, 2005).

Finally, Cooperative learning consists basically of an approach in which students work together to improve social relationships and get rid of the competitive sense. Like all the humanistic and communicative models, the learning is centred on the student who has an active role and the responsibility of monitoring falls to the teacher. The successful of this approach stems from the development of these basic principles (cf. Richards and Rodgers, 2001):

- Positive interdependence
- Individual accountability
- Interpersonal and social skills
- Group formation and group processing
- Structuring and structures

Modern applications of the concept of *mindfulness* have created mixing traditional skills and “nonmeditative approaches” (Siegel, 2007:11). Some instances of these new perspectives are found in S.R. Bishop et al (2004) since they consider *mindfulness* as a “regulation of attention and attention” (Siegel, 2007:11). Dialectal Behaviour Therapy approach focuses mainly on

“observing (...), describing (...) and participating (...)” (S. Dimidjan & M.M. Linehan, 2003: 166). S.L. Shapiro, L.E. Carlson, J.A. Astin and B. Freedman (2006) deem *mindfulness* mechanisms as a process of “re-perceiving”. Finally, Acceptance and Commitment Therapy understands it as a process to dominate verbal reactions.

In short, I consider worth noting establishing the connection between all the models above accounted with the *mindfulness*-based intervention programs. So, synthetically speaking, at a cognitive level, *mindfulness* practices will help students to connect contents and analyse them more consciously, which will imply their own creation of rules. In relation to the Constructivism, students will be more cooperative when working in groups and supportive, like the case of CLL. NLP will be benefited from *mindfulness* practice because the five senses will be connected and all types of intelligences will be appealed, in connection with the Multiple Intelligence Theory. To sum up, *mindfulness* will be helpful for cooperative learning since students will improve decision-making and new thinking processes.

The third and final aspect to be covered in this section is devoted to provide a general description of the relevant literature in order to detect a possible niche in the area of investigation or something that has not already been explored yet. Although I have mentioned that one of the most significant current discussions within teaching research is aimed at humanistic component of the teaching context, pilot studies on *mindfulness* have only scarcely been applied.

For this purpose, I will base my research on the following experimental studies:

1. The last research contained in *Revista Interuniversitaria de Formación del Profesorado* (2016), specifically three action-research.
2. A pilot study on a *mindfulness*-based curriculum with adolescents in East Harlem, carried out by Maureen Braun, Brenda Levy, Geoffrey Collins and Leora Mogilner (2014).

1. The first experimental research is about a monograph containing the last research on *mindfulness* and education. I will stand out the pilot study of Carlos Garcia-Rubio, Teodoro Luna Jarillo, Ruth Castillo Gualda and Raquel Rodriguez-Carvajal about the impact of *mindfulness* among elementary students. This study makes use of both qualitative and quantitative analyses and the results about the behavioural problems and academic performance are of high significance in a context where few studies provide a longitudinal description in primary school.

However, this study shows some limitations like the subjectivity in the results that could entail a biased investigation and obliterate the hypothesis, lack of a follow-up work and brevity of the study (only six weeks), which can limit the observation of some variables.

The second action research was conducted by Luis Lopez-Gonzalez, Manuel Alvarez Gonzalez and Rafael Bisquerra Alzina and focuses on the design of the TREVA program to see the effect of mindfulness in secondary education. The examination was exhaustive, employs a high number of instruments, analyses the effects of the program on the different subjects, the number of the sample was considerably high, but it is limited due to some reasons: its complexity, scarce validation criteria and diversity of the intervention term.

The third study that I will display is the one carried out in Brazil by Alex Mourao Terzi, Erika Leonardo de Souza, Mayra Pires Alves Machado et al. about mindfulness-based experiences in students and teachers at various educational levels. For that purpose, this study based on the following programs related to *mindfulness* and their main results: *SENTE*, *MindEduca*, *¡Atención Funcional!* and “*CARE - Cultivating Awareness and Resilience in Education*”. All the interventions developed with these programs suggest a promising application in all educational levels, although they are at their initial stage.

2. The second study contemplated in this dissertation is the one implemented by Maureen Braun, Brenda Levy, Geoffrey Collins and Leora Mogilner in East Harlem with 14 adolescents. The sample was administered a 10-week yoga and mindfulness program. The experiment made use of varied tools like a questionnaire, a program evaluation, and the Perceived Stress Scale (PSS-10) which was analysed via t-test. The study support the use of MBP programs to reduce stress, but large studies are required to confirm findings.

All things considered and after displaying a general scenario concerning the action research, I will establish my own study proposal based on the limitations showed by the current investigation. In this sense, I will propose a pilot study attending to the specific context of the school, which will be developed by an exhaustive collection data by which an ample spectre of variables will be objectively scrutinised thanks to varied tools to validate or refute the initial hypotheses and which will have an adequate duration. The scope of the investigation will centre on a sample of students pertaining to secondary education in Andalusia since this niche is not profoundly investigated in this geographical area.

3. RESEARCH PLAN / DESIGN

3.1. Formulation of hypothesis

First of all, I will consider the quotation of J.E. Mauch & J.W. Birch (1989:69), which defines a hypothesis as “a shrewd guess, an assumption, an opinion, a hunch, an informed judgment, or an inference that is provisionally adopted to explain facts or conditions or to guide how one starts to attack a problem”.

In this specific case, the main hypotheses focus on the importance of the implementation in the classroom of some techniques related to the *mindfulness* for the development of some psychological factors among students, which has contributed, in turn, to the academic performance and the improvement of the learning of the second language, and the variation of the results between females and males.

3.2 Objectives

The specific aims of this study have focused on the confirmation of the initial hypothesis. In this case, after the study program, participants are likely to score higher on tests. For this purpose, I will establish the following prior aims:

1. To acknowledge students about the existence of *mindfulness* techniques and its application to educational purposes.
2. To identify the main benefits and effects of *mindfulness* meditation on therapist trainees (students). For this purpose, students' opinions about the importance of the implementation of *mindfulness* techniques and the evolution of different types of psychological and academic factors will be collected.
3. To compare the statistical differences between the two cohorts concerning the evolution of academic achievement.

3.3. Research questions

For the implementation of the research, I have answered the following two questions which correspond to the aims proposed previously:

1. Do students consider useful *mindfulness* techniques for their own learning?
2. How do students feel after implementing some kind of *mindfulness* technique?
3. What are the differences between females and males in relation to the perception of the variables?

3.4. Intervention program

The program will be integrated into the classroom using two approaches: “indirect (the teacher develops a personal mindfulness practice and embodies mindfulness attitudes and behaviors throughout the school day) and direct (programs teach the students mindfulness exercises and skills)” (J. Meiklejohn et al, 2012:4).

In order to describe the direct approach, which will be carried out in the experimental group from October 2016 to June 2017, the following table will serve the purpose of specifying the date of the practice, how much time I will devote for the practice, which will be increasing throughout the year, and which type of practice will be implemented. Regarding the last aspect, four main types of practices will be implemented during the intervention program.

It is important to mention that *mindfulness* practices will be preceded by an introduction in class about *mindfulness*’ conceptualisation and main characteristics (taking place on 3rd November). The day to implement *mindfulness* will be on Thursdays since they have English lesson in the last hour and they feel more distracted and disruptive (see Table 2).

Date	Time devoted to the technique	Type of practice
10 th November	3 mins.	PRACTICE 1: Breathing focused on the here and now
17 th November	3 mins.	PRACTICE 2: Attention to the diaphragmatic and costal

		breathing
24 th November	3 mins.	PRACTICE 3: Attention to the synchronized breathing 4x4
1 st December	3 mins.	PRACTICE 4: Attention to the synchronized breathing 4x4x8
8 th December	7 mins.	PRACTICE 1: Breathing focused on the here and now
15 th December	7 mins.	PRACTICE 2: Attention to the diaphragmatic and costal breathing
22 nd December	7 mins.	PRACTICE 3: Attention to the synchronized breathing 4x4
12 th January	7 mins.	PRACTICE 4: Attention to the synchronized breathing 4x4x8
19 th January	10 mins.	PRACTICE 1: Breathing focused on the here and now
26 th January	10 mins.	PRACTICE 2: Attention to the diaphragmatic and costal breathing
2 nd February	10 mins.	PRACTICE 3: Attention to the synchronized breathing 4x4
9 th February	10 mins.	PRACTICE 4: Attention to the synchronized breathing 4x4x8
16 th February	15 mins.	PRACTICE 1: Breathing focused on the here and now
23 rd February	15 mins.	PRACTICE 2: Attention to the diaphragmatic and costal breathing
9 th March	15 mins.	PRACTICE 3: Attention to the synchronized breathing 4x4
16 th March	15 mins.	PRACTICE 4: Attention to the synchronized breathing 4x4x8
etc.	The same time	etc.

Table 2: Description of the intervention diary

4. METHODOLOGY

With the aim of setting forth the methods of this didactic research, I will base myself on the classification presented by C. Chaudron (1988), which can be found in Antonio Bueno González (2016:17). According to him, this language teaching research derives from the psychometric research in which linguistic assets of methods are determined through the use of the “experimental method” together with the ethnographic method due to the fact that “the processes which take place in the classroom by means of observation techniques, sometimes highly sophisticated” (cf. Chaudron, 1988:45-9).

The present investigation is qualitative in nature, mainly practical according to the general framework because it applies practically by providing pedagogical principles experimented in the classroom (Brown, 2001), i.e., this research will explore the influence of the *mindfulness* technique on the academic achievement at a classroom of Secondary Education through an experimental proposal, thereby constituting an instance of action research. It is also an example of primary research as my primary source of information are the students who are practicing *mindfulness* techniques, and within it, analytical because the influence of a cluster of factors connected to *mindfulness* will be identified and investigated when learning a foreign language. As far as the sample is concerned, it is a group study where the goal is reached deductively since I depart from an initial hypothesis (“*mindfulness* techniques are beneficial for academic achievement of students”) to search for evidence either to support or refute that hypothesis. The study includes a mix-mode method: qualitative and statistical research and the data collection will be carried out by quasi-experimental methods, which will be further detailed. In this case, two methods of analyses will be employed: interpretive, for the evolution of psychological factors (Concentration, Anxiety, Shyness, etc.) and statistical for the study of academic variables connected to Foreign Language Competence (Pair/Work Group, Oral and Written skills, Use of the Internet, etc.). Within it, two sources of information will be consulted: trainee teacher and supply teacher. Finally, since it will be conducted over the course of a year (9 months), with a pre- and a post-test, it is a longitudinal investigation.

4.1. Identification and description of variables

There are four main types of variables that are going to characterize my study:

4.1.1. Dependent variable will be the students' English language competence since it will change as a result of changes in other variables. Within the FL competence, I will measure the following specific variables:

1. Deeper level of thinking
2. Pair / Group work
3. Activities which involve data-gathering and interviewing foreigners on the street.
4. Projects
5. Video
6. Songs
7. Games
8. Visual
9. Oral production (speaking)
10. Oral comprehension (listening)
11. Written production (writing)
12. Written comprehension (reading)
13. Use of the Internet and new technologies (chats, e-mail, web pages, etc.) as a learning resource
14. Role plays
15. Language awareness (grammar functions, spelling, pronunciation and vocabulary)
16. Sociolinguistic and intercultural aspects
17. Learning strategies

4.1.2. Independent variable will correspond to the *mindfulness* programs implemented in the different types of schools.

4.1.3. Moderating variables are going to produce a modulating effect on the dependent variable. Among these, we must distinguish between the variables to take into account among teachers and students. In relation to the teachers, they will be:

1. Age
2. Gender
3. Subject that he/she teaches (English as a Foreign Language)
4. Type of school (public)
5. Competence of the teacher in *mindfulness* techniques

As for the students, the specific variables will be:

1. Age
2. Gender
3. Grade (3rd Year of CSE)
4. Foreign language competence
5. Sociocultural status
6. Type of school (public)
7. Setting (urban, coastal)
8. Province (Málaga)
9. Performance in the English as a Foreign Language subject
10. Exposure to *mindfulness* techniques outside school
11. Time of exposure to relaxing techniques in a formal school context

4.1.4. Finally, I will take into consideration those variables related to the individual characteristics of the subjects involved. **Subject or identification variables** will be:

1. Concentration
2. Attention
3. Participation in class
4. Motivation
5. Anxiety
6. Cooperation
7. Empathy

8. Extroversion

9. Persistence

10. Shyness

4.2. Sample / participants

As mentioned in the last section, it clearly constitutes an example of a group study, as it works with an experimental and a control group of students and quasi-experimental since the cohorts will be not assigned to the groups at random, but are already part of pre-established groups belonging to two different class groups (3ºA and 3ºB). Instead, two samples who agreed to participate in the study on a voluntary basis will be used.

In implementing the study, data from two classrooms of 28 students (around 14 years old), pertaining to the 3rd Year of Compulsory Secondary Education at a public school in Marbella (IES Nueva Andalucía) and whose mother tongue is Spanish, will be gathered. Both, the experimental group and the control group are formed by 28 students and they will be exposed to approximately 144 hours of English as a foreign language in class by the age of 15. Besides, it is estimated that the experimental sample is going to receive fifteen minutes (maximum) of *mindfulness* techniques every week.

Since the gender is one of the variables taken into account, the gender distribution for the sample is detailed as follows: 10 male and 18 female for the experimental sample, and 15 male and 13 female for the control sample, as can be seen in the following bar graph:

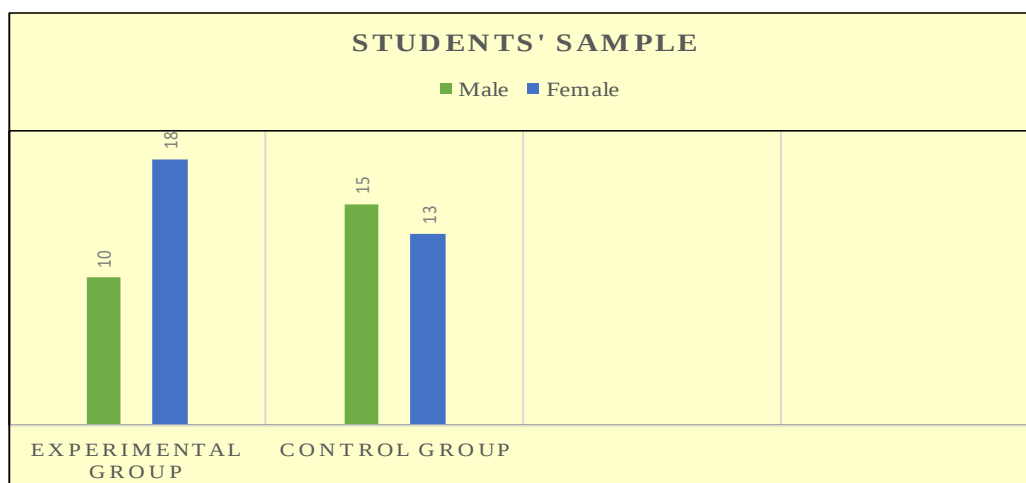


Chart 1: Sample distribution concerning the gender

As for their level of linguistic competence, both groups are supposed to have a foreign language level of A1-A2+ in accordance with the CEFR as shown by the diagnostic test implemented at the beginning of the course year among the students (cf. section 4.3.4.).

The subjects who are going to participate in this study have not been exposed to *mindfulness* programmes before, but many of them manifest a receptive attitude towards the experience.

Finally, the investigation will be carried out by myself and data will be collected by two teachers (me and other colleague), one male and one female, pertaining to the English Department from the same high school. In relation to the foreign language competence, we are not native speakers of English, but we have acquired a C1 level of English according to the CEFRL.

4.3. Instruments

Since this research is mid-way between qualitative and statistical research, instruments of both these methods will be employed:

- Semi-structured interviews
- Opinion questionnaires
- Classroom structured observation
- Assessment results (comparisons of pre-test and post-test assessments as quantitative instruments).

Below, you will find a detailed description of the application and development of each instrument:

4.3.1. Interview

Firstly, we must say that the interview is one of the ethnographic methods of research and regarding the format, it can be: spontaneous, semi-structured and structured (Pérez Cañado, 2015¹). In my case, I have opted for a semi-structure interview where rigidity is combined with

¹ http://dv.ujaen.es/goto_docencia_file_648575_download.html

spontaneity.

For the implementation of the interview I have prepared beforehand ten questions in relation to different aspects connected with *mindfulness* worked in class that will be presented to five students randomly at the end of the course year. The respondents will not be recorded, but I will take notes about their answers. The interview will be carried out in Spanish. You will find the model followed in Table 5.

4.3.2. Questionnaire

In this case, a questionnaire with a paper-based format will be administered to the experimental sample before and after the *mindfulness*-based curriculum where they will value their satisfaction in relation to some variables that I want to control. The questionnaire will be provided in Spanish to facilitate the data collection phase. In relation to the format, it will be a closed-ended questionnaire in which they have to assign a numerical value (Likert scale ranging from 1 to 5) mixed with an open answer since I include an option with “other” for commentaries.

Although the preparation of the questionnaire has taken more time due to the design of its format, once achieved, the quantification of the results will be completed more quickly and the qualitative data will be quantified by means of percentages. A model for this questionnaire is found in Table 6.

4.3.3. Classroom observation worksheet

This instrument is one of the so-called ethnographic research methods and its main goal is “to observe some behavioral patterns in the classroom setting” (cf. A. Mackey and S. M. Gass, 2005:76). In this case, psychological factors’ evolution and other academic related elements will help me understand the benefits and damages of *mindfulness* to students. “Observations are within the tools to gather qualitative data” (Mackey and Gass, 2005:175). It is a structure observation since I will concentrate on pre-fixed issues, such as the possible reduction of some factors like Anxiety and Shyness, the increase of the Motivation, Concentration, Participation, Cooperation, Empathy, etc. and the effects on the learning process, such as, Deeper level of thinking learning, Pair/Work group, Projects, use of Sociolinguistic and Intercultural elements,

among others. Observations arising during the intervention programme will be written down in an observation worksheet.

In Table 7 information from several classroom sessions is included to investigate the frequency with which some competences, language skills, materials and grouping techniques are performed and developed in class.

4.3.4. Tests

Tests are used within the quantitative study with a threefold objective: First, with the purpose of “collecting data about how proficient the student is in the foreign language” (Pérez Cañado, 2015²). Secondly, they are also used “to check that the experimental and the control have the same starting level”. In this case, despite of minor differences, both groups depart from the same level of language competence in the diagnostic test. Finally, tests are used to check if the intervention programme (*mindfulness* techniques) has had any effect or not in the experimental sample at the end of the course year in areas such as vocabulary, grammar, skill development, etc. and to compare the results with the ones of the control group.

As far as types of test are concerned, I will make use of Madrid & Pérez Cañado (2014):

1. Diagnostic/placement test. This test will be applied to establish the students’ level of competence and their degree of mastery of certain communicative and linguistic aspects.

2. Achievement/progress test. The main goal of this test is to evaluate what the students have learned in the course after receiving *mindfulness* techniques and they apply to the whole syllabus.

Both kinds of tests (see Appendix 4) will include different student’s learning techniques (some of the following are found in J.L. Ortega & J. Villoria, 2014):

- Multiple choice activities for listening, grammar, vocabulary and reading
- Cloze activities for listening and use of English. The test-taker has to complete the gap with words or short phrases
- True/false activities for listening and reading
- Matching exercises for reading
- Guided production for writing. In this kind of activities the test-taker must create an

² http://dv.ujaen.es/goto_docencia_file_648575_download.html

essay following a model.

- Free production for speaking. Unlike guided production, in free production students are required to develop creativity, fluency (in the case of speaking), discourse strategies, story-telling, etc.

Together with the selection of the instruments, it is essential to flesh out the stages of preparation I will employ in my investigation (Pérez Cañado, 2015).

1. Instrument design. I will base the selection of the instruments on the contents of the course materials of “Classroom-Oriented Research” (Bueno González, 2016) where precise account of each instrument is detailed. This author, in turn, bases on Painter (1999) and Ortega and Villoria (2014) for the typology of data collecting procedures, Hopkins (1993) for the classification of processes in the classroom observation, Madrid & Bueno (2005) for the structure of interviews and Madrid & Pérez Cañado (2014) to explain types of tests.
2. Instrument validation. In this case, a pilot study with a representative sample of 28 subjects of similar features will participate in my investigation. With the aim to perform hypothesis contrasts, I have previously carried out a F-test of the equality of two variances in all the variables to check if the variances are equal and to ascertain the internal consistency and reliability of my instruments.
3. Instrument administration. For the administration of the instruments consistent and homogeneous conditions will be applied. Moreover, the instruments will be administered in a group and with a paper format in order to ease the collection of the data gathering process.

4.4. Data collection

As any data-based survey, some procedures of data collection will be established in order to answer the research questions. This section is of an essential part of the fact-finding component and will last the whole school year. Previously to the investigation, some formal documents will be revised and analysed: preliminary meeting minutes, disciplinary files, the

School Curricular Project, the School Educational Project, tutorial planning and Department Course Plans.

In this case, a pre and post questionnaire will be administered to the sample where they will express numerically their opinion in relation to some factors. Moreover, other two qualitative procedures will be used to collect data from the evolution of psychological aspects involved in *mindfulness* techniques: interviews and classroom observations.

The data from the interview will be gathered by means of written reports that I will create during the interview to leave proof of the study and the classroom observation will be implemented by self-observation.

Concerning the quantitative aspect, two tests that will be completed by students will be taken as a reference: one pre-test at the beginning of the course year and one post-test to check their performance after having participated in the intervention program. The mark will range from 0 to 10, being 10 the maximum mark. In relation to the contents comprised in the exam, I will consider the evaluation of the four skills, language awareness (Vocabulary, Grammar, Spelling and Pronunciation) and Sociocultural aspects and Intercultural awareness. The use of the Internet and the new technologies, Pair and Work group, Projects, Songs, Games and Dramatising will be also assessed by means of evaluation oriented activities carried out in the classroom.

On the other hand, all the skills will be worked through the completion of activities where lower-order thinking skills and higher-order thinking ones will be implemented.

4.5. Data analysis

In order to conclude with the methodology section, data analysis will be carried out. “At this stage, I will organise the data collected in order to check if the hypotheses can be confirmed or refuted (cf. section 3.1.), if the objectives that I predetermined have been achieved (cf. section 3.2.), to provide an answer to the research questions that have been formulated (cf. section 3.3.) or simply to draw conclusions accruing from an ethnographic study. This analysis will lead to the final conclusions of the research” (Bueno González, 2016:47).

A quasi-experimental design will be adopted in this study since it has pre- and post-tests, and experimental, control groups and the subjects are not chosen randomly.

For this purpose, it must be underscored that both quantitative and qualitative analyses will be conducted by means of some statistical operations. On the one hand, mean, median, mode (central tendency measures), range, low-high, standard deviation (dispersion measures), correlation coefficients (correlational techniques) and the t test, to determine the existence of statistically significant differences between groups and within groups in terms of the moderating and identification variables considered (experimental procedures), will be calculated for the quantitative study and analysed with Statgraphics and Excel. On the other hand, the qualitative design will focus on the use of questionnaires, classroom observation worksheets and interviews to gather information from students.

The treatment of general statistics will be descriptive in relation to quantitative and qualitative variables and the results of this examination will be provided in the next section.

The following analyses have been carried out:

1. Statistical operations (mean, median, mode, standard deviation and range) have been calculated by means of the mathematical functions provided in Excel for emotional and academic variables and within the control and the experimental group for the school year 2016/2017. The data have been extraxted from a questionnaire (cf. Table 6) completed by students at the beginning and at the end of the course, from the observation carried out in the classroom (Table 7) and from the test results (appendix 4). The resulting values of each of these parameters are found below of their corresponding data (Table 8), being 1 the lowest value in the scale and 5 the highest one.
2. The average values obtained for each variable and the variations between 2017 and 2016 have been estimated to know how these values could change in other classrooms. As you can appreciate, emotional and academic features have been analysed separately (cf. Table 9).
3. To explore existing relations between all the emotional and academic variables correlations been performed with the statistical method t-student, thanks to the program Statgraphics and results from that have been put down on an Excel template (see Table 10). To each pair of variables or correlation three values are associated:

- The first value is the Pearson's correlation coefficient (r), which ranges from +1 to -1.
- Number of pairs of data used to calculate each coefficient (N).
- P-value; number that determines the level of significance of the correlations. In this case, the conventional level of rejecting the null hypothesis is $p < 0.05$, which implies a 95% of confidence level.

4. In order to prove that *mindfulness* works, I have accomplished hypothesis contrasts (Table 11) with Statgraphics over each variable and with the data obtained from the control and experimental groups at the end of the course year. The contrasts have been performed with a significance level of 5%. If the p-value is higher than 0.05, the null hypotheses is not rejected, i.e., the variable is not affected by *mindfulness*.

On the contrary, if the p-value is lower than 0.05, I have implemented a second contrast over the variable to see if the variation is negative or positive. If this second p-value is lower than 0.05, the variation is considered positive, but if the p-value is higher than 0.05, the variation is considered negative.

The variables coloured in dark green are benefited from *mindfulness*. In this analysis, the variables Shyness and Anxiety are considered special cases, because if the p-value is higher than 0.05, the variation is negative, and as a consequence, the variable improves.

5. Finally, Table 12 shows once again hypothesis contrasts, but in this case I want to prove the difference in the use of *mindfulness* techniques according to the genre. To carry out this procedure, I have used the data from the experimental group at the beginning and at the end of the course. I have calculated the increase in the variables affected positively for each genre, which has resulted in two columns, whose data have been contrasted with the same method than in Table 10. Emotional and academic variables are distinguished and Shyness and Snxiety are separated from the rest since their improvement means a decreasing value, whereas in the rest of the cases it would lead to a positive increase. It is essential bearing this aspect in mind when contrasting hypotheses.

5. RESULTS AND DISCUSSION

After scrutinising the data collected through different and varied tools, I will provide a comprehensive account of the chief outcomes, relating them to the hypotheses and research questions and extracting the pedagogical implications which derive from the findings. But first of all, it must be indicated that the results have been evaluated by means of the CIPP model (Context, Input, Process and Product).

And now, I will comment the most relevant results extracted from the questionnaire and the classroom observation worksheet that appear in Tables 8, 9, 10, 11, and 12 (Appendix 5).

In the first place, I will concentrate on the mean values between the beginning and the end of the school year in each cohort appearing in Table 8. Regarding the experimental sample, it is noticeable a high increase in oral aspects (Oral production, Pronunciation, Spelling and Dramatizing), Vocabulary, Grammar, Writing, cognitive related skills (use of Learning strategies and Deeper level of thinking), Concentration, Attention, Participation, Motivation, Extroversion and Anxiety. Other emotional factors also improve, but the variation is lower: Cooperation, Empathy, Persistence and Shyness. On the other hand, it is appreciated a minor worsening in the rest of the skills.

If we compare these results with the ones in the control group, we obtain the following information: The control group improves in Interviews On the street, Games, Cooperation, Empathy, Persistence and Shyness, but it gets worse in the majority of the variables, being the most remarkable Speaking, Learning strategies, Sociolinguistic aspects, Concentration, Attention, Participation and Motivation.

Secondly, all the variations which originate from Table 8 are expressed in percentages in Table 9. In this way, we can pinpoint the most relevant values with higher precision: for the experimental group, the highest variations are in: Writing (17,86%), Speaking (16,43%), Learning strategies (15,71%), Pronunciation (15%), Spelling (14,29%), Deeper level of thinking (12,86%), Attention (21,43%), Concentration (19,95%), Participation (19,84%), Motivation (15,53%) and Anxiety (-11,59%). The control group presents significant variations in: Games (8,57%), Speaking (-8,57%), Pair work (-4,29%), Anxiety (15%), Motivation (13,57%) and Attention (9,29%). As can be implied from these results, the experimental sample shows higher and positive variations within the academic and emotional variables. However, the control group

experiments smaller and negative variations in the variables.

In Table 10 I have related the variables in order to break down the correctional research data. In the first line, the Pearson's correlation coefficient (r) is expressed to show the relation between all the variables studied in the research. Values between 0 and -1.00 indicate negative correlation, i.e., if one variable increases, the other decreases, and vice versa. Values between 0 and 1.00 indicate positive correlation, if one variable increases, the other also increases. As you can check in Table 10, none of the variables show any relevant correlative relationship with other variable because the coefficients are close to 0, which implies that, in general, the variables have connection with each other, but the relation is not very strong. In the second line, the N values refer to the number of data which have been used to create the correlations, in this case, 56. Finally, I will focus on the level of significance obtained after contrasting academic vs. emotional variables. The conventional level of rejecting the null hypothesis ("there is not relationship between the two variables") is $p < 0.05$; it means that the two variables are connected. The following correlations are derived from this assumption: Projects and Deeper level of thinking, Listening and Participation, Listening and Motivation, Speaking and Deeper level of thinking, Writing and Extroversion, Pronunciation and Motivation, Grammar and Anxiety, Sociolinguistic and Empathy, Pronunciation and Persistence, and Pronunciation and Shyness.

In Table 11 contrasts between the variables in both groups are displayed and the hypotheses established are: "*Mindfulness* has not affected the variable" (null hypothesis) and "*mindfulness* has affected the variable" (alternative hypothesis). As you can perceive, the following variables have a p -value < 0.05 : Speaking (0,00163762), Learning strategies (0,0468793), Writing (0,000716208), Pronunciation (0,000198514), Vocabulary (0,0489991), Grammar (6,03018E-06), Spelling (0,00904594), Deeper level of thinking (0,0925846), Concentration (0,024956), Attention (0,04686322), Participation in class (0,0003213), Motivation (0,0091682), Anxiety (0,00045147) and Shyness (0,006543). This fact means that the null hypothesis is rejected, so "*mindfulness* has affected these variables". On the other way, the rest of the variables have a p -value > 0.05 , so in those cases the null hypothesis is not rejected and it implies that "*mindfulness* has not affected those variables".

Once I have checked that *mindfulness* affects some variables, we will see how it has affected them. For this purpose, I have carried out another contrast hypothesis with the alternative hypotheses. The results are expressed in the second line of Table 11. In this way, the null

hypothesis has been: “The variable is equal o has decreased” (p-value > 0.05) and the alternative hypothesis: “The variable has increased” (p-value < 0.05). As it can be appreciated, Speaking, Learning strategies, Writing, Pronunciation, Vocabulary, Grammar, Spelling, Deeper level of thinking, Concentration, Attention, Participation in class and Motivation have a p-value < 0.05, i.e., they have increased or improved. Anxiety and Shyness have a p-value > 0.05, so they are equal or have decreased, which means that they also have improved.

Another initial hypothesis established in the research design concerns the differences between females and males in relation to the perception of the variables that have improved (Table 12). Regarding this aspect, another contrast hypothesis has been established. On the one hand, the null hypothesis is “female students show a smaller or equal variation than male students” (p-value > 0.05). On the other hand, “female students show a higher variation than male students” (p-value < 0.05) is the alternative hypotheses. The results for the academic variables (p-value = 0,000259878) and for the emotional ones (p-value = 0,0182818) imply that female students have been more affected than male students by *mindfulness* and null hypothesis is rejected in all the cases.

The completion of the final test by the students has given to me information about the influence of the *mindfulness* program on academic evolution. Generally speaking, the experimental group has improved 10.71% during the school year 2016/17, whereas the control group has got worse 21.42%, as it is described in the following chart:

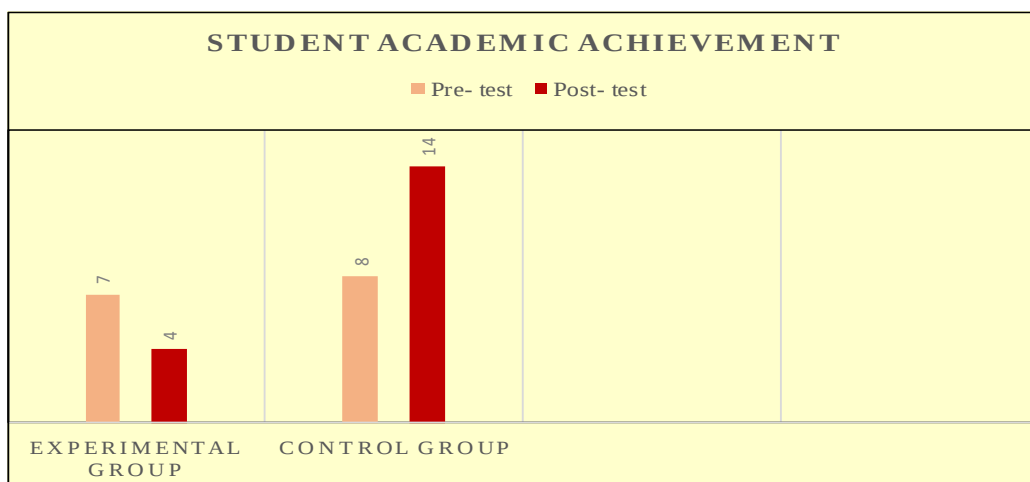


Chart 2: Number of students who have failed pre- and post-test.

Furthermore, classroom observation has been also considered a useful tool during the intervention program to examine the evolution of both academic and emotional factors. In the following table you can appreciate some conclusions extracted from the classroom observations made by the participant observer using the model of Table 7.

Thematic blocks	Observations				
	Session 1 (1 st term)	Session 2 (2 nd term)	Session 3 (2 nd term)	Session 4 (3 rd term)	Session 5 (3 rd term)
Viability, acceptance, implementation	Students are expectant with the new dynamics.	Good acceptance, although some students get distracted.	Good acceptance. Some students find it difficult to concentrate.	The implementation has slightly improved in disruptive students.	The implementation has slightly improved in disruptive students.
Duration	3/7 mins.	10 mins.	10 mins.	15 mins.	15 mins.
Calm / relaxation level	Low	Low	Medium	Medium-high	High
Behaviour in class and social relationships	Acceptable, in general	Good, in general	Good, in general	Behaviour has improved considerably	More cohesive group
Self-consciousness, integration in the class group	Sense of individuality in some students	The sense of individuality remains.	Some students feel a little more integrated.	Students feel more joined.	The integration in the group is almost perfect, except for some punctual situations.

Table 3: Conclusions from classroom observation

Another important tool in this research has been the interview performed among students at the end of the school year since it has provided to me with valuable information about the personal opinion of my students and the possibility of continuing the intervention program next year. Below you can find some of the most significant impressions expressed by students during the interview found in Table 5.

Thematic blocks	Notes extracted from interview
¿Cómo te sientes cuando algo ocurre de manera que no esperabas?	- “Intento serenarme antes de protestar”. - “Trato de aceptarlo”. - “No sé qué hacer porque me quedo sorprendido”.
¿Te sientes más capaz de aprender inglés?	- “Puede que ahora tenga más conocimientos que antes”. - “Ahora sé más que a principio de curso”. - “Sí porque hemos hecho muchos esquemas para recordar la gramática y el vocabulario”.
¿Cuál es tu reacción cuando no entiendes algún ejercicio en clase?	- “Levanto la mano y pregunto a la profesora”. - “Le pregunto al compañero para que me lo explique”. - “No lo hago y espero a que se corrija”.
¿En qué ha cambiado tu relación con tus compañeros con respecto al comienzo de curso?	- “Ahora nos llevamos mejor porque nos conocemos más”. - “Al final hemos congeniado y nos aceptamos”. - “En nada porque a la mayoría ya los conocía del curso pasado”.
¿Qué opinas sobre el aprendizaje de idiomas?	- “Es fundamental para viajar por el mundo”. - “Lo necesito para estudiar la carrera de derecho”. - “Lo veo una tontería porque yo no voy a salir de España”.

¿Cuál es la causa de que hayas mejorado/empeorado tu nivel de inglés?	- “He estudiado para cada examen y he trabajado en clase”. - “La academia donde voy me ayuda bastante para repasar lo que no entiendo”. - “Estaba más relajada y tenía más confianza en mí”.
¿Te gusta ahora participar en clase?	- “Yo suelo participar porque así me sube la nota”. - “Ahora participo más porque me entero mejor de las cosas y la profesora me ayuda cuando estoy en la pizarra”.
¿Te sientes más capaz de autocontrolarte en clase si hay algún conflicto?	- “Creo que es difícil, pero lo intento”. - “La verdad es que no me meto si no el problema no va conmigo”. - “Debemos intentar llevarnos bien y no meternos los unos con los otros”.
¿Te sientes más nervioso y estresado en clase?	- “La verdad es que estoy más tranquilo porque ya hemos terminado casi los exámenes”. - “Estoy más nerviosa pero por cosas personales, no de la clase”. - “Yo me encuentro muy bien en clase”.
¿Qué te han parecido las técnicas de <i>mindfulness</i>? ¿Volverías a repetirlas el curso próximo?	- “Me ha gustado bastante porque no lo habíamos hecho nunca”. - “Sí repetiría, aunque a veces me aburría con la música”. - “Me da igual, prefiero salir al patio”. - “Ha estado muy bien justo antes de los exámenes”.

Table 4: Notes extracted from the interview

After performing a thorough interpretation of the results conclusive ideas can be highlighted:

- The research has had a considerable impact on the experimental group and the individual and group effects are positive. Moreover, it is sustainable and transportable along the time.
- All the qualitative and quantitative instruments have been useful and reliable for establishing conclusive ideas about the influence of relaxation and *mindfulness* techniques in education performance.
- The findings suggest that students has felt relevant improvement after the intervention both in academic variables, such as Oral skills, Learning strategies, Writing skills, Language awareness and Deeper level of thinking; and a decrease in emotional aspects: Concentration, Attention, Participation, Motivation, Extroversion, Anxiety and Shyness.
- Although both female and male students are benefited from the *mindfulness*- based intervention program, female students have been more predisposed and opened than male ones.
- The notes taken from the interview indicate that the participants have enjoyed the program, have found it helpful and useful, and have felt it was of value to them.

6. LIMITATIONS OF THE STUDY AND FURTHER RESEARCH

Although this pilot study contributes to the existing literature by providing data gathered from two groups pertaining to an Andalusian Secondary Education school, this section will pinpoint the main limitations that my study has presented and which future research might address.

As far as the limitations are concerned, they have affected three main issues:

1. Participants (students and teachers). Restricted representativeness of the sample in terms of number of students and teachers who carry out the research and limited geographical scope. In relation to teachers, they have only been taught a brief introduction about *mindfulness* techniques and the intervention program.
2. Methodology. Although the findings support the hypothesis of that adolescents can enjoy and benefit from *mindfulness*-based programs, this study should integrate into existing *mindfulness* program, either national: e.g. “PINEP” program, developed at the University of Malaga, for the development of emotional intelligence through the mindfulness training program; the “TREVA” program, which consists of the design, development and evaluation of 12 relaxation-mindfulness study lessons; or international: “SENTE” program, “MindEduca” program, “Atención Funciona” program, the “MBWE” program created by the University of Toronto in 2005, etc.

The lack of multiple triangulation means another limitative aspect in the study, specifically concerning investigators and location triangulation. In the first case, two, and not three, different researchers have analysed the open-response items on the questionnaire and interviews, written up their conclusions, and collated their findings. On the other hand, language learning data have been collected from only one data-gathering site (Secondary school).

3. Nature of the experiment. Limitations in this matter refer to the brevity and size of the study, which can make it difficult to draw general conclusions and to know what the minimal level of reporting is required to ensure a *mindfulness* based intervention can be replicated.

Once established the limitations which have arisen during the completion of the research, I will suggest issues in need of further research:

Concerning the participants, a more proper previous training about *mindfulness* practices would have been needed, an investigator triangulation would serve the purpose of “mediating biases interjected by people with different roles in the language teaching context” (Pérez Cañado, 2015:11) and more number of groups could be engaged in the intervention program to see the effects on a broad scale.

Secondly, and in relation to the nature of the study implemented, a follow-up would be useful in determining the evolution of some emotional and academic variables. In addition, larger trials should be pursued to confirm the study’s findings and to determine the long term impact of the program on the participants, with post-testing phases.

To sum up, although this research gives a glimpse into the impact of the practice of *mindfulness* in academic achievement, future investigations may increasingly shed light on how this technique works in other areas like students’ personal relationship with family and friends, their role in social fields and professional autonomy and management.

7. CONCLUSIONS

In order to complete this project I will underscore the chief points made in the study to foreground the investigation's core findings.

In the first place, aims established before the study have been achieved:

1. To make students conscious about the existence of *mindfulness* and its benefits.
2. To recognise how beneficial *mindfulness* meditation on students is.
3. To establish a comparison between the two groups of participants in relation to their academic evolution.

Secondly, the research questions, contemplated along the study, have been answered.

1. Do students consider *mindfulness* techniques useful for their own learning?

According to the information extracted from the personal interview, in general terms, students feel comfortable with the *mindfulness*-based intervention program and they express their desire to repeat again.

2. How do students feel after implementing some kind of *mindfulness* technique?

Once again, after implementing the interview, I can come to the conclusion that students register an improvement concerning the levels of acceptance, patience, collaboration and empathy, participation, auto-control, stress and learning strategies since they are more able to learn the English language. In addition to this, it can be deduced from the classroom observation that acceptance, behaviour in class, self-awareness and integration have substantially improved from October 2016 to June 2017.

3. What are the differences between female and male students in relation to the perception of the variables?

As we have seen in the section of analysis and results, the females show a better attitude to *mindfulness* since their both academic and emotional variables have improved in relation to their male counterpart.

In summary, the main action hypothesis “*mindfulness* develops some psychological factors among students, which contributes, in turn, to the academic performance and the improvement of the learning of the second language” is confirmed.

As we can infer from all the accomplished analyses, the resulting findings are of great relevance for English teaching purposes and for all the teaching staff in general since they will

serve to select the most appropriate activities and resources that will contribute to develop the personality factors affecting the learning process. Specifically, this study can be considered of great relevance for the pedagogical accommodation of my students.

However, in order to implement appropriately any kind of technique among students, in this case *mindfulness* and relaxation techniques, it is advisable to analyse the context in depth, to imply the Administration of the Secondary School, inform all the educational community about the benefits of this practice and include the program in the School Curricular Project (“Proyecto Curricular de Centro”) and the School Educational Project (“Proyecto Educativo de Centro”). Finally, the specific training with an expert about this type of techniques is indispensable so as not to be unsuccessful in an intervention program of this nature.

I would like to finish this study with a Daniel Goleman’s quote about the importance of emotional factors when learning: “La clave para alcanzar un alto cociente intelectual colectivo es la armonía social” (2012:84).

8. BIBLIOGRAPHICAL REFERENCES

- Adams, E. 2001. *Aspects of creativity in the teaching and learning of English as a Foreign Language* (doctoral thesis). Universidad de Jaén. Facultad de Humanidades y Ciencias de la Educación. Departamento de Filología Inglesa, Jaén.
- Association for Mindfulness in Education. 2017. *Mindful Education*. Available at: <http://www.mindfuleducation.org/>
- Bishop, S. R. et al. 2004. "Mindfulness: A Proposed Operational Definition". In J. Gayle Beck (ed.) *Clinical Psychology: Science and Practice*. Vol. 11, issue 3. Wiley Online Library, 230 -241 (online)
- Brown, J. D. 2001. *Using Surveys in Language Programs*. Cambridge: Cambridge University Press.
- Braun, M. Levy, B. Collins, G and Mogilner, L. 2014. "Off the mat: Piloting a mindfulness-based curriculum with adolescents in East Harlem". *Int J Child Health Hum Dev*; 7(3):325 - 330
- Bueno González, A. 2016. "Collecting and analysing data" (Unit 3). Course materials. In "Classroom-Oriented Research". Jaén: Universidad de Jaén. Available at: http://dv.ujaen.es/goto_docencia_crs_616347.html
- CEP Marbella-Coín. 2017. *Inteligencia Emocional Plena. Mindfulness para gestionar emociones*. Málaga: Junta de Andalucía.
- Chaudron, C. 1988. *Second Language Classrooms. Research on Teaching and Learning*. Cambridge: Cambridge University Press.
- Curran, C. 1976. *Counseling-Learning in Second Languages*. Apple River, III: Apple River Press.

- Dimidjian, S. and Linehan, M. M. 2003. "Defining an Agenda for Future Research on the Clinical Application of Mindfulness Practice". In J. Gayle Beck (ed.) *Clinical Psychology: Science and Practice*. Vol. 10, issue 2. Wiley Online Library, 166 - 171 (online)
- Gardner, H. 1983. *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.
- Goleman, D. 2006. *Social Intelligence: The New Science of Human Relationships*. New York: Random House Publishing Group
- Goleman, D. 2012. *El cerebro y la inteligencia emocional*. Barcelona: Ediciones B.
- Hopkins, D. 1993. *A Teacher's Guide to Classroom Research*. Buckingham and Philadelphia: Open University Press.
- Mackey, A. & S.M. Gass. 2005. *Second Language Research: Methodology and Design*. New Jersey and London: Lawrence Erlbaum Associates, Publishers.
- Madrid, D. & A. Bueno 2005. "Classroom research". In N. McLaren, D. Madrid & A. Bueno (eds.). *TEFL in Secondary Education*. Granada: Editorial Universidad de Granada, 641 - 676.
- Madrid, D. & M.L. Pérez Cañado 2014. Evaluation. In D. Madrid & N. McLaren (eds.). *TEFL in Primary Education* (4th edition). Granada: Editorial Universidad de Granada, 442 - 480.
- Mauch, J.E. & J.W. Birch. 1989. *Guide to the Successful Thesis and Dissertation*. New York: Marcel Dekker.
- Meijlejohn, J., Phillips, C. et al. 2012. "Integrating Mindfulness Training into K-12 Education: Fostering the Resilience of Teachers and Students". In *Mindfulness*. Vol. 3, issue 4.

Springer, 291 - 307 (online)

Ortega, J.L. & J. Villoria. 2014. *Classroom Research*. Granada: Editorial Universidad de Granada. 4th edition.

Palomero Fernández, P., Valero Errazu, D., Recondo, O. et al. (2016). “Monografía *Mindfulness* y educación”. *Revista Interuniversitaria de Formación del Profesorado*. Vol. 87. (online)

Pérez Cañado, M.L. 2015. “Writing an MA Dissertation” (Unit 5). Course materials. In “Research Methodology and Academic English”. Jaén: Universidad de Jaén. Available at: http://dv.ujaen.es/goto_docencia_file_648575_download.html

Pérez Cañado, M.L. 2016b. “Linguistic Competence” (Unit 2). Course materials. In “Research into Language Competence”. Jaén: Universidad de Jaén. Available at: http://dv.ujaen.es/goto_docencia_fold_710943.html

Revell, J. & S. Norman. 1998. *In Your Hands: NLP in ELT*. London: Saffire Press.

Richards, J.C. & T. S. Rodgers. 1986. *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.

Richards, J. C. & T. S. Rodgers 2001. *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.

Shapiro, S. L., Carlson, L.E., Astin, J.A., and Freedman, B. 2006. “Mechanisms of mindfulness”. In Beverly E. Thorn (ed.) *Journal of Clinical Psychology*. Vol. 62, issue 3. Wiley Online Library, 373 - 386 (online)

Siegel, D. J. 2007. *The Mindful Brain: Reflection and Attunement in the Cultivation of Well-Being*. New York: Norton.

Stevick, E. W. 1990. *Humanism in Language Teaching*. Oxford: Oxford University Press.

Tejada Molina, G., M.L. Pérez Cañado & G. Luque Agulló. 2005. "Current approaches and teaching methods". In N. McLaren, D. Madrid & A. Bueno (eds.). *TEFL in Secondary Education*. Granada: Editorial Universidad de Granada, 155 - 187.

APPENDICES

Appendix 1: Interview

ENTREVISTA:

A continuación te voy a realizar una serie de preguntas. Puedes contestar abiertamente.

Pregunta 1. ¿Cómo te sientes cuando algo ocurre de manera que no esperabas?

Pregunta 2. ¿Te sientes más capaz de aprender inglés?

Pregunta 3. ¿Cuál es tu reacción cuando no entiendes algún ejercicio en clase?

Pregunta 4. ¿En qué ha cambiado tu relación con tus compañeros con respecto al comienzo de curso?

Pregunta 5. ¿Qué opinas sobre el aprendizaje de idiomas?

Pregunta 6. ¿Cuál es la causa de que hayas mejorado/empeorado tu nivel de inglés?

Pregunta 7. ¿Te gusta ahora participar en clase?

Pregunta 8. ¿Te sientes más capaz de autocontrolarte en clase si hay algún conflicto?

Pregunta 9. ¿Te sientes más nervioso y estresado en clase?

Pregunta 10: ¿Qué te han parecido las técnicas de *mindfulness*? ¿Volverías a repetirlas el curso próximo?

Table 5: Interview model

Appendix 2: Questionnaire

CUESTIONARIO:

¿Cómo te sientes actualmente en relación a estos aspectos? Evalúa estos puntos mediante la siguiente escala:

5 = siempre

4 = casi siempre

3 = en ocasiones

2 = casi nunca

1 = nunca

Señala: Sexo:

Curso:

Fecha:

(.....) 1. Estoy concentrado/a en clase

(.....) 2. Presto atención a las explicaciones del profesor/a

(.....) 3. Participo en clase

(.....) 4. Me siento motivado/a en la asignatura

(.....) 5. Siento ansiedad en clase

(.....) 6. Colaboro con el desarrollo de las clases

(.....) 7. Siento empatía por mis compañeros/as y mi profesor/a

(.....) 8. Soy extrovertido/a en clase

(.....) 9. Persisto en la tarea independientemente de su dificultad

(.....) 10. Soy tímido/a en clase

(.....) 11. Otros aspectos que consideres importantes incluir

Table 6: Questionnaire model

Appendix 3: Classroom observation sheet

Academic Variables	Observations				
	Session 1 (1 st term)	Session 2 (2 nd term)	Session 3 (2 nd term)	Session 4 (3 rd term)	Session 5 (3 rd term)
Deeper level of thinking					
Learning strategies					
Pair/Group work					
Use of dialogues					
Projects					
Use of songs/ games/ video/ tape recordings					
Oral skills					
Written skills					
Internet					
Pronunciation/Spelling					
Vocabulary					
Grammar					
Sociocultural aspects					
Concentration, attention, persistence levels					
Participation, motivation levels					
Cooperation, empathy levels					
Extroversion/shyness levels					

Table 7: Classroom observation worksheet

DIAGNOSTIC TEST

READING (20 POINTS)

1 Read the text. Then choose the correct answer. (10 points)

How much fun was your last holiday? Do you want to try something different this year? Well, how about a cooking holiday? On a cooking holiday, the whole family visits a new place, sees the attractions and learns about the local food. It's a lot of fun!

Do you like Italian food? On a cooking holiday in Italy, your guide takes you shopping to buy the ingredients for the day's cooking lesson. Maybe you'll need fresh vegetables, like cauliflower and broccoli, or some sweet raspberries. You can find special salty cheese, fresh prawns and salmon at the market, too. Then, you take the food to your cooking lesson and learn how to prepare a local speciality. At the end of the day, there is the ultimate test – you eat what you cook!

There are a lot of good reasons to choose a cooking holiday. Children and parents do things together. They learn about many new types of food and they get to know the local culture. And when they return home, they can make an amazing meal for their friends. How many holidays offer you a delicious souvenir like that?

1. A cooking holiday is a good idea for a holiday.
a. different b. family c. both a and b
2. The text mentions types of vegetables.
a. two b. three c. four
3. You can buy salty at the market.
a. prawns b. cheese c. both a and b
4. According to the text, enjoy doing things together.
a. parents b. children c. families
5. Your friends will enjoy the holiday, too, when
a. you cook for them
b. they return home
c. they get to know the local culture

2 Tick (✓) the sentences T (true), F (false) or DS (doesn't say). (10 points)

	T	F	DS
1. On a cooking holiday, you spend all your time cooking.			
2. Your guide in the market is a chef.			
3. You can buy fish at the market.			
4. When the meal is ready, you eat it.			
5. Cooking holidays aren't very expensive.			

VOCABULARY (40 POINTS)

1 Complete the charts with the words below. (20 points)

paintbrush • drought • hairdresser • flood • storm • tour guide • beans • shoulder •
beak • compass
flash drive • coach • lettuce • fire • textbook • brain • sausage • lamb • feathers •
pilot

Food	Jobs	Disasters

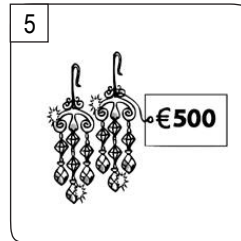
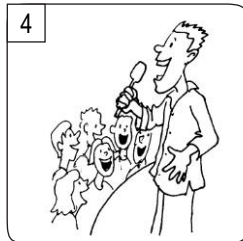
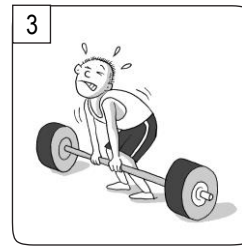
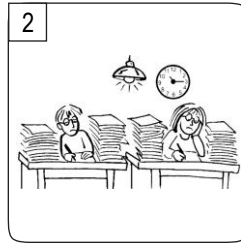
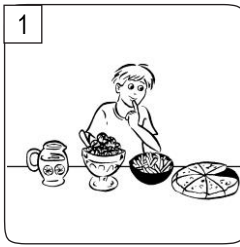
School Items	Parts of the

2 Circle the word that doesn't belong. (5 points)

- grandmother • aunt • brother • daughter
- whale • tiger • wolf • lion
- grow • laugh • shout • cry
- trainers • sweaters • shoes • sandals
- exciting • popular • messy • fantastic

3 Match the words to the pictures. (5 points)

funny • expensive • hungry • hard-working • heavy



4 Add a word from the words below to each group. (5 points)

carry • underground • lake • warm • carpet

1. tram • lorry • van •
2. throw • hit • catch •
3. river • stream • ocean •
4. shelf • sofa • lamp •
5. sunny • cool • snowy •

5 Complete the sentences with the words below. (5 points)

opposite • meets friends • Irish • uncle • have a shower

1. My mother's brother is my
2. The shopping centre is the sports centre.
3. After the sports lesson, we
4. Thelma at the cinema on Saturdays.
5. Pat is and he lives in Dublin.

GRAMMAR (30 POINTS)

1 Choose the correct answer. (5 points)

1. George **hasn't got** / **isn't** / **aren't** at school today.
2. Put **Sams** / **Sam's** / **Sams'** book on his desk.
3. **Am** / **Is** / **Are** your brother a good football player?
4. Sara and her sister **have got** / **are** / **has got** long red hair.
5. The **girls** / **girls'** / **girl's** sandwiches are in their bags.

2 Complete the sentences with the verbs in brackets. Use the Present Simple. (5 points)

1. Tessa (tidy) her room once a week.
2. you (study) art at school?
3. My parents often (listen) to music after dinner.
4. Harry takes the bus to school. He (not ride) his bike.
5. My grandparents (go) to the beach every morning.

3 Complete the sentences with the verbs below. Use the Present Continuous. (5 points)

1. Right now, Dad (take out) the rubbish.
2. At the moment, Tom (run) in a marathon.
3. The boys (chat) online now.
4. I (not use) the dictionary right now.
5. the dog (eat) in the kitchen?

4 Choose the correct answer. (5 points)

1. **The** / **Some** / **A** temperature was -30° C.
2. It is **a** / **an** / **some** endangered animal.
3. There isn't **some** / **any** / **an** oil in the salad.
4. **There are** / **There is** / **There aren't** some people in the park.
5. That monkey has got **the** / **an** / **a** long tail.

5 Complete the chart with the Past Simple form of each verb. (5 points)

Base Form	Past Simple
1. get	
2. like	
3. take	
4. try	
5. go	

6 Match the questions in A to the answers in B. (5 points)

A

B

1. Does Vitorio speak English? a. No, she isn't.
2. Have you got a laptop? b. Yes, she did.
3. Is the teacher in the classroom? c. Yes, he does.
4. Did Sandra walk to school? d. Yes, I am.
5. Are you angry? e. No, I haven't.

WRITING (10 POINTS)

Write the words in the correct order to make sentences. Remember to add capital letters.

1. is / the hospital / Eagle Street / in / .

.....

2. our garden / there are / some tall trees / in / .

.....

3. is / in / my French dictionary / your schoolbag / ?

.....

4. went / I / the cinema / last Friday / to / .

.....

5. dancing / right now / the girls / aren't / .

.....

LISTENING (10 POINTS)

1 Listen to Terry and Alice. Then choose the correct answer. (5 points)

1. Terry / Alice / Natalie is a new student at Riverside School.
2. Alice plays the **guitar** / flute / keyboard.
3. The band wants a **guitar player** / a flute player / some new musicians.
4. The band plays **classical** / hard rock / popular music.
5. Terry is going to meet **the band** / Natalie / the music teacher.

2 Listen again and match A to B to form sentences. (5 points)

A

1. Terry is looking for
2. Terry plays
3. Alice and Terry are going to
4. Mr Frank is going to
5. Alice asks for

B

- a. talk after school.
- b. Terry's phone number.
- c. listen to Terry play his guitar.
- d. the music room.
- e. classical guitar.

SPEAKING (10 POINTS)

Ask your partner the following questions. Write the answers.

What is your phone number?

.....

What is your favourite food?

.....

Have you got any pets?

.....

What kind of weather do you like?

.....

Did you play any computer games yesterday?

.....

FINAL EXAM 1

READING (20 POINTS)

1 Read the book review. Then match the numbers to what they refer to. (10 points)

In the early 1900s, people all over the world were reading about Sherlock Holmes, the great British detective. The stories were written in English by Arthur Conan Doyle, and then they were sent to other countries for translation. In Russia, Sherlock Holmes was very popular, but readers often couldn't get the latest adventures. So, some Russian authors were asked to write Sherlock Holmes stories. The first one appeared in 1907. Since then, many more Russians have enjoyed reading about this extraordinary character.

The Russian stories were written by P. Orlovetz and P. Nikitin, but nothing is known about these two authors. Thanks to historian George Piliev and translator Alex Auswaks, this remarkable collection of seven Sherlock Holmes stories is now in English for the first time.

George Piliev has written a useful 21-page introduction. He explains about the Russian love of mystery and crime fiction. He also tells us about the history of the fictional character from the first time a Sherlock Holmes story came to Russia in 1893.

In the first story, Holmes and Dr Watson, his friend, are on holiday in Russia. In later stories, they travel all over the country and the authors describe the difficult conditions in Russia at that time.

In my opinion this is a fun, quick read. If you are a fan of Sherlock Holmes, you won't be disappointed.

- | | |
|---------|---|
| 1. 1907 | a. the number of stories the Russian authors wrote |
| 2. 2 | b. the year the first Russian story came out |
| 3. 7 | c. the number of Russian authors |
| 4. 21 | d. the year Russians first read about Sherlock Holmes |
| 5. 1893 | e. the number of pages in the introduction |

2 Complete the sentences. (10 points)

1. The Russian authors wrote Sherlock Holmes stories because
2. Alex Auswaks translated the book from into
3. According to George Piliev, Russian people
4. In the Russian stories, Sherlock Holmes and Dr Watson
5. The writer of the review thinks that

VOCABULARY (20 POINTS)

1 Circle the word that doesn't belong. Then add a word to each group. (8 points)

1. soap • backpack • toothpaste •
2. slide • swing • net •
3. sculptor • potter • mosaic •
4. damage • recycle • reuse •

2 Write a word to match the definition. (6 points)

1. the opposite of *sour*:
2. the opposite of *shallow*:
3. another word for *outdated*: -
4. very tired:
5. Motorcycle riders wear it on their heads:
- 6 You keep your mobile phone in it:

3 Complete the sentences with the words and phrases below. There are more words and phrases than you need. (6 points)

leggings • flash • obsolete • solar system • designer • traffic light • kneepads • space colony • ringtone

1. Turn left at the third
2. Sandy only buys clothes at the most expensive shops.
3. Our company doesn't make that radio any more. It's
4. The on your phone is too loud. Make it quieter.
5. If you're going out with your skateboard, take your
6. Earth is a small planet in the

GRAMMAR (30 POINTS)

1 Choose the correct answer. (7 points)

1. The rubbish **are recycled** / **is recycled** / **aren't recycled** in a big factory.
2. It was quiet in the courtroom while the judge **was talking** / **talked** / **were talking** to the lawyer.
3. Dena doesn't like dogs but she isn't **too scared** / **scared enough** / **as scared as** she was a few years ago.
4. Have you got **some** / **any** / **much** tuna?

5. At this restaurant, you **mustn't** / **could** / **have to** serve yourself. There aren't any waiters.
6. Where **are you going to spend** / **you are going to spend** / **you aren't going to spend** your summer?
7. If we pollute the area, people **don't live** / **will live** / **won't live** there.

2 Correct the mistakes. (4 points)

1. If I will study hard, I'll go to university.
.....
2. We watched TV when we heard the noise.
.....
3. Was there a lot of stars in the sky?
.....
4. Astronauts can to live in the International Space Station for six months.
.....

3 Write questions according to the answers in bold. (5 points)

1.
No, I haven't eaten salmon fried in butter.
2.
They usually go on holiday **in the summer**.
3.
It happened **at the corner of Lemon and Lime Streets**.
4.
Yes. Many trees were cut down before 2009.
5.
I'm looking at **a mural**.

4 Write sentences with the words below. Use the correct form of the verb or adjective. (5 points)

1. Paul and Peter / live / in that house / since / they were children / .
.....
2. we / play / tennis / when / the rain / start / .
.....
3. the boys / not skate / right now / .
.....

4. In my opinion, / it / not happen / again / in the future / .

.....

5. is / football / popular / game / in the world / ?

.....

5 Choose the correct answers. (9 points)

For thousands of years, women ¹. **has carried / have carried / hasn't carried** drinking water on their heads. And still today, many people ². **have to / should / could** walk long distances to bring water to their homes. In September 2011, the WaterWheel ³. **were brought / was brought / weren't brought** to people in Northern India. It is ⁴. **any / some / an** invention by Wello, a US company. The WaterWheel ⁵. **is made / aren't made / are made** of strong plastic. It rolls along the ground with 50 litres of water inside it. This is three to five times more water than women ⁶. **could / can / should** transport in the past. Wello is going to keep the cost of the WaterWheel ⁷. **too low / low enough / as low as possible**. So ⁸. **how many / how much / what** will it cost? Only \$25 -\$30! Now they ⁹. **is planning / plans / are planning** to take the WaterWheel to other states in India.

WRITING (10 POINTS)

Correct the ten mistakes.

We were in london for the weekend. It rained on saturday, because we didn't go on a tour. Then, we went shopping. First, we met some friends at a little great restaurant. We had a lunch delicious in addition coffee and cake. There were a lot of people there therefore it's popular?

.....
.....
.....
.....
.....
.....

Appendix 5: Results

EXPERIMENTAL GROUP (2011)																						
Female	Pair-work	Group work	On the street	Projects	Video	Tap recording	Songs	Games	Visual aids	Listening	Internet	Dramatic	Speaking	Learning strat.	Reading	Writing	Pronunciation	Vocabulary	Grammar	Spelling	Sociology	(Inter)Cultural aspects
Student 1	2	4	5	4	3	2	3	3	4	4	4	4	5	3	4	4	5	3	4	4	3	3
Student 2	4	4	4	3	3	4	4	4	3	3	4	3	4	4	3	3	4	3	4	4	4	4
Student 3	3	3	5	3	5	3	5	3	5	3	3	5	4	3	5	4	5	3	5	5	2	4
Student 4	3	4	4	1	4	5	3	5	2	3	5	4	3	3	1	5	5	4	4	4	2	2
Student 5	3	2	4	2	3	3	4	2	2	3	3	3	2	4	4	3	3	4	5	3	3	4
Student 6	2	3	3	4	2	4	1	3	3	5	2	3	5	3	5	4	4	5	4	4	4	4
Student 7	4	4	5	3	4	4	2	5	4	4	2	2	4	5	4	4	3	4	3	3	3	3
Student 8	4	3	4	4	2	3	2	3	3	3	3	4	5	3	1	5	4	5	4	4	2	2
Student 9	2	3	4	1	2	2	1	4	4	4	4	3	1	4	4	1	4	2	4	3	3	4
Student 10	3	4	3	3	3	4	2	4	2	5	3	2	4	3	3	3	5	3	3	4	1	3
Student 11	5	5	5	3	5	4	5	3	1	3	2	3	3	4	2	5	4	4	5	5	4	1
Student 12	3	4	2	4	2	5	4	4	2	3	3	3	2	3	4	4	5	4	5	5	4	1
Student 13	3	4	2	1	1	3	1	5	2	2	4	2	3	2	1	5	4	2	4	4	2	2
Student 14	2	2	1	3	2	1	3	3	4	4	3	1	5	4	4	2	4	3	5	3	4	3
Student 15	1	1	2	3	2	1	3	2	3	3	3	3	4	5	4	4	4	4	3	4	3	4
Student 16	5	1	3	3	2	4	4	4	5	2	3	4	2	3	1	4	5	4	3	4	3	1
Student 17	4	4	3	4	4	3	2	2	1	2	3	2	3	3	3	5	4	5	2	3	3	3
Student 18	2	4	3	4	3	4	4	3	2	3	4	4	4	3	3	3	5	5	5	4	2	5
MEAN	2,8571	2,7857	3,25	2,6429	2,75	2,9643	2,6214	2,8571	2,9643	3,1429	2,8214	2,8571	3,0571	3,3214	2,8571	3,7857	3,5714	3,5	3,6786	2,8571	2,5714	3,5
MODE	3	3	3	3	2,5	3	3	3	3	3	3	3	3	3	3	4	4	4	4	3	2,5	4
ST. DEV.	1,0440	1,2379	1,1745	1,0291	1,2360	1,1379	1,3342	0,9224	1,2044	0,8369	1,1027	1,0591	0,8519	0,9047	1,3257	1,0403	0,9343	0,9595	1,0762	0,9047	1,0763	1,0650
RANGE	4	4	4	3	4	4	4	3	4	4	4	4	4	3	4	3	3	4	3	4	3	4

Anxiety	Cooperation	Empathy	Extroversion	Persistence	Shyness
2	3	4	4	3	4
2	4	5	5	5	4
1	3	3	3	4	3
3	2	2	3	3	2
3	2	2	2	3	4
4	5	5	4	5	3
3	2	2	3	2	3
3	4	3	3	4	3
2	2	3	3	3	1
3	2	3	2	2	2
2	3	5	3	2	2
2	3	3	5	3	2
2	3	4	2	4	2
3	3	4	4	4	3
4	3	3	3	3	2
3	4	4	2	4	3
5	5	3	3	3	4
4	3	2	2	4	3
Anxiety	Cooperation	Empathy	Extroversion	Persistence	Shyness
2	3	4	4	5	3
2	3	5	3	3	3
2	3	2	4	4	3
3	3	2	2	3	2
3	3	5	4	5	4
3	3	4	3	3	2
4	2	4	4	3	2
4	4	4	4	3	1
1	3	3	2	2	2
3	2	1	3	3	1
2,78571	3	3,28571	3,10714	3,39286	2,64286
3	3	3	3	3	3
3	3	3	3	3	3
0,35674	0,86066	1,15011	0,91643	0,91643	0,91142
4	3	4	3	3	3

EXPERIMENTAL GROUP (2016)																						
Female	Pair-work	Group work	On the street	Projects	Video	Tap recording	Songs	Games	Visual aids	Listening	Internet	Dramatic	Speaking	Learning strat.	Reading	Writing	Pronunciation	Vocabulary	Grammar	Spelling	Sociology	(Inter)Cultural aspects
Student 1	3	4	5	4	3	2	3	3	4	4	4	4	5	3	4	4	5	4	3	4	3	3
Student 2	4	4	4	4	4	4	4	4	3	4	3	4	3	2	3	4	3	4	3	4	4	4
Student 3	4	3	5	3	3	3	5	3	5	3	5	3	5	4	3	2	4	5	4	5	3	3
Student 4	3	3	4	2	4	5	3	5	2	4	5	4	2	2	1	4	2	2	3	5	2	2
Student 5	3	4	4	2	3	3	4	2	2	3	4	3	1	3	4	2	3	3	4	2	2	4
Student 6	2	3	3	4	2	4	2	4	3	5	2	3	4	1	5	1	2	4	5	3	4	4
Student 7	4	4	5	3	4	4	2	5	4	4	2	2	3	4	4	4	4	5	2	1	3	3
Student 8	4	3	4	4	2	3	3	3	3	3	3	4	2	3	1	3	3	4	4	3	2	2
Student 9	3	3	4	2	2	3	1	4	5	4	1	1	3	3	2	4	4	3	3	4	3	4
Student 10	3	4	4	3	4	2	4	4	2	5	4	2	4	1	2	3	1	4	1	2	3	2
Student 11	5	5	5	3	5	4	5	3	1	3	2	2	4	4	2	3	3	3	4	4	3	2
Student 12	4	4	3	4	2	5	4	4	2	3	3	3	1	4	4	5	4	5	4	5	4	1
Student 13	3	4	2	3	3	3	2	5	3	2	5	1	1	1	1	5	4	2	2	4	2	2
Student 14	2	2	1	3	2	1	3	3	4	4	3	2	3	3	4	4	4	4	3	4	3	4
Student 15	1	1	2	4	3	2	1	4	2	3	4	2	3	4	4	1	2	3	2	4	3	4
Student 16	5	1	4	3	2	4	4	4	5	2	3	4	2	1	1	3	4	2	3	3	2	1
Student 17	4	4	3	3	4	3	2	2	1	2	5	2	2	4	5	3	3	5	3	3	2	3
Student 18	3	3	3	4	3	5	4	3	2	3	4	4	3	5	3	2	4	4	4	2	5	3
MEAN	3,1095	2,8571	3,5714	2,9286	2,9643	3,0714	3,5714	2,9643	3,0714	2,5591	2,7857	2,5591	2,5714	2,6329	2,8571	3,0714	2,9643	2,9286	2,7143	2,8571	2,9286	2,9643
MODE	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	3	3	3
ST. DEV.	0,34431	1,1017	1,19301	0,89974	1,13791	1,11801	1,0634	0,87891	1,2375	0,89974	1,0501	1,06451	1,13791	1,06504	1,25125	1,23801	0,96364	1,12211	1,11801	1,03714	0,95604	0,9379
RANGE	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Anxiety	Cooperative	Empathy	Extroversion	Persistence	Shyness
4	3	4	3	3	3
3	5	5	1	3	4
5	3	3	3	4	5
4	2	2	3	3	4
3	2	2	2	1	4
4	5	5	4	4	5
3	1	2	2	2	2
4	4	3	2	2	2
2	1	3	2	2	2
3	2	3	4	2	3
3	3	5	3	5	3
4	2	3	1	3	1
4	3	4	3	3	3
3	3	3	2	2	4
3	3	5	4	4	3
2	4	4	4	5	4
4	5	3	3	4	5
4	3	2	2	4	3
Anxiety	Cooperative	Empathy	Extroversion	Persistence	Shyness
4	4	4	3	5	5
5	3	4	2	3	3
3	3	3	2	4	3
2	3	2	4	3	2
4	4	5	3	5	3
3	3	3	3	3	4
2	1	1	2	2	2
4	3	4	3	3	2
2	2	3	2	3	2
3	2	1	3	3	1
3,35714	2,32857	3,25	2,67857	3,17857	3,10714
3	3	3	3	3	3
4	3	3	3	3	3
0,86384	1,11857	1,17458	0,86237	1,03048	1,16559
3	4	4	3	4	4

CONTROL GROUP (2011)																											
Female	Pair-work	Group-work	On the street	Projects	Video	Tape record	Songs	Games	Visual aids	Listening	Internet	Drama/skits	Spelling	Learning of Reading	Vocabulary	Pronunciation	Vocabulary	Grammar	Spelling	Sociolinguistics	(Inter)Cultural	Deeper level of thinking	Concentration	Attention	Participation	Motivation	
Student 1	2	3	2	5	4	5	4	5	2	3	2	3	2	2	3	3	4	4	2	3	3	3	4	3	2	3	
Student 2	4	4	4	1	2	3	2	4	2	1	3	2	2	2	1	2	3	1	1	4	4	4	3	2	3	3	
Student 3	4	3	3	4	4	5	4	3	3	4	2	3	4	4	2	4	3	4	3	4	4	2	4	5	3	4	
Student 4	2	3	3	2	3	3	3	2	3	2	2	2	2	3	3	2	2	2	2	3	2	2	2	2	1	2	
Student 5	1	2	3	3	2	2	3	2	1	1	1	1	2	1	2	2	1	1	3	2	3	2	3	4	3	3	
Student 6	4	3	4	3	2	3	3	3	5	3	3	2	3	4	4	3	4	4	3	3	3	3	3	3	3	3	
Student 7	2	3	3	1	2	2	2	3	2	2	2	2	2	2	3	2	3	2	2	3	2	2	3	4	3	3	
Student 8	4	2	3	2	1	2	3	3	3	2	2	3	2	1	3	2	2	2	3	1	2	3	4	5	4	3	
Student 9	4	4	3	2	2	4	4	2	2	1	3	4	1	1	3	4	4	4	1	3	2	3	2	3	2	3	
Student 10	2	1	2	3	3	1	2	3	2	1	1	2	3	3	2	3	4	1	2	1	3	4	2	2	1	2	
Student 11	1	2	4	1	3	3	3	2	3	2	2	3	2	2	1	3	2	2	2	2	3	3	3	4	2	2	
Student 12	3	3	2	2	4	4	2	3	2	3	2	3	3	3	3	2	2	2	2	3	3	3	3	1	3	3	
Student 13	1	1	2	3	2	4	2	2	1	2	1	4	1	1	3	3	3	1	1	4	2	4	3	2	1	1	
Male	Pair-work	Group-work	On the street	Projects	Video	Tape record	Songs	Games	Visual aids	Listening	Internet	Drama/skits	Spelling	Learning of Reading	Vocabulary	Pronunciation	Vocabulary	Grammar	Spelling	Sociolinguistics	(Inter)Cultural	Deeper level of thinking	Concentration	Attention	Participation	Motivation	
Student 1	2	3	2	3	1	2	2	2	2	1	3	1	1	2	3	1	1	3	2	3	3	3	4	3	2	3	
Student 2	2	4	3	5	2	3	5	2	1	2	2	2	2	2	2	3	5	3	2	4	4	2	3	3	2	3	
Student 3	4	1	2	3	4	5	3	5	3	4	4	4	2	4	3	3	4	3	4	3	4	3	4	2	1	3	4
Student 4	3	3	3	5	5	3	4	3	1	5	4	2	4	4	3	3	2	4	3	3	2	4	3	3	2	3	
Student 5	3	5	4	4	3	4	5	5	5	4	5	4	4	4	3	2	5	2	4	4	4	2	4	2	3	2	
Student 6	3	2	3	1	3	3	3	2	3	3	3	3	3	2	2	3	3	3	3	3	4	3	3	3	3	2	
Student 7	2	3	3	3	3	2	2	2	3	3	4	2	1	2	3	2	2	2	2	3	2	2	3	3	3	3	
Student 8	2	1	3	4	2	4	3	3	3	2	4	3	4	3	3	2	4	1	3	2	3	3	1	1	1	2	3
Student 9	3	4	4	3	2	3	2	2	5	3	3	2	5	5	5	5	3	2	4	3	5	2	3	2	2	1	
Student 10	4	2	1	1	2	4	2	4	3	3	3	4	2	1	1	2	4	2	4	1	2	2	3	1	1	1	
Student 11	3	3	2	2	2	2	4	3	1	2	2	2	1	1	2	4	2	3	1	3	2	1	3	2	4	2	3
Student 12	2	5	4	2	2	2	5	4	5	2	2	5	4	4	2	3	4	2	4	3	5	1	1	1	2	2	
Student 13	2	2	2	1	3	2	2	1	2	1	3	2	1	3	2	2	3	2	3	2	3	2	3	1	4	2	
Student 14	1	2	2	2	2	2	2	1	4	2	3	1	2	4	1	4	3	3	2	1	3	2	3	2	3	3	
Student 15	2	3	4	4	3	2	3	3	4	3	4	3	1	3	4	4	3	3	3	3	3	3	3	3	3	3	
MEAN	2,53714	2,75	2,62143	2,76571	2,42857	2,32857	2,52857	3,03571	2,71429	2,46429	2,60714	2,71429	2,42857	2,28571	2,94429	2,71429	3	2,35714	2,62143	2,60714	3,07143	2,92857	2,67071	2,5714	2,67857	2,42857	
MEDIAN	2	3	3	3	2	2	2	3	3	2,5	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2,5
MODE	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	3	4	2	2	3	3	3	3	3	3	3
ST. DEV	1,03714	1,03712	0,86237	1,19744	1,06304	1,05623	0,93403	0,93934	1,32336	1,10494	1,16553	1,03379	1,15622	1,11744	1,0703	1,11744	1,10314	1,151	0,86384	1,15642	1,05395	1,05595	1,152407186	0,93643	1,05304	1,02003	0,920003
RANGE	3	4	3	4	4	4	4	3	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Anxiety	Cooperative	Empathy	Extroversion	Persistence	Shyness
3	4	3	3	4	3
4	2	4	3	2	2
4	5	4	4	5	4
2	2	1	1	3	2
3	3	4	4	4	4
4	4	4	4	4	4
3	3	3	4	4	4
5	5	5	4	5	4
4	4	5	4	5	4
2	2	2	3	3	2
4	4	2	2	4	3
2	1	2	3	2	3
2	3	2	1	2	3
Anxiety	Cooperative	Empathy	Extroversion	Persistence	Shyness
5	4	4	4	5	3
5	4	3	2	4	2
4	4	3	2	3	3
3	2	3	1	1	3
4	5	4	5	5	4
5	3	3	4	3	3
4	4	2	3	2	3
4	3	3	1	2	2
4	3	3	2	2	2
4	3	3	1	3	2
5	3	2	4	4	3
3	3	4	3	5	1
3	3	3	3	4	1
4	4	3	4	4	4
3,67857	3,32143	3,14286	2,83286	3,35714	2,85714
4	3	3	3	3,5	3
4	3	3	4	3	3
0,34391	0,98333	0,97046	1,19689	1,22364	0,30152
3	4	4	4	4	3

CONTROL GROUP (2016)																			
Female	Pair-work	Group work	On the street	Projects	Video	Tape record	Songs	Games	Visual aids	Listening	Internet	Dramatised	Speaking	Learning strat.	Reading	Written	Pronunciation	Vocabulary	Grammatical
Student 1	2	3	2	5	4	5	4	2	3	2	2	2	2	5	5	4	3	4	5
Student 2	4	4	4	1	2	3	2	3	3	1	3	2	2	2	1	3	3	1	1
Student 3	4	3	3	4	4	2	4	2	3	4	2	3	4	4	3	3	2	4	2
Student 4	2	3	2	2	3	3	3	2	3	2	2	2	2	2	3	3	2	3	3
Student 5	1	3	3	3	2	2	3	1	1	1	2	1	3	1	3	2	1	1	3
Student 6	5	4	4	4	4	3	3	5	5	3	4	4	4	4	4	1	4	5	5
Student 7	3	3	3	2	2	3	3	2	2	2	3	3	2	2	3	2	3	2	3
Student 8	4	2	2	2	1	2	3	1	3	2	2	3	2	1	2	3	2	3	1
Student 9	4	4	4	2	3	4	4	1	2	2	3	4	2	2	3	4	4	4	1
Student 10	1	2	1	4	3	1	2	2	2	1	2	1	2	3	4	3	4	1	2
Student 11	2	2	3	2	3	3	3	2	3	2	2	2	2	2	2	2	2	3	3
Student 12	3	3	2	2	3	2	3	3	2	3	2	3	3	2	3	2	2	2	3
Student 13	2	1	2	4	2	4	2	3	1	3	1	4	1	2	3	4	3	3	2
Student 14	2	3	1	3	1	2	2	2	2	1	3	1	3	3	3	3	2	2	1
Student 15	2	4	3	5	2	5	3	5	2	5	2	2	3	3	3	3	5	4	5
Student 16	4	2	2	2	4	5	3	3	5	3	4	4	5	2	4	4	3	4	3
Student 17	4	4	3	5	5	5	4	3	2	5	4	3	5	4	4	3	3	4	2
Student 18	3	5	4	4	5	3	5	3	5	5	5	5	5	5	5	5	5	2	4
Student 19	3	2	2	3	2	3	3	3	2	3	3	3	3	2	2	3	3	3	2
Student 20	3	3	3	3	3	2	3	3	3	3	3	3	2	3	3	2	3	2	3
Student 21	3	1	3	3	4	4	4	4	1	3	2	4	4	3	3	2	4	4	1
Student 22	3	3	4	3	2	3	2	2	5	2	5	2	5	2	5	5	4	2	5
Student 23	4	1	3	1	2	4	2	3	3	4	3	4	1	1	1	2	4	2	4
Student 24	4	1	2	2	1	4	3	1	2	2	2	2	2	2	4	2	4	3	4
Student 25	2	5	4	2	2	2	5	4	5	2	2	5	5	4	4	2	5	2	3
Student 26	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	3	3
Student 27	2	2	1	1	2	2	1	4	2	3	1	4	2	1	2	4	2	3	3
Student 28	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 29	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 30	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 31	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 32	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 33	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 34	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 35	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 36	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 37	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 38	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 39	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 40	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 41	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 42	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 43	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 44	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 45	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 46	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 47	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 48	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 49	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 50	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 51	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 52	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 53	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 54	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 55	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 56	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 57	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 58	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 59	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 60	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 61	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 62	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 63	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 64	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 65	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 66	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 67	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 68	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 69	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 70	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 71	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 72	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 73	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 74	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 75	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 76	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 77	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 78	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 79	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 80	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 81	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 82	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 83	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 84	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 85	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 86	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 87	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 88	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 89	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 90	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 91	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 92	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 93	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 94	2	3	3	4	1	2	3	3	4	3	4	2	4	1	3	4	4	3	3
Student 95																			

EMOTIONAL VARIABLES	EXPERIMENTAL VARIATION	PERCENTAGE	CONTROL VARIATION	PERCENTAGE
Concentration	0,997354497	19,95%	-0,428571429	-8,57%
Attention	1,071428571	21,43%	-0,464285714	-9,29%
Participation in class	0,992063492	19,84%	-0,392857143	-7,86%
Motivation	0,776455026	15,53%	-0,678571429	-13,57%
Anxiety	-0,579365079	-11,59%	0,75	15,00%
Cooperation	0,108465608	2,17%	0,357142857	7,14%
Empathy	0,12037037	2,41%	0,107142857	2,14%
Extroversion	0,432539683	8,65%	0	0,00%
Persistence	0,228835979	4,58%	0,321428571	6,43%
Shyness	-0,403439153	-8,07%	-0,285714286	-5,71%

Table 9: Variations between the variables post-intervention program

Table 10: Correlation between the variables and the importance of *mindfulness* techniques

		Pair-work	Group work	On the street	Projects	Video	Tape recordings	Songs
Pair-work	Pearson Cor		0,17568	0,4255	-0,0518	0,328	0,2704	0,3009
	N		56	56	56	56	56	56
	Sig.		0,1925	0,0011	0,7044	0,01356	0,0439	0,0243
Group work	Pearson Cor	0,17568		0,4058	0,1441	0,2344	0,1478	0,35356
	N	56		56	56	56	56	56
	Sig.	0,1925		0,0019	0,2893	0,0821	0,277	0,0075
On the street	Pearson Cor	0,4255	0,4058		0,0582	0,25673	0,3077	0,3094
	N	56	56		56	56	56	56
	Sig.	0,0011	0,0019		0,56703	0,04564	0,021	0,0203
Projects	Pearson Cor	-0,0518	0,1441	0,0582		0,25631	0,1475	0,3084
	N	56	56	56		56	56	56
	Sig.	0,7044	0,2893	0,56703		0,0501	0,2781	0,0208
Video	Pearson Cor	0,328	0,2344	0,25673	0,25631		0,13856	0,378
	N	56	56	56	56		56	56
	Sig.	0,01356	0,0821	0,04564	0,0501		0,3083	0,0041
Tape recordings	Pearson Cor	0,2704	0,1478	0,3077	0,1475	0,13856		0,2522
	N	56	56	56	56	56		56
	Sig.	0,0439	0,277	0,021	0,2781	0,3083		0,05607
Songs	Pearson Cor	0,3009	0,35356	0,3094	0,3084	0,378	0,2522	
	N	56	56	56	56	56	56	

	Sig.	0,0243	0,0075	0,0203	0,0208	0,0041	0,05607	
Games	Pearson Cor	0,20569	0,15678	0,1522	0,05631	0,153	0,2078	-0,0147
	N	56	56	56	56	56	56	56
	Sig.	0,12561	0,21563	0,25628	0,56441	0,25604	0,1244	0,9145
Visual aids	Pearson Cor	0,1873	0,0842	0,3485	0,0483	0,0744	-	0,0958
	N	56	56	56	56	56	56	56
	Sig.	0,1567	0,5373	0,0085	0,724	0,58556	0,9323	0,4823
Listen- ing	Pearson Cor	0,21561	0,1234	0,2103	0,3201	0,18561	0,2294	0,0159
	N	56	56	56	56	56	56	56
	Sig.	0,1097	0,35648	0,1198	0,01562	0,156956	0,0891	0,9072
Internet	Pearson Cor	0,1423	0,0858	0,15679	0,01356	0,2203	0,0989	0
	N	56	56	56	56	56	56	56
	Sig.	0,29556	0,5297	0,21562	0,9208	0,1027	0,45685	1
Dramati- sing	Pearson Cor	0,356	-	0,3241	0,0319	0,1027	0,2854	0,3282
	N	56	56	56	56	56	56	56
	Sig.	0,00564	0,944	0,0148	0,8152	0,4514	0,033	0,0135
Speak- ing	Pearson Cor	0,00556	0,1821	0,2012	0,392	0,127	0,1558	0,2401
	N	56	56	56	56	56	56	56
	Sig.	0,95673	0,1793	0,137	0,0028	0,3509	0,2515	0,0747
Learning strat.	Pearson Cor	0,0988	0,3856	0,15956	0,3341	0,2559	0,2849	0,256156
	N	56	56	56	56	56	56	56
	Sig.	0,4569	0,0033	0,2401	0,0119	0,05569	0,0333	0,0515
Reading	Pearson Cor	-0,1101	0,1997	0,0138	0,3888	0,27563	-0,0553	0,1317
	N	56	56	56	56	56	56	56
	Sig.	0,4191	0,14	0,91956	0,0031	0,0393	0,56855	0,3333
Written	Pearson Cor	0,1418	0,3594	0,1142	0,1121	0,1088	0,0593	-0,0303
	N	56	56	56	56	56	56	56
	Sig.	0,2973	0,00565	0,4019	0,4108	0,4249	0,565641	0,82456
Pronun- ciation	Pearson Cor	0,28564	0,1894	0,2074	0,2279	0,1307	0,05657	0,05677
	N	56	56	56	56	56	56	56

	Sig.	0,0323	0,1562 1	0,125	0,0912	0,337	0,56304	0,56201
Vocabulary	Pearson Cor	0,221	0,3512	0,1795	0,4223	0,1743	0,3748	0,1904
	N	56	56	56	56	56	56	56
	Sig.	0,10156	0,008	0,18556	0,0012	0,1989	0,0044	0,1598
Grammar	Pearson Cor	0,05609	0,1564 7	0,0451	0,317	0,01256	0,291	0,1754
	N	56	56	56	56	56	56	56
	Sig.	0,56555	0,225	0,7413	0,0173	0,92564	0,02956	0,1959
Spelling	Pearson Cor	0,3229	0,4211	0,34056	0,1538	0,2359	0,2203	0,3179
	N	56	56	56	56	56	56	56
	Sig.	0,0152	0,0012	0,0102	0,2578	0,0801	0,1029	0,017
Sociolinguistic	Pearson Cor	0,2393	0,1317	0,1224	0,1569 3	0,15356	0,4022	0,2758
	N	56	56	56	56	56	56	56
	Sig.	0,0757	0,3333	0,35689	0,2124	0,2583	0,0021	0,03956
(Inter) Cultural aspects	Pearson Cor	0,056569	0,0841	0,2202	0,1235	0,05694	-0,0772	- 0,21569
	N	56	56	56	56	56	56	56
	Sig.	0,5624	0,5375 6	0,1029	0,3564 5	0,56114	0,5715	0,1083
Deeper level of thinking	Pearson Cor	-0,1838	0,1593	-0,04356	0,3756 1	0,0455	- 0,11561	0,0154
	N	56	56	56	56	56	56	56
	Sig.	0,1751	0,241	0,74956	0,0043	0,739	0,3942	0,9102
Concentration	Pearson Cor	0,095	0,113	-0,0852	0,0256 5	-0,1185	-0,1423	-0,0151
	N	56	56	56	56	56	56	56
	Sig.	0,48563	0,4056 9	0,5323	0,8456	0,3843	0,2955	0,9122
Attention	Pearson Cor	0,1005	0,184	-0,0297	0,0756 56	0,091	0,1947	0,1103
	N	56	56	56	56	56	56	56
	Sig.	0,45612	0,1745 6	0,828	0,5747	0,5047	0,1505	0,41856
Participation in class	Pearson Cor	0,0503	0,089	0,031	-0,0534	-0,0012	-0,1082	- 0,05658
	N	56	56	56	56	56	56	56
	Sig.	0,7128	0,5141	0,8204	0,5695	0,9931	0,4271	0,56299

					61			
Motivation	Pearson Cor	- 0,075656	0,1323	-0,1371	- 0,025656	-0,124	0,0547	0,0582
	N	56	56	56	56	56	56	56
	Sig.	0,5745	0,3311	0,3138	0,8454	0,35624	0,56887	0,56703
Anxiety	Pearson Cor	0,15657	0,1482	0	0,0382	0,05629	0,1124	0,0151
	N	56	56	56	56	56	56	56
	Sig.	0,2222	0,2757	1	0,7797	0,56451	0,40956	0,9123
Cooperation	Pearson Cor	0,1025	-0,0051	-0,1049	0,1754	-0,1514	-0,0917	0
	N	56	56	56	56	56	56	56
	Sig.	0,4522	0,9701	0,4418	0,1959	0,25653	0,5015	1
Empathy	Pearson Cor	0,1348	0,056567	-0,0384	-0,0593	-0,0528	0,011	-0,095
	N	56	56	56	56	56	56	56
	Sig.	0,322	0,5625	0,7788	0,565642	0,56994	0,93556	0,48562
Extroversion	Pearson Cor	0,047	-0,0252	-0,01561	-0,0145	-0,0899	- 0,05615	- 0,10256
	N	56	56	56	56	56	56	56
	Sig.	0,73056	0,8535	0,90561	0,9157	0,51	0,56527	0,4517
Persistence	Pearson Cor	0,0825	- 0,07564	-0,0837	0,1085	0,0538	0,0547	0,1184
	N	56	56	56	56	56	56	56
	Sig.	0,5453	0,57556	0,53956	0,42561	0,56937	0,56889	0,3849
Shyness	Pearson Cor	0,0042	0,0442	-0,0147	-0,1155	0,0138	- 0,01567	- 0,05624
	N	56	56	56	56	56	56	56
	Sig.	0,97556	0,745656	0,9143	0,39565	0,9198	0,9029	0,564756

		Games	Visual aids	Listening	Internet	Dramatizing	Speaking	Learning strat.
Pair-work	Pearson Cor	0,20569	0,1873	0,21561	0,1423	0,356	0,00556	0,0988
	N	56	56	56	56	56	56	56
	Sig.	0,12561	0,1567	0,1097	0,29556	0,00564	0,95673	0,4569

Group work	Pearson Cor	0,15678	0,0842	0,1234	0,0858	0,00956	0,1821	0,3856
	N	56	56	56	56	56	56	56
	Sig.	0,21563	0,5373	0,35648	0,5297	0,944	0,1793	0,0033
On the street	Pearson Cor	0,1522	0,3485	0,2103	0,15679	0,3241	0,2012	0,15956
	N	56	56	56	56	56	56	56
	Sig.	0,25628	0,0085	0,1198	0,21562	0,0148	0,137	0,2401
Projects	Pearson Cor	0,05631	0,0483	0,3201	0,01356	0,0319	0,392	0,3341
	N	56	56	56	56	56	56	56
	Sig.	0,56441	0,724	0,01562	0,9208	0,8152	0,0028	0,0119
Video	Pearson Cor	0,153	0,0744	0,18561	0,2203	0,1027	0,127	0,2559
	N	56	56	56	56	56	56	56
	Sig.	0,25604	0,58556	0,156956	0,1027	0,4514	0,3509	0,05569
Tape recordings	Pearson Cor	0,2078	0,01156	0,2294	0,0989	0,2854	0,1558	0,2849
	N	56	56	56	56	56	56	56
	Sig.	0,1244	0,9323	0,0891	0,45685	0,033	0,2515	0,0333
Songs	Pearson Cor	-0,0147	0,0958	0,0159	0	0,3282	0,2401	0,256156
	N	56	56	56	56	56	56	56
	Sig.	0,9145	0,4823	0,9072	1	0,0135	0,0747	0,0515
Games	Pearson Cor		0,27569	0,4156	0,15685	0,0904	0,1192	0,2095
	N		56	56	56	56	56	56
	Sig.		0,0388	0,0014	0,21456	0,5075	0,3815	0,1212
Visual aids	Pearson Cor	0,27569		0,2378	0,11556	0,35056	0,28256	0
	N	56		56	56	56	56	56
	Sig.	0,0388		0,07756	0,39562	0,0081	0,0349	1
Listening	Pearson Cor	0,4156	0,2378		-0,1235	0,381	0,3844	0,2589
	N	56	56		56	56	56	56
	Sig.	0,0014	0,07756		0,35647	0,0038	0,0034	0,054
Internet	Pearson	0,15685	0,1155	-0,1235		-0,0034	0,0088	-0,10956

	Cor		6					
	N	56	56	56		56	56	56
	Sig.	0,21456	0,3956 2	0,3564 7		0,9799	0,9485 6	0,4214
Dramati- sing	Pearson Cor	0,0904	0,3505 6	0,381	-0,0034		0,2141	0,08456
	N	56	56	56	56		56	56
	Sig.	0,5075	0,0081	0,0038	0,9799		0,113	0,5351
Speak- ing	Pearson Cor	0,1192	0,2825 6	0,3844	0,0088	0,2141		0,3874
	N	56	56	56	56	56		56
	Sig.	0,3815	0,0349	0,0034	0,94856	0,113		0,0032
Learning strat.	Pearson Cor	0,2095	0	0,2589	-0,10956	0,0845 6	0,3874	
	N	56	56	56	56	56	56	
	Sig.	0,1212	1	0,054	0,4214	0,5351	0,0032	
Reading	Pearson Cor	-0,0537	0,2156 56	0,1456 8	-0,0002	0,1137	0,3084	0,41056
	N	56	56	56	56	56	56	56
	Sig.	0,5694	0,1089	0,2803	0,99856	0,4042	0,0207	0,0017
Written	Pearson Cor	0,08	0,1493	0,0444	0,2283	- 0,1560 9	0,0759	0,12568
	N	56	56	56	56	56	56	56
	Sig.	0,5578	0,2721	0,7453	0,09056	0,2356 1	0,578	0,3519
Pronunci ation	Pearson Cor	0,1502	0,2885 6	0,0724	0,3039	0,0481	0,0214	0,1417
	N	56	56	56	56	56	56	56
	Sig.	0,25694	0,031	0,5958	0,0228	0,725	0,8755	0,2977
Vocabu- lary	Pearson Cor	0,1889	0,1056 8	0,291	0,0425	0,2005 6	0,2489	0,4255
	N	56	56	56	56	56	56	56
	Sig.	0,15632	0,4334	0,0295 6	0,7556	0,1382	0,0564 3	0,0011
Gramma- tical	Pearson Cor	0,1059	0,0519	0,3427	0,0573	0,131	0,2356 3	0,23556
	N	56	56	56	56	56	56	56
	Sig.	0,4372	0,704	0,0097	0,56747	0,3358	0,0795 6	0,0805
Spelling	Pearson Cor	0,3022	0,1732	0,2581	0,1913	0,3223	0,1738	0,1209
	N	56	56	56	56	56	56	56
	Sig.	0,02356	0,2018	0,0548	0,1577	0,0154	0,2003	0,37456

Sociolin- guistic	Pearson Cor	0,09956	0,2561	0,2818	-0,0017	0,3344	0,3072	0,1757
	N	56	56	56	56	56	56	56
	Sig.	0,45652	0,0521	0,0353	0,9904	0,0118	0,0213	0,1951
(Inter) Cultural aspects	Pearson Cor	0,0098	0,2956 1	0,3211	0,0931	0,0229	0,2568 8	-0,0411
	N	56	56	56	56	56	56	56
	Sig.	0,9429	0,0256 7	0,0158	0,495	0,8565 67	0,0451	0,75637
Deeper level of thinking	Pearson Cor	0,0921	0,2915	0,1	0,0429	0,1707	0,3525 6	0,1518
	N	56	56	56	56	56	56	56
	Sig.	0,4998	0,0293	0,4563 56	0,7537	0,2083	0,0077	0,25639
Concen- tration	Pearson Cor	-0,15656	-0,0174	-0,0842	-0,058	0,1251	0,0912	-0,1854
	N	56	56	56	56	56	56	56
	Sig.	0,2214	0,8985	0,5372	0,56712	0,3582	0,504	0,1712
Atten- tion	Pearson Cor	0,05605	-0,1533	0,0777	0,02956	0,0909	-	-0,0233
	N	56	56	56	56	56	56	56
	Sig.	0,56578	0,2593	0,5569 1	0,8283	0,5054	0,898	0,85649
Participa- -tion in class	Pearson Cor	-0,149	0,0082	0,0056	0,077	0,1565 7	0,1093	-0,1944
	N	56	56	56	56	56	56	56
	Sig.	0,273	0,9519	0,9565	0,5727	0,2222	0,4224	0,151
Motiva- -tion	Pearson Cor	-0,0434	-0,0561	-0,1138	0,05695	0,094	0,082	-0,1432
	N	56	56	56	56	56	56	56
	Sig.	0,7508	0,5655 4	0,4035	0,56107	0,4908	0,548	0,2925
Anxiety	Pearson Cor	0,04565	-0,0019	0,1119	0,2309	0,1563 56	0,0055	-0,0593
	N	56	56	56	56	56	56	56
	Sig.	0,7337	0,989	0,4115 6	0,08569	0,2284	0,9567 8	0,56564
Coopera- -tion	Pearson Cor	-0,114	-0,1379	0,0782	0,05653	0,1155	0,0956	-0,1711
	N	56	56	56	56	56	56	56
	Sig.	0,4027	0,3107	0,5565 656	0,56325	0,3956 8	0,4815 6	0,2073

Empathy	Pearson Cor	0,10556	0,0934	0,1556 2	-0,0884	0,0795	0,1324	-0,13356
	N	56	56	56	56	56	56	56
	Sig.	0,43856	0,4934	0,2504	0,5173	0,5560 3	0,3308	0,32562
Extrover sion	Pearson Cor	0,0333	-0,0193	0,1233	-0,14956	0,0892	0,0563 56	-0,101
	N	56	56	56	56	56	56	56
	Sig.	0,8077	0,8879	0,3565 2	0,2711	0,5133	0,5641 4	0,4587
Persisten -ce	Pearson Cor	-0,0074	-0,1084	0,0295 6	- 0,025656	0,0945 6	0,2377	-0,0729
	N	56	56	56	56	56	56	56
	Sig.	0,955656	0,4256 56	0,8283	0,8457	0,4879	0,0777	0,59356
Shyness	Pearson Cor	-0,1851	-0,0445	0,0497	0,01567	0,0722	0,0017	-0,25356
	N	56	56	56	56	56	56	56
	Sig.	0,172	0,7449	0,7158	0,9029	0,5956 9	0,9903	0,0593

		Reading	Written	Pronun- ciation	Vocabu- lary	Gram- mar	Spell- ing	Sociolin- guistic
Pair- work	Pearson Cor	-0,1101	0,1418	0,28564	0,221	0,0560 9	0,3229	0,2393
	N	56	56	56	56	56	56	56
	Sig.	0,4191	0,2973	0,0323	0,1015 6	0,5655 5	0,0152	0,0757
Group work	Pearson Cor	0,1997	0,3594	0,1894	0,3512	0,1564 7	0,4211	0,1317
	N	56	56	56	56	56	56	56
	Sig.	0,14	0,0056 5	0,15621	0,008	0,225	0,0012	0,3333
On the street	Pearson Cor	0,0138	0,1142	0,2074	0,1795	0,0451	0,3405 6	0,1224
	N	56	56	56	56	56	56	56
	Sig.	0,91956	0,4019	0,125	0,1855 6	0,7413	0,0102	0,35689
Projects	Pearson Cor	0,3888	0,1121	0,2279	0,4223	0,317	0,1538	0,15693
	N	56	56	56	56	56	56	56
	Sig.	0,0031	0,4108	0,0912	0,0012	0,0173	0,2578	0,2124
Video	Pearson Cor	0,27563	0,1088	0,1307	0,1743	0,0125 6	0,2359	0,15356

	N	56	56	56	56	56	56	56
	Sig.	0,0393	0,4249	0,337	0,1989	0,9256 4	0,0801	0,2583
Tape record- ings	Pearson Cor	-0,0553	0,0593	0,05657	0,3748	0,291	0,2203	0,4022
	N	56	56	56	56	56	56	56
	Sig.	0,56855	0,5656 41	0,56304	0,0044	0,0295 6	0,1029	0,0021
Songs	Pearson Cor	0,1317	-0,0303	0,05677	0,1904	0,1754	0,3179	0,2758
	N	56	56	56	56	56	56	56
	Sig.	0,3333	0,8245 6	0,56201	0,1598	0,1959	0,017	0,03956
Games	Pearson Cor	-0,0537	0,08	0,1502	0,1889	0,1059	0,3022	0,09956
	N	56	56	56	56	56	56	56
	Sig.	0,5694	0,5578	0,25694	0,1563 2	0,4372	0,0235 6	0,45652
Visual aids	Pearson Cor	0,215656	0,1493	0,28856	0,1056 8	0,0519	0,1732	0,2561
	N	56	56	56	56	56	56	56
	Sig.	0,1089	0,2721	0,031	0,4334	0,704	0,2018	0,0521
Listen- ing	Pearson Cor	0,14568	0,0444	0,0724	0,291	0,3427	0,2581	0,2818
	N	56	56	56	56	56	56	56
	Sig.	0,2803	0,7453	0,5958	0,0295 6	0,0097	0,0548	0,0353
Internet	Pearson Cor	-0,0002	0,2283	0,3039	0,0425	0,0573	0,1913	-0,0017
	N	56	56	56	56	56	56	56
	Sig.	0,99856	0,0905 6	0,0228	0,7556	0,5674 7	0,1577	0,9904
Dramati- sing	Pearson Cor	0,1137	- 0,1560 9	0,0481	0,2005 6	0,131	0,3223	0,3344
	N	56	56	56	56	56	56	56
	Sig.	0,4042	0,2356 1	0,725	0,1382	0,3358	0,0154	0,0118
Speak- ing	Pearson Cor	0,3084	0,0759	0,0214	0,2489	0,2356 3	0,1738	0,3072
	N	56	56	56	56	56	56	56
	Sig.	0,0207	0,578	0,8755	0,0564 3	0,0795 6	0,2003	0,0213
Learning	Pearson	0,41056	0,1256	0,1417	0,4255	0,2355	0,1209	0,1757

strat.	Cor		8			6		
	N	56	56	56	56	56	56	56
	Sig.	0,0017	0,3519	0,2977	0,0011	0,0805	0,3745 6	0,1951
Reading	Pearson Cor		0,0975	0,2839	0,3435 6	0,1756	0,0399	0,3022
	N		56	56	56	56	56	56
	Sig.		0,4747	0,034	0,0095	0,1944	0,7705	0,02356
Written	Pearson Cor	0,0975		0,45654	0,2183	0,0569 56	0,2048	0,19256
	N	56		56	56	56	56	56
	Sig.	0,4747		0,0003	0,1056 1	0,5610 4	0,13	0,1549
Pronun- ciation	Pearson Cor	0,2839	0,4565 4		0,1562 9	0,0505 6	0,2305 6	0,05609
	N	56	56		56	56	56	56
	Sig.	0,034	0,0003		0,2303	0,7112	0,0873	0,56558
Vocabu- lary	Pearson Cor	0,34356	0,2183	0,15629		0,1741	0,3272	0,20256
	N	56	56	56		56	56	56
	Sig.	0,0095	0,1056 1	0,2303		0,1995	0,0138	0,1343
Gram- mar	Pearson Cor	0,1756	0,0569 56	0,05056	0,1741		0,0495	0,27568
	N	56	56	56	56		56	56
	Sig.	0,1944	0,5610 4	0,7112	0,1995		0,7171	0,0389
Spelling	Pearson Cor	0,0399	0,2048	0,23056	0,3272	0,0495		0,1902
	N	56	56	56	56	56		56
	Sig.	0,7705	0,13	0,0873	0,0138	0,7171		0,15602
Sociolin- guistic	Pearson Cor	0,3022	0,1925 6	0,05609	0,2025 6	0,2756 8	0,1902	
	N	56	56	56	56	56	56	
	Sig.	0,02356	0,1549	0,56558	0,1343	0,0389	0,1560 2	
(Inter) Cultural aspects	Pearson Cor	0,25637	0,1475 6	0,2779	0,1935	0,0085	0,2257	0,091
	N	56	56	56	56	56	56	56
	Sig.	0,04956	0,2778	0,0381	0,1529	0,9503	0,0945	0,505
Deeper level of thinking	Pearson Cor	0,2589	0,142	0,0942	0,2199	0,1595 6	0,111	0,2333

	N	56	56	56	56	56	56	56
	Sig.	0,054	0,2956 56	0,48956	0,1034	0,2399	0,4153	0,0835
Concen- tration	Pearson Cor	-0,0995	-0,1077	-0,2002	- 0,0568 3	0,1439	0,0814	0,0888
	N	56	56	56	56	56	56	56
	Sig.	0,456556	0,4295	0,1391	0,5615 67	0,29	0,5511	0,515
Atten- tion	Pearson Cor	0,1562	-0,1851	-0,2233	0,237	0,1573	0,0856 56	0,031
	N	56	56	56	56	56	56	56
	Sig.	0,233	0,172	0,0981	0,0785 6	0,2456 9	0,5255 6	0,8208
Participa- -tion in class	Pearson Cor	-0,0473	-0,2153	-0,2024	-0,1201	- 0,1565 5	0,088	-0,0244
	N	56	56	56	56	56	56	56
	Sig.	0,7291	0,111	0,1347	0,378	0,2227	0,5188	0,8583
Motiva- -tion	Pearson Cor	0,0141	-0,1092	-0,28056	0,0394	0,1399	0,0014	0,15693
	N	56	56	56	56	56	56	56
	Sig.	0,9179	0,423	0,03562	0,773	0,3037	0,9915 6	0,2123
Anxiety	Pearson Cor	0,1431	0,0875 6	-0,05356	0,0356 3	0,3185	0,1035	0,2011
	N	56	56	56	56	56	56	56
	Sig.	0,2928	0,5209	0,56948	0,7905	0,0156 7	0,4479	0,1372
Coopera- -tion	Pearson Cor	0,0774	-0,0994	-0,245	0,0282	0,2037	-0,0792	0,1397
	N	56	56	56	56	56	56	56
	Sig.	0,57056	0,4565 62	0,05688	0,8356 8	0,132	0,5561 7	0,3044
Empathy	Pearson Cor	0,0399	-0,1184	-0,15659	-0,0182	0,0514	0,1568 5	0,25657
	N	56	56	56	56	56	56	56
	Sig.	0,7701	0,3849	0,2218	0,8943	0,7056 5	0,2144	0,0478
Extrover- -sion	Pearson Cor	-0,0194	-0,3398	- 0,256056	0,0424	-0,01	0,0215	-0,0939
	N	56	56	56	56	56	56	56
	Sig.	0,88569	0,0104	0,0524	0,7556 5	0,9418	0,8752	0,4914
Persisten	Pearson	0,0292	-0,104	-0,2959	0,1204	0,11	0,1549	0,1482

-ce	Cor							
	N	56	56	56	56	56	56	56
	Sig.	0,8308	0,4457	0,02568	0,37568	0,4194	0,2542	0,2758
Shyness	Pearson Cor	0,05603	-0,0473	-0,3107	-0,0201	0,1354	-0,0812	0,1905
	N	56	56	56	56	56	56	56
	Sig.	0,56589	0,7293	0,0198	0,8836	0,31956	0,5519	0,1597

		(Inter)Cultural aspects	Deeper level of thinking	Concentration	Attention
Pair-work	Pearson Cor	0,056569	-0,1838	0,095	0,1005
	N	56	56	56	56
	Sig.	0,5624	0,1751	0,48563	0,45612
Group work	Pearson Cor	0,0841	0,1593	0,113	0,184
	N	56	56	56	56
	Sig.	0,53756	0,241	0,40569	0,17456
On the street	Pearson Cor	0,2202	-0,04356	-0,0852	-0,0297
	N	56	56	56	56
	Sig.	0,1029	0,74956	0,5323	0,828
Projects	Pearson Cor	0,1235	0,37561	0,02565	0,075656
	N	56	56	56	56
	Sig.	0,35645	0,0043	0,8456	0,5747
Video	Pearson Cor	0,05694	0,0455	-0,1185	0,091
	N	56	56	56	56
	Sig.	0,56114	0,739	0,3843	0,5047
Tape recordings	Pearson Cor	-0,0772	-0,11561	-0,1423	0,1947
	N	56	56	56	56
	Sig.	0,5715	0,3942	0,2955	0,1505
Songs	Pearson Cor	-0,21569	0,0154	-0,0151	0,1103
	N	56	56	56	56
	Sig.	0,1083	0,9102	0,9122	0,41856
Games	Pearson Cor	0,0098	0,0921	-0,15656	0,05605
	N	56	56	56	56
	Sig.	0,9429	0,4998	0,2214	0,56578
Visual aids	Pearson Cor	0,29561	0,2915	-0,0174	-0,1533
	N	56	56	56	56

	Sig.	0,02567	0,0293	0,8985	0,2593
Listening	Pearson Cor	0,3211	0,1	-0,0842	0,0777
	N	56	56	56	56
	Sig.	0,0158	0,456356	0,5372	0,55691
Internet	Pearson Cor	0,0931	0,0429	-0,058	0,02956
	N	56	56	56	56
	Sig.	0,495	0,7537	0,56712	0,8283
Dramati- sing	Pearson Cor	0,0229	0,1707	0,1251	0,0909
	N	56	56	56	56
	Sig.	0,856567	0,2083	0,3582	0,5054
Speaking	Pearson Cor	0,25688	0,35256	0,0912	-0,0175
	N	56	56	56	56
	Sig.	0,0451	0,0077	0,504	0,898
Learning strat.	Pearson Cor	-0,0411	0,1518	-0,1854	-0,0233
	N	56	56	56	56
	Sig.	0,75637	0,25639	0,1712	0,85649
Reading	Pearson Cor	0,25637	0,2589	-0,0995	0,1562
	N	56	56	56	56
	Sig.	0,04956	0,054	0,456556	0,233
Written	Pearson Cor	0,14756	0,142	-0,1077	-0,1851
	N	56	56	56	56
	Sig.	0,2778	0,295656	0,4295	0,172
Pronuncia tion	Pearson Cor	0,2779	0,0942	-0,2002	-0,2233
	N	56	56	56	56
	Sig.	0,0381	0,48956	0,1391	0,0981
Vocabula- ry	Pearson Cor	0,1935	0,2199	-0,05683	0,237
	N	56	56	56	56
	Sig.	0,1529	0,1034	0,561567	0,07856
Gramma- tical	Pearson Cor	0,0085	0,15956	0,1439	0,1573
	N	56	56	56	56
	Sig.	0,9503	0,2399	0,29	0,24569
Spelling	Pearson Cor	0,2257	0,111	0,0814	0,085656
	N	56	56	56	56
	Sig.	0,0945	0,4153	0,5511	0,52556
Sociolin- guistic	Pearson Cor	0,091	0,2333	0,0888	0,031
	N	56	56	56	56
	Sig.	0,505	0,0835	0,515	0,8208

(Inter)Cul- tural aspects	Pearson Cor		0,0741	0,0101	-0,103
	N		56	56	56
	Sig.		0,5873	0,9414	0,4499
Deeper level of thinking	Pearson Cor	0,0741		0,1901	-0,05633
	N	56		56	56
	Sig.	0,5873		0,15605	0,56431
Concentra- -tion	Pearson Cor	0,0101	0,1901		0,3181
	N	56	56		56
	Sig.	0,9414	0,15605		0,01569
Attention	Pearson Cor	-0,103	-0,05633	0,3181	
	N	56	56	56	
	Sig.	0,4499	0,56431	0,01569	
Participa- -tion in class	Pearson Cor	0,0439	-0,0534	0,58356	0,45632
	N	56	56	56	56
	Sig.	0,7479	0,569561	0	0,0003
Motiva- -tion	Pearson Cor	0,0039	0,0738	0,564563	0,5134
	N	56	56	56	56
	Sig.	0,9774	0,5889	0	0,0001
Anxiety	Pearson Cor	-0,1448	0,0568	0,4274	0,5185
	N	56	56	56	56
	Sig.	0,2871	0,56187	0,001	0
Coopera- -tion	Pearson Cor	-0,1095	0,0519	0,565681	0,5038
	N	56	56	56	56
	Sig.	0,4218	0,7038	0	0,0001
Empathy	Pearson Cor	0,0725	-0,1397	0,55682	0,4534
	N	56	56	56	56
	Sig.	0,5957	0,30456	0	0,0005
Extrover- -sion	Pearson Cor	-0,0091	-0,0482	0,43456	0,479
	N	56	56	56	56
	Sig.	0,94568	0,7242	0,0008	0,0002
Persisten- -ce	Pearson Cor	-0,1562	-0,0814	0,5325	0,5088
	N	56	56	56	56

	Sig.	0,233	0,5511	0	0,0001
Shyness	Pearson Cor	0,11456	-0,0231	0,56077	0,35639
	N	56	56	56	56
	Sig.	0,4003	0,85658	0	0,0058

		Participa- tion in class	Motivation	Anxiety	Coopera- tion	Empa- thy	Extrover- sion
Pair-work	Pearson Cor	0,0503	-0,075656	0,15657	0,1025	0,1348	0,047
	N	56	56	56	56	56	56
	Sig.	0,7128	0,5745	0,2222	0,4522	0,322	0,73056
Group work	Pearson Cor	0,089	0,1323	0,1482	-0,0051	0,056567	-0,0252
	N	56	56	56	56	56	56
	Sig.	0,5141	0,3311	0,2757	0,9701	0,5625	0,8535
On the street	Pearson Cor	0,031	-0,1371	0	-0,1049	-0,0384	-0,01561
	N	56	56	56	56	56	56
	Sig.	0,8204	0,3138	1	0,4418	0,7788	0,90561
Projects	Pearson Cor	-0,0534	-0,025656	0,0382	0,1754	-0,0593	-0,0145
	N	56	56	56	56	56	56
	Sig.	0,569561	0,8454	0,7797	0,1959	0,565642	0,9157
Video	Pearson Cor	-0,0012	-0,124	0,05629	-0,1514	-0,0528	-0,0899
	N	56	56	56	56	56	56
	Sig.	0,9931	0,35624	0,56451	0,25653	0,56994	0,51
Tape recordings	Pearson Cor	-0,1082	0,0547	0,1124	-0,0917	0,011	-0,05615
	N	56	56	56	56	56	56
	Sig.	0,4271	0,56887	0,40956	0,5015	0,93556	0,56527
Songs	Pearson Cor	-0,05658	0,0582	0,0151	0	-0,095	-0,10256
	N	56	56	56	56	56	56
	Sig.	0,56299	0,56703	0,9123	1	0,48562	0,4517
Games	Pearson Cor	-0,149	-0,0434	0,04565	-0,114	0,10556	0,0333
	N	56	56	56	56	56	56
	Sig.	0,273	0,7508	0,7337	0,4027	0,43856	0,8077
Visual aids	Pearson Cor	0,0082	-0,0561	-0,0019	-0,1379	0,0934	-0,0193
	N	56	56	56	56	56	56

	Sig.	0,9519	0,56554	0,989	0,3107	0,4934	0,8879
Listening	Pearson Cor	0,0056	-0,1138	0,1119	0,0782	0,15562	0,1233
	N	56	56	56	56	56	56
	Sig.	0,9565	0,4035	0,41156	0,5565656	0,2504	0,35652
Internet	Pearson Cor	0,077	0,05695	0,2309	0,05653	-0,0884	-0,14956
	N	56	56	56	56	56	56
	Sig.	0,5727	0,56107	0,08569	0,56325	0,5173	0,2711
Dramatizing	Pearson Cor	0,15657	0,094	0,156356	0,1155	0,0795	0,0892
	N	56	56	56	56	56	56
	Sig.	0,2222	0,4908	0,2284	0,39568	0,55603	0,5133
Speaking	Pearson Cor	0,1093	0,082	0,0055	0,0956	0,1324	0,056356
	N	56	56	56	56	56	56
	Sig.	0,4224	0,548	0,95678	0,48156	0,3308	0,56414
Learning strat.	Pearson Cor	-0,1944	-0,1432	-0,0593	-0,1711	-0,13356	-0,101
	N	56	56	56	56	56	56
	Sig.	0,151	0,2925	0,56564	0,2073	0,32562	0,4587
Reading	Pearson Cor	-0,0473	0,0141	0,1431	0,0774	0,0399	-0,0194
	N	56	56	56	56	56	56
	Sig.	0,7291	0,9179	0,2928	0,57056	0,7701	0,88569
Written	Pearson Cor	-0,2153	-0,1092	0,08756	-0,0994	-0,1184	-0,3398
	N	56	56	56	56	56	56
	Sig.	0,111	0,423	0,5209	0,456562	0,3849	0,0104
Pronunciation	Pearson Cor	-0,2024	-0,28056	-0,05356	-0,245	-0,15659	-0,256056
	N	56	56	56	56	56	56
	Sig.	0,1347	0,03562	0,56948	0,05688	0,2218	0,0524
Vocabulary	Pearson Cor	-0,1201	0,0394	0,03563	0,0282	-0,0182	0,0424
	N	56	56	56	56	56	56
	Sig.	0,378	0,773	0,7905	0,83568	0,8943	0,75565
Grammatical	Pearson Cor	-0,15655	0,1399	0,3185	0,2037	0,0514	-0,01
	N	56	56	56	56	56	56
	Sig.	0,2227	0,3037	0,01567	0,132	0,70565	0,9418
Spelling	Pearson Cor	0,088	0,0014	0,1035	-0,0792	0,15685	0,0215

	N	56	56	56	56	56	56
	Sig.	0,5188	0,99156	0,4479	0,55617	0,2144	0,8752
Sociolin- guistic	Pearson Cor	-0,0244	0,15693	0,2011	0,1397	0,25657	-0,0939
	N	56	56	56	56	56	56
	Sig.	0,8583	0,2123	0,1372	0,3044	0,0478	0,4914
(Inter)Cul- -tural aspects	Pearson Cor	0,0439	0,0039	-0,1448	-0,1095	0,0725	-0,0091
	N	56	56	56	56	56	56
	Sig.	0,7479	0,9774	0,2871	0,4218	0,5957	0,94568
Deeper level of thinking	Pearson Cor	-0,0534	0,0738	0,0568	0,0519	-0,1397	-0,0482
	N	56	56	56	56	56	56
	Sig.	0,569561	0,5889	0,56187	0,7038	0,30456	0,7242
Concentra- -tion	Pearson Cor	0,58356	0,564563	0,4274	0,565681	0,55682	0,43456
	N	56	56	56	56	56	56
	Sig.	0	0	0,001	0	0	0,0008
Attention	Pearson Cor	0,45632	0,5134	0,5185	0,5038	0,4534	0,479
	N	56	56	56	56	56	56
	Sig.	0,0003	0,0001	0	0,0001	0,0005	0,0002
Participa- -tion in class	Pearson Cor		0,45615	0,3739	0,48	0,5083	0,5428
	N		56	56	56	56	56
	Sig.		0,0003	0,0045	0,0002	0,0001	0
Motiva- -tion	Pearson Cor	0,45615		0,485656	0,5835	0,5898	0,35569
	N	56		56	56	56	56
	Sig.	0,0003		0,0001	0	0	0,00569
Anxiety	Pearson Cor	0,3739	0,485656		0,5821	0,4822	0,3085
	N	56	56		56	56	56
	Sig.	0,0045	0,0001		0	0,0002	0,0207
Coopera- -tion	Pearson Cor	0,48	0,5835	0,5821		0,5485	0,4923
	N	56	56	56		56	56
	Sig.	0,0002	0	0		0	0,0001
Empathy	Pearson Cor	0,5083	0,5898	0,4822	0,5485		0,39567
	N	56	56	56	56		56

	Sig.	0,0001	0	0,0002	0		0,0025
Extrover- sion	Pearson Cor	0,5428	0,35569	0,3085	0,4923	0,39567	
	N	56	56	56	56	56	
	Sig.	0	0,00569	0,0207	0,0001	0,0025	
Persisten- ce	Pearson Cor	0,4897	0,45652	0,5727	0,56099	0,5801	0,4257
	N	56	56	56	56	56	56
	Sig.	0,0001	0,0003	0	0	0	0,0011
Shyness	Pearson Cor	0,5178	0,56354	0,48156	0,56441	0,50156	0,4357
	N	56	56	56	56	56	56
	Sig.	0	0	0,0002	0	0,0001	0,0008

		Persistence	Shyness
Pair-work	Pearson Cor	0,0825	0,0042
	N	56	56
	Sig.	0,5453	0,97556
Group work	Pearson Cor	-0,07564	0,0442
	N	56	56
	Sig.	0,57556	0,745656
On the street	Pearson Cor	-0,0837	-0,0147
	N	56	56
	Sig.	0,53956	0,9143
Projects	Pearson Cor	0,1085	-0,1155
	N	56	56
	Sig.	0,42561	0,39565
Video	Pearson Cor	0,0538	0,0138
	N	56	56
	Sig.	0,56937	0,9198
Tape recordings	Pearson Cor	0,0547	-0,01567
	N	56	56
	Sig.	0,56889	0,9029
Songs	Pearson Cor	0,1184	-0,05624
	N	56	56
	Sig.	0,3849	0,564756
Games	Pearson Cor	-0,0074	-0,1851
	N	56	56
	Sig.	0,955656	0,172
Visual aids	Pearson Cor	-0,1084	-0,0445

	N	56	56
	Sig.	0,425656	0,7449
Listening	Pearson Cor	0,02956	0,0497
	N	56	56
	Sig.	0,8283	0,7158
Internet	Pearson Cor	-0,025656	0,01567
	N	56	56
	Sig.	0,8457	0,9029
Dramatising	Pearson Cor	0,09456	0,0722
	N	56	56
	Sig.	0,4879	0,59569
Speaking	Pearson Cor	0,2377	0,0017
	N	56	56
	Sig.	0,0777	0,9903
Learning strat.	Pearson Cor	-0,0729	-0,25356
	N	56	56
	Sig.	0,59356	0,0593
Reading	Pearson Cor	0,0292	0,05603
	N	56	56
	Sig.	0,8308	0,56589
Written	Pearson Cor	-0,104	-0,0473
	N	56	56
	Sig.	0,4457	0,7293
Pronunciation	Pearson Cor	-0,2959	-0,3107
	N	56	56
	Sig.	0,02568	0,0198
Vocabulary	Pearson Cor	0,1204	-0,0201
	N	56	56
	Sig.	0,37568	0,883
Grammatical	Pearson Cor	0,11	0,1354
	N	56	56
	Sig.	0,4194	0,31956
Spelling	Pearson Cor	0,1549	-0,0812
	N	56	56
	Sig.	0,2542	0,5519
Sociolinguistic	Pearson Cor	0,1482	0,1905
	N	56	56
	Sig.	0,2758	0,1597
(Inter)Cultural aspects	Pearson Cor	-0,1562	0,11456
	N	56	56
	Sig.	0,233	0,4003

Deeper level of thinking	Pearson Cor	-0,0814	-0,0231
	N	56	56
	Sig.	0,5511	0,85658
Concentration	Pearson Cor	0,5325	0,56077
	N	56	56
	Sig.	0	0
Attention	Pearson Cor	0,5088	0,35639
	N	56	56
	Sig.	0,0001	0,0058
Participation in class	Pearson Cor	0,4897	0,5178
	N	56	56
	Sig.	0,0001	0
Motivation	Pearson Cor	0,45652	0,56354
	N	56	56
	Sig.	0,0003	0
Anxiety	Pearson Cor	0,5727	0,48156
	N	56	56
	Sig.	0	0,0002
Cooperation	Pearson Cor	0,56099	0,56441
	N	56	56
	Sig.	0	0
Empathy	Pearson Cor	0,5801	0,50156
	N	56	56
	Sig.	0	0,0001
Extroversion	Pearson Cor	0,4257	0,4357
	N	56	56
	Sig.	0,0011	0,0008
Persistence	Pearson Cor		0,4472
	N		56
	Sig.		0,0005
Shyness	Pearson Cor	0,4472	
	N	56	
	Sig.	0,0005	

Table 10: Correlation between the variables and the importance of mindfulness techniques

ARCHIVO INICIO INSERTAR DISEÑO DE PÁGINA FÓRMULAS DATOS REVISAR VISTA																
Normal	Ver salt. Pág. de libro	Diseño de página personalizadas	Vistas	☒ Regla	☒ Barra de fórmulas	☒ Líneas de cuadrícula	☒ Títulos	Zoom 100%	Ampliar selección	Nueva ventana	Organizar todo	Inmovilizar	Mostrar	Dividir	Ver en paralelo	Desplazamiento sincrónico
Ventana Cambiar ventanas Macros																
H8																
1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
2	Table 11: Contrasts between control and experimental groups at the end of the course year															
3	CONTRAST BETWEEN CONTROL AND EXPERIMENTAL GROUPS (2017)															
4	Variables	Pair-work	Group work	On the street	Projects	Video	Tape recordings	Songs	Games	Visual aids	Listening	Internet	Dramatising	Spelling	Le-entire stre	Reading
5	P-value	0.252548	0.909518	0.125566	0.633617	0.302618	0.904827	0.821201	0.053025	0.675551	0.061744	0.0842039	0.70337	0.00163762	0.0468733	0.74063
6														0.000818809	0.000121125	0.000716208
7															0.000358104	0.000198514
8																0.000093257
	Vocabulary	Grammatical	Spelling	Sociolinguistic	(Inter)Cultural aspects	Deeper level of thinking	Concentration	Attention	Participation in class	Motivation	Anxiety	Cooperation	Empathy	Extroversion	Persistence	Shyness
	0.048999	6.03018E-06	0.00304534	0.904317	0.0833283	0.0325846	0.024956	0.04686322	0.0003213	0.009168	0.000451	0.900702	0.308739	0.227605	0.45104	0.006543
	0.0245	2.73207E-05	0.00158574			0.0263045	3.75442E-06	1.08484E-06	6.75278E-05	4.44E-07	0.348658					0.194059

Table 11: Contrasts between control and experimental groups at the end of the course year

ACADEMIC VARIABLES

P-value = 0,000259878

FEMALES 2017	FEMALES 2016	FEMALE DIF	MALES 2017	MALES 2016	MALE DIF
5	5	0	4	5	-1
4	3	1	3	2	1
4	2	2	3	3	0
3	2	1	3	2	1
2	1	1	3	3	0
5	4	1	3	2	1
4	3	1	3	1	2
5	2	3	2	2	0
4	3	1	2	3	-1
3	1	2	3	2	1
3	4	-1	3	3	0
2	1	1	2	2	0
3	1	2	3	2	1
5	3	2	2	2	0
4	4	0	2	1	1
2	2	0	2	3	-1
3	2	1	3	2	1
4	3	1	4	3	1
3	3	0	3	1	2
4	2	2	3	3	0
4	2	2	5	4	1
3	2	1	5	4	1
4	3	1	2	2	0
3	1	2	4	3	1

5	4	1
3	3	0
4	3	1
3	2	1
4	4	0
3	5	-2
2	1	1
4	3	1
5	4	1
4	1	3
5	4	1
4	3	1
4	4	0
3	4	-1
5	3	2
5	4	1
3	2	1
4	1	3
4	4	0
5	3	2
4	4	0
3	1	2
5	3	2
4	5	-1
5	5	0
2	4	-2
4	1	3
4	1	3
5	3	2
3	2	1
5	5	0
4	3	1
4	2	2
5	2	3
3	3	0
4	2	2
3	4	-1
4	3	1
2	3	-1
5	4	1
4	3	1

2	2	0
4	3	1
3	3	0
3	1	2
3	2	1
2	2	0
3	2	1
5	4	1
3	3	0
3	3	0
3	2	1
3	2	1
5	4	1
2	3	-1
4	3	1
2	1	1
4	3	1
3	3	0
2	1	1
2	2	0
3	1	2
3	4	-1
3	3	0
2	2	0
3	3	0
4	3	1
3	3	0
2	4	-2
2	2	0
1	2	-1
4	3	1
3	2	1
2	1	1
2	2	0
3	2	1
4	4	0
4	3	1
2	2	0
2	2	0
3	3	0
4	3	1

5	5	0
4	4	0
4	4	0
4	2	2
5	3	2
3	3	0
5	3	2
3	4	-1
3	3	0
5	4	1
4	2	2
4	3	1
5	4	1
4	5	-1
5	4	1
4	2	2
3	1	2
4	3	1
4	4	0
2	2	0
3	2	1
4	3	1
4	4	0
5	5	0
5	4	1
4	3	1
4	4	0
3	5	-2
4	3	1
5	4	1
4	5	-1
3	2	1
4	4	0
4	3	1
3	2	1
5	4	1
5	5	0
4	2	2
5	4	1
3	2	1
3	2	1

2	1	1
3	3	0
3	2	1
4	4	0
3	2	1
4	3	1
3	4	-1
2	3	-1
3	3	0
1	4	-3
3	2	1
2	3	-1
3	2	1
3	2	1
4	3	1

4	3	1
5	4	1
4	4	0
4	3	1
5	4	1
4	5	-1
3	2	1
4	3	1
3	1	2
4	3	1
3	2	1
4	3	1
5	4	1
5	5	0
4	4	0
3	3	0
4	2	2
4	3	1
5	3	2
5	4	1
4	4	0
3	2	1
4	3	1
3	1	2
2	2	0
4	4	0
4	3	1
5	5	0
4	2	2
3	3	0
4	1	3
3	2	1
5	3	2
4	4	0
4	3	1
4	1	3
5	3	2
5	5	0

EMOTIONAL VARIABLES

P-value= 0,0182818

FEMALES 2016	FEMALES 2017	FEMALE DIF	MALES 16	MALES 17	DIF MALES
2	5	3	4	5	1
5	5	0	3	5	2
3	4	1	2	2	0
2	4	2	3	3	0
2	4	2	5	5	0
4	5	1	4	4	0
1	3	2	1	2	1
4	4	0	2	3	1
2	5	3	3	3	0
4	4	0	1	2	1
3	3	0	2	3	1
2	4	2	4	4	0
3	4	1	3	2	-1
3	3	0	3	3	0
3	4	1	3	3	0
4	5	1	2	5	3
3	4	1	3	2	-1
3	3	0	3	3	0
2	4	2	1	4	3
3	3	0	2	4	2
3	5	2	3	4	1
4	4	0	3	4	1
3	5	2	3	3	0
5	5	0	4	2	-2
3	4	1	5	5	0
3	5	2	3	4	1
2	4	2	1	3	2
2	4	2	2	2	0
4	5	1	2	3	1
2	3	1	1	3	2
3	4	1	3	4	1
1	5	4	3	3	0
3	3	0	3	4	1
3	5	2	1	2	1
4	5	1	3	4	1
4	5	1	4	4	0
3	5	2	2	3	1

2	4	2
3	5	2
3	4	1
3	3	0
3	5	2
2	2	0
2	4	2
2	3	1
4	4	0
3	4	1
1	3	2
3	4	1
2	4	2
3	5	2
4	4	0
4	5	1
2	3	1
2	5	3
5	5	0
4	4	0
3	4	1
4	3	-1
4	5	1
1	3	2
4	4	0
2	3	1
2	4	2
3	4	1
1	3	2
4	4	0
3	3	0
4	4	0
3	5	2
4	5	1
3	3	0
3	3	0
5	4	-1
3	3	0
2	2	0
2	2	0
5	5	0

3	3	0
3	3	0
2	3	1
4	3	-1
3	3	0
3	3	0
3	3	0
4	3	-1
3	3	0
1	1	0
3	4	1
2	2	0
2	2	0
4	4	0
4	4	0
3	2	-1
2	2	0
5	5	0
3	4	1
1	2	1
4	4	0
3	3	0
2	1	-1
3	4	1
2	3	1
2	4	2
4	2	-2
3	4	1
3	3	0
2	2	0
4	4	0
2	2	0
3	3	0
5	5	0
3	3	0
4	4	0
2	3	1
5	5	0
3	3	0
2	3	1
3	3	0

1	2	1
4	4	0
1	2	1
2	2	0
3	3	0
2	2	0
3	3	0
3	3	0
3	3	0
4	4	0
5	5	0
3	3	0
4	4	0
5	5	0
3	3	0
2	2	0
2	2	0
5	5	0
2	2	0
3	3	0
3	3	0
3	3	0
5	5	0
3	3	0
4	4	0
3	4	1
5	3	-2
4	4	0
3	3	0
2	2	0
3	4	1
1	5	4
3	3	0
3	3	0
2	2	0
4	4	0
2	3	1
2	3	1
2	3	1
4	2	-2
3	3	0

4	2	-2
3	3	0

1	5	4
3	2	-1
2	4	2
4	3	-1
4	2	-2
3	3	0
2	2	0
3	3	0
3	5	2
4	4	0
3	3	0
1	3	2
4	5	1
2	2	0
2	4	2
2	3	1
2	2	0
5	2	-3
3	3	0
3	4	1
2	4	2
4	3	-1
5	4	-1
4	3	-1
4	4	0

EMOTIONAL VARIABLES

P-value= 0,0222799

SHYNESS AND ANXIETY ON FEMALES		
FEMALES 2016	FEMALES 2017	FEMALE DIF
4	2	-2
3	2	-1
5	1	-4
4	3	-1
3	3	0
4	4	0
3	3	0
4	3	-1

SHYNESS AND ANXIETY ON MALES		
MALES 2016	MALES 2017	MALE DIF
4	2	-2
5	2	-3
3	2	-1
2	3	1
4	3	-1
3	3	0
2	4	2
4	4	0

2	2	0	2	1	-1
3	3	0	3	3	0
3	2	-1	5	3	-2
4	2	-2	3	3	0
4	2	-2	3	3	0
3	3	0	2	2	0
3	4	1	3	4	1
2	3	1	4	2	-2
4	5	1	2	2	0
4	4	0	2	1	-1
3	4	1	2	2	0
4	4	0	1	1	0
5	3	-2			
4	2	-2			
4	4	0			
5	3	-2			
2	3	1			
2	3	1			
2	1	-1			
3	2	-1			
3	3	0			
1	2	1			
3	2	-1			
4	3	-1			
3	2	-1			
4	3	-1			
5	4	-1			
3	3	0			

Table 12: Contrasts between females and males (experimental group)