

Memoria de proyectos de innovación y buenas prácticas docentes

A. Datos generales del proyecto de innovación y buenas prácticas docentes

Título	Emoteaching: coaching docente basado en inteligencia emocional para la mejora del proceso enseñanza-aprendizaje.		
Código	20-70	Fecha de Realización:	01/01/ 2021 hasta: 31/05/2022
Coordinación	Apellidos	Díaz Castro	
	Nombre	Javier	
Tipología	Tipología de proyecto	Avanzado	
	Rama del Conocimiento	Ciencias de la Salud	
	Línea de innovación		

B. Objetivo Principal

El objetivo general del proyecto consiste en desarrollar una metodología pedagógica, para que los estudiantes desarrollen su inteligencia emocional y manejen las emociones a su vida cotidiana, aprendiendo a reconocer comprender los sentimientos de los otros estudiantes, regulando su propio estrés y potenciando la empatía, lo cual incidirá de manera positiva en su rendimiento académico y relaciones personales. Junto a este objetivo principal, pretendemos conseguir los siguientes objetivos secundarios:

- Fomentar el trabajo colaborativo y la participación activa de los estudiantes.
- Vincular el plan docente de las asignaturas con el ámbito profesional y situaciones reales, de forma que aumente el interés y la motivación por parte de los estudiantes.
- Propiciar un espacio para el debate teórico-metodológico acerca de los temas de la Fisiología relacionados con la inteligencia emocional.
- Estructurar nexos permanentes de intercambio entre estudiantes y profesores, que mejoren el entorno de enseñanza-aprendizaje.
- Adquirir un mejor conocimiento de las emociones propias, identificar las emociones de los demás, controlar las propias emociones y revertir los efectos perjudiciales de las emociones negativas, lo cual lleva al desarrollo de una mayor competencia emocional.
- Desarrollar la habilidad de automotivarse y adoptar una actitud positiva ante la vida.
- Desarrollar la capacidad para poder controlar el estrés, la ansiedad y los estados depresivos, tomar conciencia de los factores que inducen al bienestar subjetivo, desarrollar la resistencia a la frustración, que mejoren el rendimiento académico.
- Ayudar a establecer relaciones sociales de forma empática, y adquirir progresivamente pautas de convivencia, de cooperación y de valoración de la vida académica y laboral.

C. Descripción del proyecto de innovación y buenas prácticas docentes

Resumen del proyecto realizado: Objetivos, metodología, logros alcanzados, aplicación práctica a la docencia habitual, etc.

Las tendencias pedagógicas actuales han puesto su atención en la educación afectiva, una estrategia al servicio del docente para mejorar el clima de aprendizaje en el aula mediante el autoconocimiento y uso correcto de emociones y sentimientos. Dada la importancia de los estados afectivos se debe desarrollar la inteligencia emocional para favorecer nuevos aprendizajes. Docentes y responsables de la administración educativa están comprendiendo la importancia que tiene el encauzamiento correcto de las emociones para lograr el desarrollo integral del estudiantado, por lo que reclaman la necesidad de promover no sólo la mejora de los resultados académicos sino también el fomento de las competencias sociales y emocionales. Es importante el diseño de currículos pedagógicos que enfatizan en los aspectos cognitivo, emocional e interaccional, ya que estos se asocian con el rendimiento académico. Dada la evidencia sobre los aspectos motivacionales y actitudinales como factores predictores para el fracaso académico, puede afirmarse que la inteligencia emocional se suma a las habilidades cognitivas, no solo como un potencial predictor del equilibrio psicológico de los estudiantes, sino también de su logro académico. El objetivo general del proyecto consiste en desarrollar una metodología pedagógica, para que los estudiantes desarrollen su inteligencia emocional y manejen las emociones a su vida cotidiana, aprendiendo a reconocer y comprender los sentimientos de los otros estudiantes, regulando su propio estrés y potenciando la empatía, lo cual incidirá de manera positiva en su rendimiento académico y relaciones personales. La Fisiología resulta la herramienta perfecta para la explicación de la inteligencia emocional, ya que durante las explicaciones del sistema nervioso podremos establecer los vínculos entre los aspectos cognitivos y emocionales, dotando a los alumnos de múltiples herramientas para la mejora de su inteligencia emocional. Además trabajaremos de manera coordinada con el gabinete psicopedagógico de la Universidad de Granada para asegurar un asesoramiento integral y difusión del proyecto a cuantos estudiantes quieran participar. Se impartirán seminarios, talleres y tutorías específicas dedicadas a la mejora de aspectos emocionales para todos los estudiantes interesados en participar. Los beneficios de la aplicación de la inteligencia emocional se han demostrado en los siguientes campos: desarrollo de habilidades sociales, reducción de comportamientos antisociales, incremento de la autoimagen positiva, aumento del éxito académico, mejor salud mental y aumento de comportamientos prosociales y asertividad. Realizaremos una recogida inicial de datos de los estudiantes que quieran participar, una intervención y una recogida posterior de información. Tanto en la prueba inicial como tras la intervención se emplearán diversos tests de habilidades de inteligencia emocional, que nos facilitará información precisa sobre el grado de conocimiento y habilidades sociales y emocionales que cada uno de los participantes posea antes y después de la intervención.

Summary of the Project (In English):

Current pedagogical trends have focused on affective education, a strategy at the service of the teacher to improve the learning environment in the classroom through self-knowledge and the correct use of emotions and feelings. Given the importance of affective states, emotional intelligence must be developed to favor new learning. Teachers and those responsible for the educational administration are understanding the importance of the correct channeling of emotions to achieve the comprehensive development of the student body, for which they claim the need to promote not only the improvement of academic results but also the promotion of competencies. social and emotional. It is important to design pedagogical curricula that emphasize cognitive, emotional and interactional aspects, since these are associated with academic performance. Given the evidence on motivational and attitudinal aspects as predictive factors for academic failure, it can be affirmed that emotional intelligence is added to cognitive skills, not only as a potential predictor of students' psychological balance, but also of their academic achievement. The general objective of the project is to develop a pedagogical methodology, so that students develop their emotional intelligence and manage emotions in their daily lives, learning to recognize and understand the feelings of other students, regulating their own stress and promoting empathy, which will have a positive impact on their academic performance and personal relationships. Physiology is the perfect tool for explaining emotional intelligence, since during explanations of the nervous system we can establish the links between cognitive and emotional aspects, providing students with multiple tools to improve their emotional intelligence. In addition, we will work in coordination with the psychopedagogical office of the University of Granada to ensure comprehensive advice and dissemination of the project to as many students as want to participate. Seminars, workshops and specific tutorials dedicated to improving emotional aspects will be given to all students interested in participating. The benefits of the application of emotional intelligence have been demonstrated in the following fields: development of social skills, reduction of antisocial behaviors, increase in positive self-image, increase in academic success, better mental health, and increase in prosocial behaviors and assertiveness. We will carry out an initial data collection of the students who want to participate, an intervention and a subsequent collection of information. Both in the initial test and after the intervention, various tests of emotional intelligence skills will be used, which will provide us with precise information on the degree of knowledge and social and emotional skills that each of the participants possesses before and after the intervention.

D. Resultados obtenidos

Se establecieron dos periodos temporales: antes y después de impartir varios conceptos de inteligencia emocional. Para evaluar la intervención se utilizaron el Maslach Burnout Inventory-Student Survey Inventory (MBI-SS) y la versión en español de Utrecht Work Engagement Scale-Students (UWES-S).

En total, el 63,5% de los alumnos presentó desgaste académico antes de la intervención. Después de los talleres y seminarios de inteligencia emocional, solo el 31,1% presentó desgaste académico. Antes de la intervención con los talleres de inteligencia emocional, el 44,6 % experimentaba agotamiento, el 41,7 % cinismo y el 60,3 % sentía que era ineficaz en su rendimiento académico. Después de los talleres y seminarios de inteligencia emocional, el 29,1% experimentó agotamiento, el 30,1% cinismo y el 28,8% sintió que era ineficaz.

Las puntuaciones obtenidas tras el estudio de la inteligencia emocional en las clases de fisiología se tradujeron en mejores niveles en todas las variables estudiadas. Los estudiantes manejaron más adecuadamente sus procesos adaptativos y regularon mejor sus emociones, ya que sintieron menos desgaste académico y estaban más comprometidos con sus actividades académicas al finalizar el estudio de la inteligencia emocional a través de la fisiología.

Results obtained (In English)

Two time periods were established: before and after teaching various concepts of emotional intelligence. To assess the intervention, the Maslach Burnout Inventory-Student Survey Inventory (MBI-SS) and the Spanish version of the Utrecht Work Engagement Scale-Students (UWES-S) were used.

In total, 63.5% of the students presented academic attrition before the intervention. After the emotional intelligence workshops and seminars, only 31.1% presented academic burnout. Before the intervention with the emotional intelligence workshops, 44.6% experienced exhaustion, 41.7% cynicism and 60.3% felt that they were ineffective in their academic performance. After the emotional intelligence workshops and seminars, 29.1% experienced burnout, 30.1% cynicism, and 28.8% felt ineffective.

The scores obtained after the study of emotional intelligence in physiology classes translated into better levels in all the variables studied. The students managed their adaptive processes more adequately and regulated their emotions better, since they felt less academic burnout and were more committed to their academic activities at the end of the study of emotional intelligence through physiology.

E. Difusión y aplicación del proyecto a otras áreas de conocimiento y universidades

Difundimos los resultados en revistas, foros y congresos especializados en innovación docente, tanto de carácter nacional como internacional. Los materiales docentes, tutorías y talleres fomentaron el interés, motivación y orientación, convirtiéndose en uno de los motores del aprendizaje ya que incita a la actividad y a la transferencia de conocimiento. La calidad del material didáctico, de las consignas de las actividades y, sobre todo, la orientación, guía y retroalimentación adecuadas por parte de los que realizamos el proyecto, fueron claves para garantizar la motivación de los estudiantes.

CONTRIBUCIONES A CONGRESOS DOCENTES:

Autores (p.o. de firma): J. Moreno-Fernandez, J. Ochoa, I. López-Aliaga, M. Gomez-Guzman, S. López-Ortega, Javier Diaz-Castro.

Título: The importance of emotional intelligence in the university professors.

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Dissemination and application of the project to other areas of knowledge and universities (In English)

We disseminate the results in magazines, forums and congresses specialized in teaching innovation, both nationally and internationally. The teaching materials, tutorials and workshops fostered interest, motivation and guidance, becoming one of the engines of learning as it encourages activity and knowledge transfer. The quality of the didactic material, the instructions for the activities and, above all, the adequate orientation, guidance and feedback from those of us who carried out the project, were key to guaranteeing the motivation of the students.

CONTRIBUTIONS TO TEACHING CONGRESSES:

Authors: J. Moreno-Fernandez, J. Ochoa, I. López-Aliaga, M. Gomez-Guzman, S. López-Ortega, Javier Diaz-Castro.

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F. Estudio de las necesidades para incorporación a la docencia habitual

Las tendencias pedagógicas actuales han puesto su atención en la llamada educación afectiva, una estrategia al servicio del docente para mejorar el clima de aprendizaje en el aula mediante el autoconocimiento y uso correcto de emociones y sentimientos. Tradicionalmente la enseñanza universitaria se ha caracterizado por ofrecer una gran cantidad de información conceptual, dejando de lado factores tan importantes como los afectivos que, sin duda, influyen notablemente en la atmósfera de clase o en el “estilo de enseñar” (De Moya, 2009). Dada la importancia de los estados afectivos se debe desarrollar la inteligencia emocional para favorecer nuevos aprendizajes (Goleman, 1996). En los últimos años, ha aumentado el interés por conocer cómo influyen la afectividad y las emociones en la educación. Docentes y responsables de la administración educativa están comprendiendo la importancia que tiene el encauzamiento correcto de las emociones para lograr el desarrollo integral del estudiantado, por lo que reclaman la necesidad de promover no sólo la mejora de los resultados académicos sino también el fomento de las competencias sociales y emocionales (Elias et al., 1997).

Según Goleman (1996) es fundamental conectar las emociones con uno mismo, conocer los propios sentimientos y tener un concepto propio positivo y objetivo al igual que de los demás. Entiende la inteligencia emocional como un conjunto de habilidades que sirven para expresar y controlar los sentimientos de la manera más adecuada en el terreno personal y social, incluyendo un buen manejo de los sentimientos, de la motivación, de la perseverancia, de la empatía y de la agilidad mental. Básicamente, la inteligencia emocional es un rasgo humano cuyo fin último es lograr la capacidad de interactuar con el mundo de forma receptiva y adecuada, para obtener una óptima adaptación social. La inteligencia emocional tiene sus antecedentes en teorías de la inteligencia como las de Gardner (2005), impulsor de las inteligencias múltiples. El concepto puede definirse como una forma de inteligencia social que incluye la habilidad de supervisar y entender las emociones propias y las de los demás, discriminar entre ellas, y usar la información para guiar el pensamiento y las acciones de uno mismo. A pesar de su reciente surgimiento ya han florecido múltiples enfoques y autores relevantes lo cuales pueden agruparse en dos grandes modelos de inteligencia emocional: los modelos mixtos y el modelo de habilidad. Desde el punto de vista pedagógico, potenciar la inteligencia emocional contribuye a que los estudiantes desarrollen un grado de autoestima y aprenda a valorar sus puntos fuertes y a tratar de mejorar aquellos deficitarios.

Además, se logra una visión positiva de la vida, que le ayude a desenvolverse en una sociedad cada vez más compleja y diversa. En esta situación, la empatía se alza como un valor central en el desarrollo de la inteligencia emocional puesto que entender los sentimientos de los otros permite reconocer los propios. El trabajo de la inteligencia emocional pretende despertar la motivación, la ilusión y el interés para ayudar al alumno a que, en situaciones desfavorables, ponga en marcha una serie de mecanismos alternativos que ha aprendido (Reeve, 1994). Los nuevos conocimientos y destrezas a adquirir por parte de los universitarios no se deben circunscribir al ámbito de conocimientos meramente académicos y cognitivos, ya que hasta el momento éstos no han conseguido una completa adaptabilidad a la empresa, siendo necesario un complemento indispensable que ayude a los alumnos a adquirir nuevas habilidades y competencias emocionales que les hagan ser más empleables. Es importante por tanto, el diseño de currículos pedagógicos que enfatizan en los aspectos cognitivo, emocional e interaccional, ya que estos se asocian con el rendimiento académico. El cociente emocional además resulta predictor de buen rendimiento académico durante los estudios universitarios (Castaño, 2008). Dada la evidencia sobre los aspectos motivacionales y actitudinales como factores predictores para el fracaso académico, con igual o mayor riesgo que los aspectos cognitivos o intelectuales (Marín Sánchez et al., 2000), puede afirmarse que la inteligencia emocional se suma a las habilidades cognitivas, no solo como un potencial predictor del equilibrio psicológico de los estudiantes, sino también de su logro académico (Extremera y Fernández-Berrocal, 2003). Sumado a ello, otros autores (Extremera et al., 2007) consideran que sería un factor amortiguador de los estresores académicos, lo que a su vez propicia mayor dedicación hacia el aprendizaje.

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G. Puntos fuertes, las dificultades y posibles opciones de mejora**OBJETIVOS Y COORDINACIÓN:**

Los miembros del equipo han generado una adecuada dinámica de colaboración para la innovación y la generación de buenas prácticas docentes. Además, tuvimos en cuenta el *feedback* comunicado por los estudiantes que asistieron a la primera edición de los talleres, mejorando los contenidos y adaptando los temas a su interés. Hemos conseguido gracias al proyecto:

- Fomentar el trabajo colaborativo y la participación activa de los estudiantes.
- Propiciar un espacio para el debate teórico-metodológico acerca de los temas de la Fisiología relacionados con la inteligencia emocional.
- Estructurar nexos permanentes de intercambio entre estudiantes y profesores, que han mejorado el entorno de enseñanza-aprendizaje.
- Adquirir un mejor conocimiento de las emociones propias, identificar las emociones de los demás, controlar las propias emociones y revertir los efectos perjudiciales de las emociones negativas, lo cual lleva al desarrollo de una mayor competencia emocional.
- Desarrollar la habilidad de automotivarse y adoptar una actitud positiva ante la vida.
- Desarrollar la capacidad para poder controlar el estrés, la ansiedad y los estados depresivos, tomar conciencia de los factores que inducen al bienestar subjetivo, desarrollar la resistencia a la frustración, que mejoren el rendimiento académico.
- Ayudar a establecer relaciones sociales de forma empática, y adquirir progresivamente pautas de convivencia, de cooperación y de valoración de la vida académica y laboral.

CRONOGRAMA:

El equipo ha cumplido con la totalidad del proyecto propuesto. Se ha llevado a cabo según el cronograma previsto, por parte de todos los miembros del equipo, sin embargo, en esta última etapa, detectamos una menor asistencia de estudiantes debido a su coincidencia con actividades académicas, por lo que algunos talleres o sesiones se han modificado de fecha para evitar interferir con el resto de actividades y mejorar la asistencia de los estudiantes.

METODOLOGÍA:

Las rúbricas creadas nos permitieron evaluar la idoneidad de la metodología, en la que los estudiantes participantes contestaron que:

1. Presentación del contenido en los talleres de manera adecuada

Si: La información está bien ordenada y accesible: 93%

Moderadamente: Hay un cierto orden, aunque es mejorable: 6%

No: La información presentada está ordenada de manera poco intuitiva: 1%

2. Los recursos utilizados en los talleres son atractivos y el diseño es adecuado

Si: Los recursos docentes son motivadores y ayuda en el estudio de la asignatura: 96%

Moderadamente: Tiene elementos atractivos, aunque otros aspectos se pueden mejorar: 4%

No: no mejora el estudio y comprensión de la asignatura: 0%

3. La base científica de los talleres es adecuada

SI: Presenta una buena base científica y tiene bibliografía adecuada. 97%

Moderadamente: Algunos elementos tienen buena base, pero otros son divulgativos: 3%

No: Carece de base científica: 0%

4. El entorno de los talleres y la organización es adecuada

Si: Los talleres apoyan el aprendizaje y las relaciones sociales, están bien organizados y resultan interesantes: 95%

Moderadamente: Los talleres tienen elementos que favorecen el aprendizaje y fomentan la interactividad y la organización es aceptable: 5%






No: no mejoran el proceso de aprendizaje y están mal organizados: 0%

LIMITACIONES Y OPCIONES DE MEJORA:

Es importante seguir estudiando el desgaste académico y la inteligencia emocional en los estudiantes para correlacionarlos con otras variables psicológicas como la depresión u otros trastornos, que permitirán una comprensión de la actitud de los estudiantes hacia el rendimiento académico. Asimismo, sería necesario estudiar estas variables diferenciadoras por género, aumentando la población de estudio y en diferentes facultades y grados académicos para encontrar índices que permitan contrastar estos resultados. Además, sería deseable una intervención más holística que incluya hábitos de vida y otras variables para traducir el conocimiento de la inteligencia emocional en el comportamiento habitual y en el proceso de enseñanza-aprendizaje.

Article

Lockdown, Emotional Intelligence, Academic Engagement and Burnout in Pharmacy Students during the Quarantine

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Abstract: The recent appearance and rapid spread of the new SARS-CoV-2 coronavirus meant taking unprecedented measures to control the pandemic, which in Spain forced a state of alarm and a very strict confinement, leading the university system to become virtual online teaching. Taking into account the emotional deficiencies originated during the pandemic, among the most powerful tools to achieve engagement along with the identification, control and management of emotions is emotional intelligence (EI). The present study aims to establish the effect of the current confinement on the teaching-learning process and academic performance and the impact of the application of EI on university students. In total, 47 volunteers of the second course of the Degree in Pharmacy of the University of Granada (Spain) took part in this experience. Two temporary periods were established: at the beginning of the confinement period and after teaching several concepts of emotional intelligence online for two months. The Maslach Burnout Inventory-Student Survey Inventory (MBI-SS) and the Spanish version of Utrecht Work Engagement Scale-Students (UWES-S) were used to evaluate the intervention. In total, 63.5% of the students presented academic burnout during the confinement before the intervention. After the EI workshops and seminars, only 31.1% presented academic burnout. Before the intervention with the emotional intelligence workshops, 44.6% experienced exhaustion, 41.7% cynicism and 60.3% felt it was ineffective in their academic performance. After the emotional intelligence workshops and seminars, 29.1% experienced exhaustion, 30.1% cynicism and 28.8% felt it was ineffective. The scores achieved after the study of EI in physiology classes led to better levels in all the variables studied. Students managed their adaptive processes more adequately and regulated their emotions better, as they felt less academic burnout and more engaged in their academic activities at the end of the study of EI through physiology.

Keywords: pharmacy students; lockdown; confinement; online teaching; emotional intelligence

1. Introduction

The recent appearance and rapid spread of the new SARS-CoV-2 coronavirus meant taking unprecedented measures to control the pandemic, which in Spain reached a health pressure that forced a state of alarm and a very strict confinement, which forced the university system to become virtual online teaching. The unexpected and drastic change in the world paradigm affected the educational

system in a particular way. Confinement creates significant risks to the health and well-being of university students. It is common for young people in quarantine periods to show high levels of stress, anxiety, confusion and anger [1].

During confinement, the two factors that most affect physical and psychological well-being are the loss of habits and routines and psychosocial stress, according to the first study that analyzes the psychological impact of quarantine in China [2]. The interruption of habits during confinement and the establishment of unhealthy ones (bad eating habits, irregular sleep patterns, sedentary lifestyle and increased use of digital devices) can lead to health problems. The conditions that accompany a pandemic include various sources of stress for people. Studies on stressful situations and emergencies make it possible to summarize the main variables involved in the psychological impact, such as the following: fear of virus infection and diseases, the manifestation of feelings of frustration and boredom, not being able to meet basic needs and not having of information and clear guidelines for action [1] or the presence of previous mental health problems or financial problems [3]. Additionally, stigma and social rejection in the case of people infected or exposed to the disease can be a trigger for a worse adaptation [1]. All these conditions can profoundly influence academic performance in the students, and therefore, training, learning and academic achievement can be seriously impaired and could trigger sensations of exhaustion, negative attitude of self-criticism, and loss of interest (cynicism).

In the academic context, the effects of confinement can be measured through academic burnout, which is a variable used to evaluate psychological well-being related to studies [4]. This burnout is understood as a consequence and response to chronic stress linked to the role, activity and academic context of a malignant, insidious nature which can affect the development, commitment and satisfaction of students with their training and academic life, in addition to their psychosocial health [5]. The latest trends in burnout research have turned towards the study of its opposite trend: engagement in university students [6]. This change can be considered an effect of the rise in recent years of the so-called "Positive Psychology", which is concerned with the proper functioning and strengths of the individual in the face of negative events, thus trying to overcome the approaches centered on the deficit and pathology highly widespread within the field of psychology [7].

Engagement is defined as a positive mental state related to studies and characterized by vigor in the tasks as a student, high levels of dedication to studies and, finally, absorption in the aforementioned tasks [6]. Taking into account the emotional deficiencies originated during the pandemic, among the most powerful tools to achieve engagement along with the identification, control and management of emotions is emotional intelligence (EI). This refers to the ability to control emotions, own feelings and others' feelings with the intention of guiding thoughts and actions, allowing the effective regulation of emotion in oneself and in others, and the use of feelings to motivate, plan and succeed in life [8].

Because confinement creates significant risks to the health and well-being of the university students, showing high levels of stress, anxiety and academic burnout, we decided to improve their academic engagement along with the identification, control and management of emotions by teaching some EI workshops. Taking into account these antecedents, the present study aims to establish the effect of the current confinement on the academic burnout and engagement, together with the impact of the application of emotional intelligence on university students.

2. Materials and Methods

2.1. Population and Intervention

Before the experience, the university students that wanted to take part in this educational strategy were selected. This study was approved by the University of Granada ethical committee (0060-N-18). In total, 47 volunteers of the second course of the Degree in Pharmacy of the University of Granada (Spain) took part in this experience. From this moment, two temporary periods were established: at the beginning of the confinement period and after teaching several concepts of EI online for two months. The topics reviewed in the seminars and workshops were:

- General physiological concepts linked to EI:
 - Introductory activity: Integration dynamics.
 - Learning with a neuroscientific approach.
 - Brain organization (central nervous system, peripheral and autonomous).
 - Neural information processing (synapse).
 - Brain chemistry, hormones and behavior (neurotransmitters, importance of hormones and neuroendocrine integration).
- Brain and learning:
 - Anatomy and brain physiology.
 - Functions of the cerebral hemispheres.
- Emotions and learning:
 - The emotional brain (limbic system and the role of the amygdala).
 - Recommendations and exercises for brain care.
- EI development:
 - Definition and evolution of the term intelligence.
 - Definition of EI.

Basic components of EI and emotional competences:

These are the set of knowledge, abilities, skills and attitudes necessary to become aware of, understand, express and regulate emotional phenomena appropriately. The purpose of these competencies is aimed at providing added value to professional functions and promoting personal and social well-being. The emotional competencies that were worked on in the workshops were structured in five blocks: emotional self-knowledge, self-control, motivation, empathy and social skills. Emotional self-knowledge refers to the degree of knowledge one has of one's own emotions and of the emotions of others, understanding how they can affect them, what produces them and having the ability to speak about them. Self-control means having the ability to express an appropriate response to the different situations that arise based on our emotional resources, our tolerance for certain stimuli and our independence of action. Motivation means being able to act with determination and enthusiasm. Empathy is a set of competencies that facilitate interpersonal relationships and promote group work, cohesion and team spirit. Social skills are a set of skills, attitudes and values that promote the construction of personal and social well-being.

Two questionnaires containing the dimensions of academic burnout and engagement were carried out compared to the studies before and after the interventions with the EI workshops. Code numbers instead of names were assigned to each completed questionnaire in order to maintain confidentiality.

2.2. Instruments

The Maslach Burnout Inventory-Student Survey Inventory (MBI-SS) [6] was used—an inventory adapted from the translation of the Maslach Burnout Inventory (MBI-GS) instrument, prepared by Maslach and Jackson [9]. The instrument assesses the dimensions of emotional exhaustion and cynicism through 11 items. (1) Emotional exhaustion: assesses the experience or feeling of being physically, mentally and emotionally exhausted, and with a feeling of not being able to perform some academic activities. (2) Cynicism: it evaluates the negative attitude of the student towards their studies, evidenced by self-criticism, devaluation, loss of interest and importance and value towards the study. (3) Academic self-efficacy: assesses the student's perception of the competence in their studies.

We also used the Spanish version of Utrecht Work Engagement Scale-Students (UWES-S) by Schaufeli, et al. [6], which includes different dimensions of student work. (1) Vigor: it evaluates

energy and mental resistance while studying, the desire to invest effort, time, persistence in the study, even when obstacles and barriers appear, through six items. (2) Dedication: assesses the sense of meaning, enthusiasm, inspiration, pride and challenge related to studies. (3) Absorption: evaluates a pleasant state of total immersion in work, where the individual is unable to separate from work despite the fact that a long time has passed. All items score on a 7-point frequency scale, ranging from 0 (never) to 6 (always).

To evaluate the syndromes, the items of exhaustion and cynicism (academic burnout) and of dedication, absorption and vigor (academic engagement) were surveyed and, later, the scores were located according to the categories of low, medium low, medium high and high.

2.3. Statistical Analysis

Descriptive parameters were performed through frequency and descriptive analysis. The Student's *t* was used to assess the significant differences in the three aspects of academic burnout and the three academic engagement factors before and after the intervention with the workshops. In addition, Spearman's correlation coefficient was carried out to assess the relationship between the subscales of the academic burnout and engagement of the participants. The SPSS version 24.0 (SPSS Statistics for Windows, SPSS INC., Chicago, IL, USA) software was used for data analysis.

3. Results

In total, 47 volunteers of the second course of the Degree in Pharmacy of the University of Granada (Spain) took part in this experience. Table 1 shows the demographic variables of the subjects.

Table 1. Demographic variables of the subjects.

	Male	Female
Age (years)	20 ± 2.1	20 ± 1.8
Number of subjects	19	28
% of population	40.42	59.58

The results show that 63.5% of the students featured academic burnout (distributed in high and medium high levels) during the confinement before the intervention with the EI workshops, which suggests that the students experience the feeling of not being capable of achieving good academic results and a cynical attitude about the value and meaning of work. After the EI workshops and seminars, only 31.1% presented academic burnout (high and medium high levels).

Before the intervention with the EI workshops, 44.6% experienced exhaustion, 41.7% cynicism and 60.3% felt it was ineffective in their academic performance. After the EI workshops and seminars, 29.1% experienced exhaustion, 30.1% cynicism and 28.8% felt it was ineffective. The presence of academic engagement was found in 39% of university students (distributed in medium high and high levels) before the intervention and in 57% after the intervention with workshops and seminars, showing the positive influence of the intervention on academic performance.

The internal consistency (Cronbach's alpha) of the instruments, was as follows: emotional exhaustion ($\alpha = 0.77$), cynicism ($\alpha = 0.72$), academic self-efficacy ($\alpha = 0.73$), vigor ($\alpha = 0.71$), dedication ($\alpha = 0.72$) and absorption ($\alpha = 0.75$). Table 2 shows the different scores used in the study before and after the intervention.

Table 2. Mean of scales used in the study (data presented as mean \pm standard deviation).

	Before Intervention	After Intervention	Student's <i>t</i> Test	Cronbach's Alpha
	MBI-SS (academic burnout)			
Emotional exhaustion	5.26 \pm 1.22	4.31 \pm 1.11	$p < 0.01$	0.77
Cynicism	3.11 \pm 1.08	2.31 \pm 1.39	$p < 0.01$	0.72
Academic self-efficacy	3.15 \pm 1.26	4.63 \pm 1.14	$p < 0.001$	0.73
	UWES-S (academic engagement)			
Vigor	2.52 \pm 1.22	3.76 \pm 1.17	$p < 0.01$	0.71
Dedication	3.42 \pm 1.42	5.17 \pm 1.29	$p < 0.001$	0.72
Absorption	3.11 \pm 1.11	4.17 \pm 1.33	$p < 0.01$	0.75

Before the workshops, emotional exhaustion correlated positively with cynicism (0.381, $p < 0.01$), and negatively with academic self-efficacy (-0.351 , $p < 0.01$) and with satisfaction with studies (-0.298 , $p < 0.01$). A positive correlation was also found between exhaustion and cynicism (0.381, $p < 0.01$), and a negative relationship was found between exhaustion and academic self-efficacy (-0.389 , $p < 0.01$) and between cynicism and academic self-efficacy (-0.295 , $p < 0.01$). A negative correlation was also found between cynicism and self-efficacy (-0.395 , $p < 0.01$) and cynicism and satisfaction (-0.321 , $p < 0.01$).

After the workshops, emotional exhaustion correlated positively with cynicism (0.201, $p < 0.05$), and negatively with academic self-efficacy (-0.205 , $p < 0.05$) and with satisfaction with studies (-0.221 , $p < 0.01$). A positive correlation was also found between exhaustion and cynicism (0.285, $p < 0.01$), and a negative relationship was found between exhaustion and academic self-efficacy (-0.225 , $p < 0.01$) and between cynicism and academic self-efficacy (-0.201 , $p < 0.05$). A negative correlation was also found between cynicism and self-efficacy (-0.276 , $p < 0.01$) and cynicism and satisfaction (-0.265 , $p < 0.01$).

Before the workshops, a positive correlation was found between vigor and dedication (0.380, $p < 0.01$), vigor and absorption (0.315, $p < 0.01$), vigor and satisfaction with studies (0.297, $p < 0.01$), academic vigor and self-efficacy (0.381, $p < 0.01$), vigor and dedication (0.265, $p < 0.05$) and vigor and absorption (0.290, $p < 0.01$). Exhaustion was negatively correlated with vigor (-0.435 , $p < 0.01$), as well as cynicism with vigor (-0.277 , $p < 0.01$) and cynicism with dedication (-0.285 , $p < 0.01$). A positive correlation was also observed between exhaustion and cynicism (0.421, $p < 0.001$), and vigor was positively correlated with dedication (0.373, $p < 0.01$) and absorption (0.329, $p < 0.01$).

After the workshops, a positive correlation was found between vigor and dedication (0.525, $p < 0.001$), vigor and absorption (0.435, $p < 0.01$), vigor and satisfaction with studies (0.479, $p < 0.001$), academic vigor and self-efficacy (0.521, $p < 0.001$), vigor and dedication (0.483, $p < 0.001$) and vigor and absorption (0.402, $p < 0.01$). Exhaustion was negatively correlated with vigor (-0.283 , $p < 0.01$), as well as cynicism with vigor (-0.239 , $p < 0.01$) and cynicism with dedication (-0.301 , $p < 0.01$). A positive correlation was also observed between exhaustion and cynicism (0.322, $p < 0.01$), and vigor was positively correlated with dedication (0.422, $p < 0.01$) and absorption (0.420, $p < 0.01$).

4. Discussion

This research aimed to describe the impact of various EI workshops and seminars on academic burnout and engagement of university students from the Faculty of Pharmacy (University of Granada) during the lockdown and confinement caused by COVID-19.

According to Goleman [10], it is essential to be aware of the own emotions, to know what a person feels and to have a positive and objective self-concept as well as of others. EI is understood as a set of skills that serve to express and control feelings in the most appropriate way in the personal and social field, including a good management of feelings, motivation, perseverance, empathy and of mental agility. In stressful situations, as we have been able to verify in the surveyed students, EI has helped

students to interact with the world in a receptive and appropriate way to obtain an optimal adaptation to the learning process.

The tripartite model of EI postulates three levels of the concept: the knowledge level refers to the complexity and width of emotion knowledge; the ability level refers to the ability to apply emotion knowledge in an emotional situation and to implement a given strategy and finally; and the trait level refers to emotion-related dispositions, namely, the propensity to behave in a certain way in emotional situations. However, these three levels of EI are poorly connected: knowledge does not always translate into abilities, which, in turn, do not always translate into usual behavior [11,12]. Therefore, we can affirm that a longer intervention would be desirable to translate the knowledge of EI into usual behavior, especially after the confinement.

Cognition and emotion are two aspects that exist together and have become inextricably linked in the mind of the individual, which leads them to act together, linked to the knowledge acquired. Stressful or unexpected situations, as in the case of confinement due to the pandemic, had a negative influence on the academic engagement and burnout of students. In fact, it is thanks to the need or interest that a person presents to acquire certain knowledge that emotions and feelings influence its acquisition; hence, we can affirm that our students improved their engagement and reduce their burnout once they knew several concepts of EI. This relationship between reason and emotion makes it possible to generate the adaptive capacity of the person, whose concrete manifestation is seen in the power to give answers and solutions, effectively, to the problems that arise linked to interpersonal relationships and disruptive behaviors, favoring a change in psychological well-being and academic performance [13].

In addition to the possible negative psychological effects due to the conditions of the confinement, the characteristics of the pandemic and the multiple associated factors, the lockdown can be perceived as an adversity of high psychosocial stress. Taking into account the results obtained in the current study, we can affirm that it would be important to include emotional education in the university to improve the teaching-learning process. It should be implemented gradually due to its complex structure. In addition, the study of EI allows the student to have more possibilities to adapt to the different situations and to obtain success in the projects proposed [14].

There is a range of reasons postulating that adequate indices of EI can help to solve academic and daily problems more successfully [15], obtaining a remarkable degree of psychological well-being [14,16]. In this sense, a good degree of EI can help people to collaborate more with the people around them, a fundamental skill in university teaching [17]. Poor levels of EI have also been shown to serve as predictors of stress development and the learning process [18].

Emotion favors attention, memory and learning, acting as booster for learning and development, but also an obstacle or a brake in case of negative feelings. Affectivity is a component of learning, and neuroscience studies are providing scientific support to the uniqueness of the person to the interaction between what we feel, what we think and how we act. Other research highlights that the role of emotions in learning is crucial [19]. Both emotion and feeling can promote learning by intensifying the activity of neural networks and thus strengthening synaptic connections.

Limitations and Future Perspectives

It is important to continue studying academic burnout and engagement to correlate them with other psychological variables such as depression or other disorders, which will allow an understanding of the attitude of students to academic performance. Likewise, it would be necessary to study these variables differentiating by gender, increasing the population of the study and in different faculties and academic degrees to find indices that allow contrasting these results. Additionally, a longer intervention would be desirable to translate the knowledge of EI into usual behavior, especially after the confinement. It is also important to design programs aimed at strengthening teaching-learning processes, as well as intervention actions aimed at reducing burnout, especially in students with lower academic results.

5. Conclusions

A high rate of students featured academic burnout during the confinement before the intervention with the EI workshops. The study of several concepts of emotional intelligence in physiology classes led to better regulation of the students' emotions; therefore, they felt less academic burnout and more engaged in their academic activities—facts that could improve the teaching–learning process during the confinement period and lockdown.

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THE IMPORTANCE OF EMOTIONAL INTELLIGENCE IN THE UNIVERSITY PROFESSORS

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Abstract

The European University is currently experiencing a moment of strong changes that affect both students and professors: adaptation of new methodologies that have a profound impact on the teaching-learning processes. The traditional role of the professor, focused on the transmission of knowledge, is changing. This modification is due in part to what we previously mentioned about the new technologies, which allow the student to access any knowledge they need immediately. In this way, the role of transmitter of knowledge of the professor is outdated, which derives the need for it to focus more on providing an emotional relationship of support to students. Emotions are the most important aspect to facilitate learning in education: positive or pleasant emotions will allow the performance of actions favorable to learning, negative or non-pleasant emotions will not allow it. In the case of classroom interaction, professors' emotions will be decisive for the course that students' learning follows. A change in the modality of professor-student interaction would be a priority aspect to fulfill the purpose of improving the quality of our teaching. The present study was designed for the development of emotional intelligence (EI) through a series of professor workshops as a strategy aimed at enhancing success during the performance of the teaching activity in the classroom. Before the experience, the professors that voluntarily wanted to take part in this educational strategy were selected. 14 professors of the University of Granada took part in this experience. From this moment, two temporary periods were established: at the beginning of the semester and after several workshops of emotional intelligence development, that served us to improve in this field. The workshops are intended for the knowledge and development of emotions and emotional intelligence. Before and after the workshops, Trait Meta Mood Scale 24 (TMMS-24) questionnaire was used to assess the perception about the ability to attend, understand or regulate their own emotional states. Before the intervention with EI workshops, we observed that women have a higher level of EI. After the EI workshops we were able to observe an improvement of all the items in both sexes in 85% of the participants, indicating that they better control their moods in the class, but also control their students' emotions better. EI is an innovative tool with a high application potential to enhance the success of professors during the development of their work in the classroom, because by its nature it contributes to the integral development of the student, allowing through an action-reflection process undertake a set of transformative and conscious initiatives aimed at enhancing their capacity for success and their personal and professional development. In this context, the aim of the current study was to know the emotional intelligence profile of university professors and to hold a series of workshops to improve emotional skills ad EI.

Keywords: Emotional intelligence, teaching innovation, learning, information and communication technologies (ICT).

1 INTRODUCTION

Emotional Intelligence (EI) in a few years [1], has evolved from being a fashionable concept to becoming a fruitful field of research. In this sense, several authors defend that the skills to identify, assimilate, understand and regulate our emotions and those of others are potential resources that would facilitate a greater coping with stressful events [2]. The perception of our emotional abilities [3] and emotional skills [4] are significant predictors of emotional well-being and psychosocial adjustment. Emotional intelligence is of great interest, because there is evidence that individual differences in the processing of affective information predict success [5] and the adaptation of the person to different areas of their life such as educational [6]. Emotional intelligence could be a personal resource that facilitates a greater perception of self-efficacy and a better coping with the multiple conflicts and

negative reactions that arise in the work environment and is positively correlated with self-esteem and leadership and negatively with anxiety [7].

One of the needs to promote students' EI development is the development of the professors own EI, taking into account these concepts in their teaching practice. Therefore, the impulse, promotion and development of EI in the classroom, both of the professor and the student, must be developed in a coordinated way. The process of learning, improving and applying EI will favor a mutual respect for one's own sensations, thus providing the creation of positive learning environments. The EI of the professor is one of the variables that best explains the creation of an emotionally intelligent classroom. In this sense, EI seems to depend on the perception and management of the own emotions, especially those of a negative nature. The professors should not be closed to their negative emotions, but be able to express them in a healthy way within the community built with the students. Regarding the above, it should be noted that Extremera and Fernández-Berrocal [8] mention that emotionally intelligent people will not only be more skilled at perceiving, understanding and managing their own emotions, but will also be more capable of extrapolating their perception skills, understanding and handling the emotions of others and point out the importance for which the professor should possess certain emotional abilities has a marked altruistic aspect and a clearly educational purpose. For the learner to learn and develop emotional and affective skills concerning the intelligent use of their emotions, they need an emotional educator [8].

Learning processes are extremely complex processes being the result of multiple causes that are combined in a single result. However, these causes are fundamentally the result of two aspects: cognitive and emotional. Despite this, the prevailing educational model generally tends to ignore or minimize emotional aspects. However, as a result of the educational revolution generated from the emergence of constructivism and the impact of the theory of multiple intelligences, a new debate in pedagogy has emerged and this includes the role of emotions as one of the fundamental aspects to be considered in the integral formation of the student. The professor-student interaction in the classroom constitutes a way of relationship that has important consequences for the formation of students, both personally and academically. The perception that students have about their interpersonal relationships with professors would have the greatest impact on their learning process, and not the content or subject matter. On the other hand, in higher education, the reorganization of cognitive activity is closely linked to new forms of social experience [9], so the change in the modes of professor-student interaction would be a priority aspect to fulfill with the purpose of improving the quality of teaching.

Since learning is only possible thanks to the presence of its two main actors, students and professors, it must be considered how the emotions of the professors influence the learning process. Taking these antecedents into account, this study is aimed at proposing workshops for the development of emotional intelligence in teachers as a strategy aimed at enhancing success during the performance of teaching activity in the classroom.

2 AIMS

The primary aim of this experience was to determine the emotional intelligence profile of the professors before and after the intervention with workshops of emotional intelligence development to improve the teaching-learning process. This aim is complemented with other secondary outcomes:

- To apply the knowledge acquired after the theoretical study of this system taught in the classroom.
- To improve the teaching methodology of the professorship by means of the change of the didactic strategies and innovating in the educational dynamics of the University.
- To contribute to the adequacy of the systems of education-learning by means of the emotional intelligence.

3 METHODOLOGY

Before the experience, the professors that voluntarily wanted to take part in this educational strategy were selected. 14 professors of the University of Granada took part in this experience. From this moment, two temporary periods were established: at the beginning of the semester and after several workshops of emotional intelligence development, that served us to improve in this field. We used a series of workshops to improve the level of emotional intelligence of the professors. The format used is

mainly practical, with a structure based on the theoretical model of Mayer & Salovey (1997) and 40 hours of duration.

The sessions were distributed throughout the semester (2 hours per week). The workshops are intended for the knowledge and development of emotions and emotional intelligence. Before and after the workshops, Trait Meta Mood Scale 24 (TMMS-24) questionnaire [10] was used. This is an adaptation to Spanish of the Trait Meta-Mood Scale (TMMS) reported by Salovey et al., [5]. This scale assesses the perception that each person has about the ability to attend, understand or regulate their own emotional states, that is, a measure of the level of EI perceived in their intrapersonal dimension. It consists of 24 items presented in a 5-point Likert format (1 = strongly disagree, 5 = strongly agree) and distributed in three subfactors (8 items per factor): Emotional attention, the degree to which each subject thinks about their feelings; Emotional clarity, ability to understand our own moods; and Emotional regulation, or repair, ability to repair negative emotional states and keep positive.

4 RESULTS AND DISCUSSION

Before the intervention with EI workshops, we observed that women have a higher level of EI. In this sense, numerous studies seem to show that women have higher levels of attention towards emotions, which coincides with the evidence that indicates that women are more empathetic. These data have been observed both through measuring instruments related to EI and with other instruments that measure prosocial behavior, self-perception and self-esteem [11]. Women have a better capacity to attend to emotions. This data coincides with previous results that have evaluated perceived emotional intelligence [12]. In terms of teaching years, professors who have been teaching subjects for less than 15 years are better evaluated.

Before teaching EI workshops, emotional exhaustion was high in the professors (54% revealed that they were emotionally exhausted). Surprisingly, after the workshops, the improvement in self-knowledge and motivation was noticeable, because after the EI workshops we were able to observe an improvement of all the items in both sexes in 85% of the participants, indicating that they better control their moods in the class, but also control their students' emotions better. These capabilities are essential aspects of EI. Also taking into account that professors are constantly exposed to stress factors at work of different kinds such as: very large groups of students, research tasks, excessive bureaucratic burden, to name a few. For this reason, those professors with greater EI will have an advantage to manage these emotions and, probably, to reduce their levels of occupational stress [13].

Socio-emotional aspects are well present in the educational process, but also in any personal or professional facet that is undertaken. In order to develop their socio-emotional competencies in students, one must start with the teacher. The professor must attend to a double facet because the professor is the socio-emotional leader in the classroom: on the one hand, must train students in socio-emotional skills and on the other hand, must self-train: to fulfill his mission, to feel better and to transmit knowledge, so that students feel better. Only an emotionally competent professor can help develop in their students the socio-emotional skills necessary to generate an effective working environment and full coexistence. Socio-emotional competences are the fundamental factor that characterizes effective, emotionally healthy professors and positively influencing students. According to García [14], for university students to acquire basic skills, a teacher trained in IE is necessary to fulfill a new function in university education: tutor, supervisor and guide the student to obtain, apart from the knowledge, the competences that employers and society demand.

The professor is the central axis and coordinator of the entire network of interpersonal and dynamic relationships that can occur in the educational community. Therefore, a reflection on the impact of the pedagogical strategies that are used is essential [15]. The learning process is highly influenced by the findings of neuroscience [16]. Knowing how the brain learns, it is necessary to include emotion in the educational process [15]. All learning must have an affective experience, since emotion and cognition are processes that go together (Damasio, 1994). Ferrés, (2014) [16] reports the inability to acquire knowledge without motivation or if the content does not have an emotional meaning that provokes attention. And it is that the evolutionary role that emotions have in our cognitive process is an indispensable element [17]. Motivation is the source of energy in successful learning for both professors and students. Motivation is closely linked to emotional understanding. Emotion and motivation must be understood as the pillars of learning. Therefore, the management of the professors' state of mind is decisive in all educational dynamics [18]. Emotions in the psychological life of a professor have a high influence on cognitive strategies and, consequently, on teaching and academic performance. From the physiological point of view, emotion is a reaction [19] that mobilizes

the organism towards a specific action and objective. This physiological change is due to the intervention of the limbic system, a specific area of the brain that is made up, among other structures, by the hippocampus and the amygdala, the areas responsible for generating emotional responses [18].

The professor must know their own mental, physical, emotional and social abilities to positively influence that of their students. To its multiple functions (explaining concepts, assigning tasks, evaluating performance, developing learning experiences, guiding students), others should be added as a motivator, organizer, instructional expert, leader, counselor, and role model for their students [20]. Thus, the professor assumes the role of vital axis in the teaching-learning process, favoring interpersonal relationships and promoting the affective aspect of education. The work of emotional competences is considered as something basic to participate in the knowledge society, guaranteeing the development of a solid self-concept that favors collaboration, intercommunication and creativity.

There are another range of reasons that show various investigations that postulate that adequate indices of EI can help solve academic and daily problems with greater success [21], obtain a remarkable degree of psychological well-being [22], have a better self-concept and future perspectives [23], achieve a better level of empathy in interpersonal relationships and adaptation to the environment [24]. Even a good degree of EI can help people collaborate more with the people around them, a fundamental skill in a higher education professor [25]. It has also been shown that poor levels of emotional intelligence serve as predictors in the emergence of stress and dysfunctional cognitive patterns that affect self-vision and constructive thinking [23], fundamental teaching skills.

Although it is often mistakenly thought that the only indispensable thing to teach a university subject is to have knowledge of the subject in question is forgetting that the skills provided by EI can play a crucial role in the teaching-learning process and in the personal life of the professor for various reasons: firstly, and certainly one of the most important, is that the classrooms are a model of socio-emotional learning that involve the teaching of empathic skills such as paying attention, knowing how to listen and understand the views of others, in the same way encompass the creation of environments that promote, through dynamics, group work and tasks the solution of interpersonal conflicts, the expression of both positive and negative feelings and the exposure of experiences that can help resolve possible personal conflicts in students [8]. It has also been shown that poor levels of emotional intelligence serve as predictors in the emergence of stress and dysfunctional cognitive patterns that affect self-vision and constructive thinking [23, 26].

5 CONCLUSIONS

EI is an innovative tool with a high application potential to enhance the success of professors during the development of their work in the classroom, because by its nature it contributes to the integral development of the student, allowing through an action-reflection process undertake a set of transformative and conscious initiatives aimed at enhancing their capacity for success and their personal and professional development. EI helps social interaction because it directly influences emotional expression and behavior. Within the classroom, it can help foster cordial relationships with and between students while developing a positive learning environment. In addition, the poor handling of negative emotions such as fear, anger and guilt within the classroom is not only harmful to the professor of higher education but is equally harmful to the student as it creates incorrect and non-adaptive models to cope with the environment as well as a poor capacity for decision making.

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