

Research Article

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Are Teachers' Emotions Contagious? A Qualitative Study of the Effects of Perceived Teacher Enjoyment, Anxiety, Boredom on Students' Emotions, Motivation, and Attitudes

El Makki Amiri 

Abstract

Background/purpose – The flourishing of positive psychology (PP) in education has revolutionized the field through shifting the focus into the crucial role of discrete positive emotions (e.g., enjoyment, joy, and hope). However, qualitative studies about how teachers' emotions affect different aspects of students' well-being and academic achievement are scarce. The current study aimed at examining the relationship between student-perceived teacher enjoyment (PTE), boredom (PTB) and anxiety (PTA), and students' motivation, emotions, and their attitudes towards the teacher (ATT) in higher education settings.

Materials/methods – Qualitative data were collected in a structured way before, during, and after teaching sessions through qualitative surveys that provided a standardized set of questions to all participants; thus allowing for a variety of analytical approaches, including coding and thematic analysis.

Results – Qualitative analysis revealed a positive depiction of teachers' emotions as crucial elements during classes according to their students' perceptions, in the sense that they had a significant impact on students' motivation, performance, learning, and well-being. Students were also found to catch or be influenced, consciously and unconsciously, by the emotions of their teachers.

Conclusion – This qualitative study revealed that teachers' emotions play a pivotal role in class and are essential for creating a positive learning environment due to the contagion nature.

1. Introduction

It is evident that the topic of academic emotions has largely been neglected in academic research, with the exception of anxiety which has been studied extensively (MacIntyre, 2017; Teimouri et al., 2019). In this respect, Swain (2013) stressed that “emotions are the elephants in the room – poorly studied, poorly understood, seen as inferior to rational thought” (p. 195). Yet, the topic has been attracting increasing academic interest in the past decade thanks to the flowering of positive psychology in education. Interestingly, the introduction of positive psychology to applied linguistics has revolutionized the field of education by shifting focus to the investigation of discrete positive and negative emotions (e.g., enjoyment, anxiety and boredom). Since the turn of the third millennium, researchers have paid scant attention to how teachers’ emotions impact on students’ well-being and motivation. As such, qualitative studies about how teachers’ emotions affect different aspects of students’ well-being and academic achievement are uncommon in the literature. Given this position, the current study makes a notable contribution to the literature with this qualitative research on the role of teachers’ emotions in various contexts. The current study aimed at examining the relationship between students and perceived teacher enjoyment (PTE), boredom (PTB), and anxiety (PTA), and students’ motivation, emotions, and attitudes towards the teacher (ATT) in higher education settings.

The research questions that guided this study are clearly connected, and narrowed and focused on the purpose of the study.

- RQ1 How do students perceive their teachers’ emotions of enjoyment, anxiety, and boredom?
- RQ2 Are PTE, PTA, and PTB contagious? That is, do students catch the emotions of their teachers during interactions? If so, how does this contagion take place?
- RQ3 Are students’ attitudes towards their teachers related to how much enjoyment, anxiety, and boredom they perceive that their teachers actually feel?

2. Literature Review

2.1. *Flourishing of Positive Psychology in education*

It can be stated that applied linguistics research has prioritized cognitive over emotional studies, placing the latter clearly in second place. Owing to the flowering of positive psychology, researchers began to take interest in investigating both positive and negative emotions in the context of teaching and learning as from the start of the third millennium. However, some facets of the topic have mostly been disregarded and are as yet still relatively unexplored, despite extensive research having taken place on anxiety and its varied functions in the classroom (Dewaele & Li, 2020).

Changes seen at many levels in society have forced positive psychology centerstage. During the COVID-19 pandemic, students encountered a wide range of negative emotions (e.g., anxiety, hopelessness, fear), which made it necessary to boost their well-being and to try to optimize their lives within the confines of various imposed restrictions. Significantly, positive psychology has become more widespread in popular and has gained traction in educational contexts. Research (see MacIntyre & Gregersen, 2012) has become increasingly focused on the historically neglected emotions, resulting in a “positive renaissance” (Dewaele & Li 2020).

It is notable that the most significant research in the field of education has focused intensively on imperfections; yet, recognizing positive features can help mitigate the harmful impact of detrimental effects on students (Gable & Haidt, 2005). The goal of positive psychology is to improve

individuals' well-being and standard of living. In the educational setting, this can be accomplished by helping to make students' and teachers' lives better, offering them guidance in managing their emotions more effectively, and by establishing an environment where students feel emotionally safe.

2.2. Teacher enjoyment, anxiety, and boredom

The study of academic emotions has gained considerable attention in recent years following Pekrun's (2006) development of control-value theory, one of the most well-researched theoretical frameworks on academic emotions. This theory produced fresh insight, revealing how teachers' and students' performance, engagement, and well-being are significantly impacted by their emotions. Hence, a wide range of academic emotions, including enjoyment, anxiety, and boredom, have incited scholarly research in numerous educational, cultural, and social contexts, given that learning environment has a known significant influence on students' academic performance (Amiri & El Karfa, 2021).

2.3. Academic Enjoyment

Academic enjoyment has attracted increasing attention since positive psychology has entered the literature on education research, with researchers such as Dewaele and MacIntyre (2016), Dewaele and Alfawzan (2018), and others having thoroughly investigated the topic. Enjoyment is considered as a pleasant activating emotion that people experience (Fredrickson & Cohn, 2008; Frenzel et al., 2007), including those in the teaching profession (Sutton & Wheatley, 2003). Csikszentmihalyi (2008) distinguished enjoyment from pleasure, stating that pleasure is experienced during biological programs and repetitive routines such as sleep, food, and intimate relationships. On the other hand, enjoyment is also experienced as an ongoing emotion in the aftermath of enjoyable events having taken place.

2.4. Academic Anxiety

Unsurprisingly, anxiety has been the most extensively investigated emotion in the literature (Boudreau et al., 2018; Dewaele & Li, 2018; MacIntyre, 2017). Anxiety has been defined as "the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning" (MacIntyre & Gardner, 1994, p. 284). Academic anxiety can significantly impact students' skills through self-esteem and motivation, and can therefore be detrimental to their academic proficiency (Crookall & Oxford, 1991).

2.5. Academic Boredom

Academic boredom is one of the most prevalent emotions in the academic setting, since it is clearly a negative emotion that can disengage learners from their studies (Li, 2021; Li & Dewaele, 2020). Boredom has been described as underlying the mental processes that occur when people become uninterested, fed up, or wearied (Eastwood et al., 2012), and can include disengagement and attention deficit (Fahlman et al., 2009). Boredom also promotes lack of interest and concentration during specific activities or tasks (Nett et al., 2010) and thereby influences psychological concentration (Pekrun et al., 2010). Putwain et al. (2018) made an important distinction between trait and state boredom, asserting that the former is thought to be an intrinsic quality and component of human beings, while the latter is a situation-specific and transient sensation.

2.6. Teachers' emotion contagion in academic setting

The classroom presents a cultural and emotional context where students and teachers connect socially and professionally, and thereby develop a strong working relationship (Amiri & El Karfa, 2021). During their classroom interactions, students' perceptions of their teachers' emotions can

have a significant impact on their own emotional state as the relationship is often reciprocal, which is known as emotional contagion (Moskowitz & Dewaele, 2021; Zembylas & Schutz, 2009).

It is worth noting here that teaching is a lengthy and complex undertaking. Different variables can directly affect the performance of teachers, and who can become emotionally and intellectually drained after prolonged service (Chang & Davis, 2009). Given this, teachers may find themselves in a position where they have to regulate or suppress their own emotions in order to provide an inclusive and appropriate environment and to sustain a positive relationship that helps foster effective student engagement. As such, Meyer and Turner (2007) used the expression “*emotional scaffolding*” to refer to different ways and positive interactions that teachers may use to help their students achieve certain academic goals, such as enhancing students’ learning, motivation, well-being, and development.

The scaffolding of an effective and positive classroom climate requires a supportive student-teacher relationship that is based on trust in order to demonstrate autonomy and to develop various competences. Thus, in recent years, numerous scholars have become interested in the topic of teachers’ emotional display and regulation in different contexts (Carson & Templin, 2007; Chang, 2009, 2020). During classroom transactions, teachers need to regulate their display of emotions according to certain norms and standards that guide them to make decisions. These unwritten emotional display rules help them to suppress or avoid certain negative emotions, expressing instead more positive or pleasant emotions either consciously or unconsciously (Schutz et al., 2009; Williams-Johnson et al., 2008; Zembylas, 2005). Yet, detrimental effects are still likely to occur if teachers fail to regulate their own emotions adaptively during certain events (Chang, 2020). Over the past decade, scholars have begun to recognize the need to examine the influence of teachers’ emotions on different aspects of students’ lives (e.g., Amiri, 2023; Amiri et al., 2023; Baumert & Kunter, 2006; Demetriou et al., 2009). This idea that people (teachers and students in this context) can effectively “catch” the psychological states of others during their interactions has been discussed from a variety of theoretical perspectives in communication research, neuroscience, and social psychology, and most commonly in the context of emotional contagion (Becker et al., 2014). However, limited empirical and qualitative evidence exists in the current literature to support such an assumption, hence the scarcity of published research on teachers’ emotions.

Given that emotions are a significant outcome of human social existence, and as a vital component of personal well-being (Pekrun et al., 2002; Schimmack, 2008), researchers have investigated the potential convergence between teachers and students’ emotional experiences in the classroom, based on the concept of emotional contagion. In this respect, the literature provides ample evidence that a strong positive link exists between students’ perceptions of teachers’ emotions in the context of their learning, their overall attitude, and their attitude towards their teachers and their own motivation (Moskowitz & Dewaele, 2021). In the same vein, Becker et al. (2014) conducted a study as an attempt to address this gap in the literature through adopting an experience-sampling method to analyze the intensity of emotional connections between teachers and students, based on the assumption that the emotions of both teachers and students are intertwined. To date, Becker et al.’s (2014) research remains one of few studies in the published literature that has focused on the emotional crossover of discrete emotions, including boredom, enjoyment, and anxiety in the academic setting. The impact of teachers’ emotions on students’ emotions was compared to that of teachers’ instructional actions on students’ emotions, and the findings suggest a strong link between perceived teachers’ emotions and students’ own emotions. As such, beyond teachers’ instructional actions, teachers and students’ emotions have been shown to be inextricably linked.

It is important to keep in mind that few studies have begun to speculate on how teachers may influence students’ emotions during their classroom interactions. Frenzel et al. (2009) stressed that

teachers' emotions during ongoing social interactions deserve careful attention, since studies on the topic have been strikingly sparse. In similar vein, Frenzel et al.'s study revolved around one crucial pleasant/positive emotion, namely enjoyment. Utilizing a mixed-method approach, the researchers assessed students' enjoyment of mathematics at Grade 7 and Grade 8. The participant students were asked how they felt during their classes, while their teachers were asked how they felt when they taught this same group of students. Their study concluded that teachers' enjoyment was strongly linked with their students' enjoyment, and that the relationship was mediated by teachers' enthusiasm as a mediated variable. This result implies that teachers, through enthusiasm, have the potential to minimize the negative emotions of their students through their classroom interactions.

Putwain and Symes (2010) examined the impact of teachers' use of fear on students' motivation, exam performance, and/or increasing the unpleasant states. Their study revealed that teachers' use of fear resulted in feelings of worry and anxiety in the students. However, mastery-approach goals (as in the desire to achieve better in comparison to one's own standards) and performance-avoidance (avoiding underperformance in comparison to others) were shown to increase. In a similar study, Putwain and Best (2011) investigated the influence of teachers' use of fear, forcefully or repeatedly, on primary school students' exam performance. Unlike Putwain and Symes' (2010) earlier study, Putwain and Best's 2011 study showed that students' performance can be negatively affected under a high threat condition.

In more recent research, Xie et al. (2022) looked at whether or not students' academic achievement could be predicted based on teacher enjoyment in both eastern and western contexts. In their study, the researchers analyzed data from the 2018 Program for International Student Assessment (PISA), with a total of 84,017 students' exam records from countries in both the east and the west. They concluded that teaching enjoyment and reading enjoyment were found to be strongly correlated with students' reading achievement in both eastern and western students. The same study also yielded that student enjoyment was related to PTE, revealing emotional transmission. In addition, student enjoyment was shown to mediate the relationship between PTE and student achievement. As such, the researchers found no cross-cultural variations in the degree of emotional contagion, which may indicate that emotional contagion can be considered universal across cultures and different countries. The study by Xie et al. (2022) is therefore considered a pertinent work that supports the emotional contagion mechanism.

Importantly, in order to foster such an encouraging and supportive relationship, teachers have to, effectively, manage their own emotional challenges as well as those of their students within the classroom context. Many studies have yielded that positive emotions have been shown to boost student achievement, while negative emotions have a negative influence on the quality of teaching and learning (Gläser-Zikuda et al., 2018; Jennings & Greenberg, 2009; Makhwathana et al., 2017). Thus, a teacher's competence in being able to appropriately display and regulate their emotions is considered a vital element and skill in effective classroom management in order to build a relationship of trust and cooperation with their students. Importantly, scholars have identified various characteristics of an emotionally competent teacher that include high social and self-awareness, management skills (Jennings, & Greenberg, 2009), being clear and consistent, increasing accessibility, and attending to nonverbal communication (Quinlan, 2016).

3. Methodology

3.1. Participants

A total of 33 students participated in the study, and who were each enrolled to the English department of the Moroccan Public University. A total of 18 of the participant students were male (41.2%) and 15 were female. At the time of the study, their ages ranged from 19 to 34 years old.

The students were studying five different majors between them, with 10 studying English, three studying applied language and research in higher education, seven studying linguistics, five studying culture, and eight were studying language, communication, and society. The participants were each asked to provide detailed, in-depth responses to a series of probing and open-ended questions (delivered in the format of an anonymous qualitative survey form) on how they perceived their teachers' emotions to be during classes and how emotional contagion takes place, in order to understand their experiences, attitudes, and perceptions in their own words.

Table 1. Information about participants

Name	Gender	Age	Grade	Major
Badiaa	Female	21	Undergrad, year 1	English studies
Bouchra	Female	30	Undergrad, year 1	English studies
Bayan	Female	34	Undergrad, year 1	English studies
Bader	Male	N	Undergrad, year 1	English studies
Chahed	Male	25	Undergrad, year 1	English studies
Chouaib	Male	20	Undergrad, year 2	English studies
Chaimae	Female	19	Undergrad, year 2	English studies
Driss	Male	20	Undergrad, year 2	English studies
Abdelali	Male	19	Undergrad, year 2	English studies
Abdellah	Male	19	Undergrad, year 2	English studies
Imane	Female	20	Undergrad, year 3	Linguistics
Jamila	Female	20	Undergrad, year 3	Linguistics
Youness	Male	24	Undergrad, year 3	Linguistics
Zahra	Female	22	Undergrad, year 3	Linguistics
Aicha	Female	22	Undergrad, year 3	Linguistics
Noura	Female	20	Undergrad, year 3	Linguistics
Asmae	Female	21	Undergrad, year 3	Linguistics
Rachid	Male	29	Master's, year 1	Applied language studies & research in higher education
Said	Male	22	Master's, year 1	Applied language studies & research in higher education
Marouan	Male	22	Master's, year 1	Applied language studies & research in higher education
Sara	Female	21	Master's, year 1	Cultural studies
Khalid	Male	24	Master's, year 1	Cultural studies
Karim	Male	24	Master's, year 1	Cultural studies
Kaoutar	Female	23	Master's, year 1	Cultural studies
Hassan	Male	21	Master's, year 1	Cultural studies
Ayman	Male	25	Master's, year 1	Language, communication & society
Amina	Female	24	Master's, year 1	Language, communication & society
Ayoub	Male	22	Master's, year 1	Language, communication & society
Boutaina	Female	23	Master's, year 1	Language, communication & society
Achraf	Male	23	Master's, year 1	Language, communication & society
Oumaima	Female	23	Master's, year 2	Language, communication & society
Adam	Male	26	Master's, year 2	Language, communication & society
Ali	Male	25	Master's, year 2	Language, communication & society

3.2. Instrument

A qualitative survey was employed to collect the study's data. This distinct method of generating data whereby researchers essentially ask a series of open-ended questions about a certain topic to the study's participants (Braun & Clarke, 2019). This set of qualitative data were collected in a structured manner prior to, during, and after teaching sessions with the help of a number of the university's teaching staff. The qualitative survey provided a standardized set of questions that were applied equally to all of the study's participants, thereby ensuring that every respondent was asked the same questions, reducing the potential for researcher bias. This approach helped to improve the reliability and validity of the collected data.

In the surveys, a central, general question was used with a subsequent set of sub-questions. The primary question was *"How do you see or perceive teachers' emotions during classes?"* The sub-questions from the survey were: *"What are the emotions that teachers should display/suppress in the classroom?"* *"Do you feel a sense of enjoyment when your teachers also appear to feel like that? If yes, describe."* *"Do you feel a sense of anxiety when your teachers also appear to feel like that? If yes, describe."* *"Do you feel a sense of boredom when your teachers also appear to feel like that? If yes, describe."* *"Do you recall an incident or a situation where you felt enjoyment, anxiety, or boredom because your teacher also appeared to feel like that? If yes, describe."* *"(If answered yes to the previous question) How does such contagion take place?"* *"Do you prefer teachers who appear to show enjoyment, or those who show their anxiety and boredom? Explain why?"* An open section was also included where the participants could also add any other related comment, if they wished to do so. The participants' responses to each question were recorded using Microsoft Word and then analyzed using NVivo software, collating responses to each question, and to identify excerpts related to the research questions. Demographic data, including the participants' age, gender, grade, and major, were also gathered (see Table 2).

Qualitative surveys provide rich, detailed data that help gain a deeper understanding of the phenomenon under investigation; in this case, the participants' perspectives and experiences aimed to provide a comprehensive understanding of the topic of emotions in the classroom, and thus generated new insights and hypotheses for future research. The qualitative survey employed in the current study allowed for a variety of analytical approaches, including coding and thematic analysis. This flexibility led to a rich and nuanced understanding of the data. Also of importance, due to the nature of the investigated topic (teachers' emotions), the qualitative survey was considered an appropriate choice since the topic of study was considered sensitive. The survey was administered anonymously in order for the participants to feel comfortable sharing the information sought.

3.3. Data Analysis

A process of sequential steps was followed to analyze the collected data as outlined by Creswell and Creswell (2018). That is, the data collection and analysis proceeded hand-in-hand, unlike quantitative data which must first be collected in full prior to the analysis stage commencing. In order to conduct a thorough and comprehensive thematic analysis of the survey data, a six-phase thematic analysis process was followed (Braun & Clarke, 2006, 2012; Clarke & Braun, 2013).

First, the data analysis began with the researcher becoming familiarized with the collected data by repeatedly reading through the completed survey forms, and making note of initial ideas. The most important features of the data were then coded in a systematic fashion before initial codes were then generated. Common themes related to the research objectives and research questions were identified. After gathering data relevant to each theme, the data were reviewed so as to

determine whether or not the themes bore adequate relation to the coded excerpts. As such, the themes were defined and named prior to commencing to write the report.

The final list of codes included three main defined and named themes (the importance of teachers' emotions, emotional contagion during classes, and teacher preference). Winnowing data (Guest et al., 2012) was adopted to disregard irrelevant information based on the objective of the study and then the data were aggregated into themes. NVivo software was used to organize and code the collected data in a systematic and rigorous manner, and patterns and connections within the data were identified.

4. Results

4.1. Students' Views on Teachers' Emotions and Emotional Transfer

The current study aimed to identify how students perceive their teachers' emotions, describing their experiences and perceptions of the enjoyment, anxiety, and boredom of their teachers during classes. In addition, they described incidents of having feelings of enjoyment, anxiety, and boredom as a reaction to perceiving that their teachers also felt the same emotion. The range of how different students saw and perceived their teachers' in-class emotions was vast.

The collected data were then coded into themes, which helped provide valuable insights into the opinions, attitudes, and behaviors of the participant students. From the qualitative survey having been applied to 33 participants, a range of both pleasant (i.e., enjoyment) and unpleasant (i.e., anxiety or boredom) emotions were reported. The study revealed three overarching themes regarding the students' perceptions about their teachers' emotions: importance of teachers' emotions, emotional contagion during classes, and teacher preference.

Table 2. Overarching themes in participant feedback on teachers' emotions

Theme			Participants (n)	Excerpts (n)
Importance of teachers' emotions	Important		33	33
	Not important		0	0
Emotional contagion during classes	Enjoyment		33	26
	Anxiety		29	24
	Boredom		29	21
Teacher preference	Shows positive emotions		33	33
	Shows negative emotions		0	0

4.2. Importance of Teachers' Emotions

Unsurprisingly, a positive depiction of teachers' emotions as crucial elements during classes was evident throughout all of the participants' feedback. The importance of teachers' academic emotions can be clearly recognized since they play a crucial role during classes and thereby have a significant impact on their students' performance, learning, and general well-being.

Evidence taken in the form of excerpts from the participants' survey forms revealed the importance of teachers' emotions displayed in the classroom in that they can greatly influence their students' multidimensional development, motivation, and well-being. The participants seemed to relate teachers' emotions to their own motivation and lesson engagement. That is, teachers' emotions can significantly influence their students' motivation to learn. When a teacher enjoys a certain topic and conveys that enjoyment to their class, their students are more likely to feel motivated to learn. For example, Rachid believed that "teachers' positive emotions during classes are crucial for students' engagement with course content, while negative emotions can lead to disengagement and demotivation in class." In a similar vein, Hassan stressed that,

Teachers' emotions during classes are essential in order to engage students and connect with them. Personally, I always feed off the teacher's emotional energy in class, which has a double effect; it triggers either a positive or a negative response.

Teachers' emotions can affect the classroom setting and thereby the student-teacher relationship. When teachers display empathy and care towards their students, it can help establish trust and foster a positive emotional learning environment. Students are more likely to feel comfortable sharing their thoughts when they feel that their teacher genuinely cares about their learning and well-being. In this regard, the study participants named Ayman, Chaimae, Bouchra, Khalid, and Aicha all related teachers' emotions to student performance and learning. Ayman stated that "Teachers' emotions are very important during class. When we feel that teachers are happy, we feel excited and try to work harder so that we maintain the teacher's positive emotion." Teachers' positive emotions made it easier for students to understand the lesson and participate, according to Chaimae. Bouchra expressed a similar stance, saying that, "I see teachers' emotions during classes as important since they affect the atmosphere of the class, and that can give strong power and energy to the students, helping us be more focused, concentrated, and willing to study hard." Furthermore, Khalid shared that teachers' emotions during classes are important as they can profoundly affect students' learning, and added that teachers ought to choose carefully how and when to display and regulate their own emotions.

In summary, teachers' positive emotions can have a significant influence on the success of a course. When teachers create an enjoyable classroom atmosphere, enjoy the course material, and also the teaching process, their students are more likely to become engaged, motivated, and invested in their learning. This act can result in students' better academic performance and higher achievement levels.

4.3. Emotional Contagion During Classes

In the classroom setting, where teachers' emotions can have a significant impact on learners, students can effectively "catch" or be influenced by the emotions exhibited by their teachers. This can happen through both verbal and nonverbal communication such as facial expressions, tone of voice, and body language. Interestingly, one important aspect of emotional transfer during classes is that it can occur both consciously and unconsciously. For example, teachers may consciously try to convey positive emotions to their students, such as when a teacher tries to motivate and inspire their students. However, emotional contagion can also occur unconsciously, with students picking up and mimicking the emotions exhibited by their teachers without even realizing it. Findings from the current study revealed that teachers' emotions have a crossover effect and can indirectly affect their students' emotional state, behavior, and attitudes. For example, if a teacher is feeling either bored or anxious, their students may also feel bored, or perhaps more anxious and less motivated to learn. Conversely, if a teacher shows a sense of enjoyment and passion about a certain topic, their students may feel more engaged and interested in learning.

In the current study, the great majority of students shared that their teachers' enjoyment, anxiety, or boredom were contagious. Results from the collected qualitative data revealed that when teachers experience high levels of enjoyment, their students are more likely to enjoy learning and produce a better academic performance. For example, Rachid, Said, Marouan, and Ayoub each expressed their willingness to participate in a class and a sense of increased motivation when their teachers seemingly enjoyed teaching the lesson and appeared to feel happy during the class. Bouchra clearly stated that, "I feel a sense of enjoyment when our teachers appear to feel similarly because it affects our intention to study and helps us become more focused and concentrate better in the classroom." Bayan also mentioned the concept of how enjoyment can cross over from teachers to students, saying; "I feel a sense of enjoyment when my teachers appear to feel the

same because positive vibes are contagious and they spread quickly.” Importantly, Chahed and Bader asserted that teachers are sometimes seen as in the place of students’ parents; that is, students can easily be influenced when they see their teachers enjoy giving a class. Jamila expressed a similar attitude towards the topic, stating:

As students, the first thing we notice and pay attention to once in class is the teacher. If the teacher comes in with a smile on their face, it certainly gives students a sense of joy and motivation to start the lesson and to acquire new knowledge more agreeably.

In addition, some of the participants recalled incidents or situations where they had experienced enjoyment because their teachers also appeared to feel that way. In this respect, Chaimae mentioned that, “I remember one day, our teacher started telling anecdotes from his childhood. He enjoyed telling the stories, and of course, all of us students shared in that same sense of enjoyment.” Abdelali also shared a similar memory, saying: “Yes, it happens all the time. I still remember when one of my professors was seen to be really enjoying the class. He shared his enjoyment with the students, and that created a healthy environment for learning.” Another participant, Abdellah, mentioned feeling “a sense of enjoyment with one of the professors,” and that it “made the course a lot more intriguing and fun.”

Similar to enjoyment, when teachers experience either anxiety or boredom, their students are more likely to be affected by these negative emotions and perform poorly in academic terms. Teachers’ anxiety can create a tense and stressful atmosphere in the classroom, and students may therefore “catch” on to this stress and become anxious themselves, which can lead to negative emotions such as frustration in students. This emotional impact can also affect their ability and motivation to learn. It is important, however, to note that not all students are equally susceptible to emotional contagion, since some may be more resilient than others and more able to regulate their own emotions in the face of their teachers’ anxiety in the classroom, whereas others may be more vulnerable to its effect and thereby more easily influenced by the emotions of teachers during lessons.

The data collected in this study indicated that almost all of the participant students primarily reported that both teachers’ anxiety and boredom cross over during classes. Whilst teachers’ anxiety can cause students to feel nervous, restless, and distracted, signs exhibited of teacher boredom during classes can result in students feeling unmotivated, disinterested, and unfocused. Since the classroom is a socioemotional context, both teachers and students are thereby “emotionally connected,” leading to anxiety crossover from teachers to their students, as stated by Bader, one of the study’s participants. Others attributed their lack of interest and focus in the classroom to their teachers having seemingly felt anxious. For example, Rachid and Karim stated that they would always lose interest, courage, and focus when their teachers showed signs that they were feeling anxious. Teachers’ high levels of anxiety creates a negative emotional atmosphere that can be transmitted to their students. According to both Bouchra and Asmae, this can lead to increased levels of anxiety in students and make it more difficult for them to learn and engage in the classroom. Similarly, in Abdelali’s opinion, teachers’ anxiety can significant impact the relationship between students and teachers as such negative behaviors affect interactions with their students. Ayman recalled “an incident from BA when my reading comprehension teacher became anxious because two of my classmates were talking to each other, making noise, and I unconsciously felt anxious as a result.” Similarly, Ayoub also stated that,

Once in a class, the teacher was anxious about a certain issue that I was on edge the whole time, fearing that I may do or say something that would infuriate the teacher and make her explode in my face.

Moreover, according to the qualitative survey data collected, the study's participants showed how teachers' boredom can transfer to their students. When teachers appear unenthusiastic, disinterested, or unengaged with regards to the material they are teaching, students certainly pick up on those cues and become less engaged and motivated themselves. Rachid expressed a similar view, stating that "Most of the time, yes, when the teacher feels bored, they do not spread positive energy in the class, so I do not feel as motivated to learn and end up feeling bored as well." Bayan, Chahed, Youness, and Noura all linked their own attitude as students towards the subject matter (as in how they perceive the subject) to signs of their teachers' boredom. They stressed that in cases where teachers appear bored, a negative atmosphere is created, which makes the subject seem even more boring than it perhaps really is. To this end, some students can lose their concentration; eagerly awaiting the lesson's end in order to leave the classroom. Nevertheless, some students may still enjoy the subject being taught, even in cases where they find it boring. Boutaina stressed that, "Yes, although I used to find philosophy very boring, I started enjoying the class because the teacher was enthusiastic and appeared to enjoy taking the class." Along the same line of thought, Karim mentioned "...one incident where a teacher always appeared bored, then no one attended his classes." Similarly, Ayoub stated that his level of boredom in classes "would be more amplified by the teachers' boredom" if they displayed a negative attitude towards the subject being taught. However, teachers' boredom was found not to affect students when the students themselves were significantly enthusiastic about the subject being taught.

4.5. Teacher Preference

It is important here to note that the emotions that teachers display in the classroom and the emotional climate that is thereby created as a result can cause students to have certain preferences as to the emotions that their teachers may exhibit experiencing. Unsurprisingly, the findings revealed that due to teachers' emotional contagion, all of the student participants showed a strong preference for teachers who openly display enjoyment when teaching over those who exhibit signs of anxiety or boredom. In other words, teachers can significantly impact the creation and maintenance of a positive classroom climate, which promotes student motivation, engagement, and thereby improved learning.

Through the qualitative survey conducted in the current study, the student participants gave a number of reasons that made them prefer teachers that exhibited signs of enjoyment in the teaching. One important reason noted was that such teachers help to keep the lesson exciting and engaging for their students. In line with this, Badiaa, Bayan, Chaimae, Asmae, and Boutaina all shared that when teachers create an enjoyable and positive classroom atmosphere, as students they were more likely to feel engaged and interested in the lesson, and that it would feel more relevant and interesting as a result. Another reason concerns the contagion nature of teachers' enjoyment. Where teachers display enthusiasm for the subject being taught, their enthusiasm can effectively cross over to their students. According to participants Abdelali, Imane, Zahra, Aicha, Jamila, Oumaima, and Ali, when teachers are enthusiastic and passionate about what they are teaching, this helps create a sense of excitement and interest in the classroom, which leads to students experiencing a sense of enjoyment themselves during the class. In corroboration of this idea, Amina said, "Of course, I prefer teachers' who show their enjoyment, because then I feel happier. I find myself in a good mood and I'm most likely to follow up and focus more in class." In addition, the participants also mentioned their preference for teachers who seemingly enjoyed their classes since it positively affected their own attitude towards the subject, and Asmae mentioned that this preference may stem from teachers' enjoyment causing "students to love their classes." Likewise, Youness, Rachid, Said, and Adam all expressed a similar stance, stating that teachers' enjoyment is seen as a powerful source of motivation and inspiration, and they believed that is certainly led to increased student engagement, effort, and achievement. Ayoub stated that "I

prefer teachers who show enjoyment and excitement as I feel appreciated and wanted as a student, and I will be more inclined to engage with teachers and express myself freely.”

5. Discussion

The study's first research question considered how students perceive the emotional state of their teachers in terms of enjoyment, anxiety, and boredom. The findings revealed that emotions play an important role in educational activities, given that the classroom climate provides a setting for a wide range of emotional events that might affect their teaching and, as a consequence, the students' learning and motivation also. All of the participants placed great importance on the emotional state of teachers during classes. The crucial role that teachers' academic emotions play in the learning, performance, motivation, and well-being of students was also highlighted since these emotions are pivotal in the creating of a positive learning atmosphere. An ideal and healthy classroom atmosphere is one in which students are both actively involved and engaged. The teacher-student emotional relationship boundary was found to be crucial in the emotional events that teachers go through to develop a positive classroom teaching relationship with their students. Having compassion for students requires establishing a level of connection with them, yet at the same time maintaining a degree of social distance or control; implying that teachers need to simultaneously maintain a professional relationship with their students (Schutz, 2014), given that sociocultural factors can influence the relationship between teachers and students (Amiri & El Karfa, 2021).

Interestingly, these findings also dovetail generally with previous research claiming that positive emotions help learners more easily engage in activities, strengthen their interest and motivation, and thus facilitate the whole teaching and learning process (Pekrun et al., 2014, 2017). In contrast, negative emotions can have a detrimental effect, diminishing learners' motivation and interest and thereby compromising their learning potential (Pekrun et al., 2014, 2017; Swain, 2013). These groups of emotions are critically important to students' learning, motivation, health, and academic performance (MacIntyre, 2002; Pekrun et al., 2014).

The study's second research question concerned the crossover of emotions from teachers to students. The study's participants agreed that teachers' academic enjoyment, anxiety, and boredom emotions could be contagious in the classroom. Evidence from different excerpts in the current study have shown that such contagion takes place both consciously and unconsciously. For instance, when teachers exhibit signs of boredom, that can then lead to a lack of innovation and creativity in their teaching approach, which can make the subject being taught seem boring or uninteresting to their students. The emotional state of teachers also has a contagious impact on students, as evidenced by the participants' comments regarding a preference for teachers who exhibited positive emotions, such as enjoyment, to those who displayed feelings of anxiety or boredom. By fostering an enjoyable and exciting classroom atmosphere on an emotional level, teachers can increase their students' motivation, engagement, and interest in the subject matter being taught. These findings can also be linked to prior research in the literature (see Hatfield et al., 1992, 1994; Hennig-Thurau et al., 2006; Schoenewolf, 1990; Schutz et al., 2009; Williams-Johnson et al., 2008; Zembylas, 2005).

To substantiate this, students' perceptions of teachers' enjoyment can significantly impact their own enjoyment during classes. That is, when students perceive that their teachers feel a sense of enjoyment, and are enthusiastic and passionate in their teaching, they are more likely to feel motivated and engaged in learning themselves. The findings revealed in the current study can be said to be consistent with significant prior research that investigated the transfer of emotion between teachers and students. In particular, Becker et al. (2014) found that teachers' enjoyment and students' enjoyment were related through conscious and unconscious processes. Further

alignment of the current study's findings can be found with three important studies; conducted by Frenzel et al. (2009, 2018) and Xie et al. (2022), which dealt with the issue of enjoyment transfer between teachers and students. In those studies, it was concluded that a significant and positive link exists between teachers' enjoyment and students' enjoyment. In addition, boredom was a teacher emotion that also appeared to be contagious, suggesting that when teachers fail to create a stimulating and engaging learning environment, their students feel bored and not fully engaged in the learning process, and as a result may have lower levels of motivation and academic attainment. In a similar vein, Bakker (2005) concluded that positive emotion is contagious from teachers to students, claiming that students tend to imitate happy and cheerful emotions displayed by their teachers. Concerning academic boredom contagion between teachers and students, limited prior research exists in this area, although previous studies have investigated the reciprocal relationship between academic boredom and academic achievement (e.g., Pekrun et al., 2010, 2014; Putwain et al., 2018). To the authors' knowledge, the current study is the first to test this issue within an academic setting, as researchers in the field have focused intensively on only positive emotion contagion (e.g., Frenzel et al., 2009, 2018; Moskowitz & Dewaele, 2021; Talebzadeh et al., 2020), with the exception of anxiety.

The third research question of the study concerned students' attitudes towards their teachers (ATT) based on PTE, PTA, and PTB. The results suggest that students have a preference for teachers who feel a sense of enjoyment, and thus exhibit a positive attitude towards them. Conversely, students become disengaged themselves and lose interest in the classroom when they perceive that their teachers are bored. This confirms the idea that a bored teacher can negatively impact both the classroom environment and student learning outcomes. The findings in the current study align with previous research on the impact of students' perceptions on their attitude towards teachers who seem happy (Moskowitz & Dewaele, 2021) and teachers who appear to experience a sense of enjoyment in their profession (Dewaele & Dewaele, 2020). That is, teachers demonstrating enjoyment for the subject matter being taught can positively influence their students' attitudes and behaviors towards learning. When they perceive that their teacher is enjoying the subject matter, students may be more likely to participate fully in the class and take a more active role in their own learning. As such, and in line with prior research on this front (e.g., Moskowitz & Dewaele, 2021), the current study revealed that students show a strong preference for teachers who exhibit a clear sense of enjoyment in their work, compared to those who demonstrate anxiety or boredom. Teachers who enjoy teaching can thereby help create a more enjoyable and exciting classroom environment on an emotional level, which increases student motivation, engagement, and interest in the subject matter. It is worth pointing out here that research on the relationship between perceived teacher emotions and students' attitudes towards their teachers is somewhat limited. Therefore, the current study contributes to addressing this gap in the literature, although further research may still be needed in order to fully understand this complex phenomenon.

6. Conclusion

The findings of this qualitative study suggest that teachers' enjoyment, anxiety, and boredom contagion is a crucial issue for both teachers and students during classes. The study found that students reported high levels of positive emotion (i.e., enjoyment) and a low threshold for negative emotions such as anxiety and boredom.

Furthermore, the findings showed that all of the study's participants emphasized the significance of teachers' emotions in the classroom. The impact of teachers' academic emotions on students' performance, learning, and well-being has been acknowledged as crucial as these emotions play a pivotal role in the classroom and are essential in creating a positive learning environment. As such, all of the participants shared that their teachers' enjoyment, anxiety, and boredom are contagious emotions. As such, teachers' boredom can lead to a lack of creativity and

innovation in their teaching approach, which can make the subject feel stale and uninteresting to students.

The emotional state of teachers has a contagious impact on students. In this study, the participants showed a clear preference for teachers who displayed positive emotions, such as enjoyment, compared to those who demonstrated feelings of anxiety or boredom. Teachers who display signs of enjoyment in their teaching can significantly influence the learning experience of their students. By creating an enjoyable and exciting emotional classroom atmosphere, teachers can help to increase their students' motivation, engagement, and interest in the subject matter being taught.

7. Suggestions

7.1. Limitations and future directions

The findings of this research made a notable contribution to the current scarcity of qualitative studies on the issue of emotion contagion in academic settings. This study has therefore helped fill a significant gap in the current literature. However, like most research, the current study has certain limitations that may guide future research in this area. Although the presumption that achievement emotions are domain-specific, generalized emotional traits were examined in this study, as opposed to subject-specific emotions (Goetz et al., 2007), since the participants were students selected from five different academic disciplines. The idea that emotions have context-specific effects was acknowledged (as the study was conducted within a single context), but the argument in favor of organizing emotions according to domains was not addressed in the study. Therefore, future research could also take the notion of context specificity into consideration. As such, the current qualitative study on the role of teachers' emotions has contributed significantly to our understanding of the complex nature of emotional experiences. However, adopting a mixed-methods approach could provide a more comprehensive understanding of the topic, through combining the strengths of both qualitative and quantitative research methodologies. In addition, the findings are context- and culture-specific and may not be generalized to broader populations or other cultures, which presents a challenge when it comes to capturing the diversity of human emotional experiences. Thus, investigating emotions across various cultures could help to enhance our understanding of how teachers' emotions are experienced, displayed, and regulated in different societies.

7.2. Theoretical and pedagogical implications

The findings of the current qualitative study revealed an image of teachers' emotion contagion during classroom interactions, and thus contributes to the scant existing body of research on emotional contagion in academic settings. This study provides valuable insights for researchers, teachers, and policymakers in the field of education, as well as highlighting future avenues of study. In this respect, one notable theoretical implication concerns the development of new theories and hypotheses about teachers' emotions effects, which offers a novel perspective on the topic. Moreover, the results offer practical suggestions that may be implemented immediately in the classroom as a means to enhancing student performance and to the refinement of existing instructional strategies. Fundamentally, this approach to improving the dynamic between teachers and learners places greater importance on positive emotions (e.g., enjoyment) in the classroom. Through exhibiting emotions such as enjoyment, enthusiasm, and passion in their work, teachers can establish a more pleasant and supportive learning environment, through which more effective ways for managing emotions can be developed in the classroom context. Through the implementation of wise choices and appropriate strategies, approaches, and techniques, teachers' professional development can be advanced along with the enhancement of students' educational outcomes in the classroom. The current study also demonstrated the significance of teachers'

emotions and overall well-being. Similarly, in order to create an emotionally safe classroom setting, the study emphasizes the necessity for teachers to boost their emotional intelligence, emotion display, and self-regulation skills, since a positive classroom environment can help to enhance their students' motivation, engagement, and learning. Lastly, the study's findings further emphasize the necessity of providing teachers with continual professional development and training. That is, teachers should have access to the appropriate pedagogical materials, training, and guidance in order to improve their emotional intelligence and to create teaching environments where they can better display and regulate teacher emotions that may positively benefit their students through the emotional contagion effect.

Declarations

Conflicts of Interest: The author declares no conflict of interest.

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Ethical Approval: While no ethical approval was required for the current study according to the regulations of Morocco, the study adhered to ethical research principles and all participants provided their informed consent prior to inclusion in the study.

Data Availability Statement: The datasets generated and analyzed during the current study are available on the Open Science Framework (OSF) platform <https://osf.io/mqgri/>

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Appendix

A copy of the qualitative survey used in the current study

Gender:

Grade:

Age:

Major:

We are a group of researchers, conducting a research project on the role of emotions in education. You are kindly requested to express your opinion about the issue of teachers and students' enjoyment, anxiety, and boredom by answering these questions. Before answering the questions, please recall some typical situations of being in class, which you have experienced during the course. Your contribution to this study will add value to the study's findings. The information you provide will remain strictly confidential.

- **By completing and submitting this questionnaire, I am indicating my voluntary agreement to participate in this study.**
- **I understand that my responses will remain confidential, and my anonymity will be preserved throughout the research process.**
- **I understand that my participation in this study is entirely voluntary, and that I may withdraw at any time without penalty.**
- How do you see or perceive teachers' emotions during classes? (important, not important, etc.)
- Do you feel a sense of enjoyment when your teachers also appear to feel like that? If yes, describe.
- Do you feel anxious when your teachers also appear to feel like that? If yes, describe.
- Do you feel bored when your teachers also appear to feel like that? If yes, describe.
- Do you recall an incident or situation where you felt enjoyment, anxiety, or boredom because your teacher also appeared to feel like that? If yes, describe.
- (If answered yes to the previous question) How does such contagion take place? (conscious or unconscious emotional transfer)
- Do you prefer teachers who appear to show enjoyment or those who appear to show their anxiety or boredom? Explain why.
- Please feel free to add any other related comment:

About The Contributor

El Makki Amiri is a lecturer at Mohammed 5 University in Rabat, Morocco. He conducted his Ph.D. research on the role of emotions in educational settings. He has contributed and participated in various conferences and workshops on a wide range of topics, and undertakes research on emotional and psychological variables in the education context.

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