

Effect of Teachers' Emotions on Their Students: Some Evidence

Déborá Rodrigo-Ruiz

Facultad de Educación

Universidad Nacional de Educación a Distancia (UNED)

Calle de Juan del Rosal, 14, 28040

Madrid, Spain

Abstract

This work attempts to compile some of the different effects that professorial emotions have upon students by searching relevant scientific literature. As a result, presented here is a series of influences, classified by considering six areas of effects about which empirical evidence has been gathered: students' emotions, emotional competence, motivation, academic performance, classroom discipline, and social behavior. Furthermore, herein are expounded both positive and negative effects that come to play in each of the discrete emotions mentioned. The results reveal that, excluding certain exceptions in the context of specific circumstances, it is determined that positive emotions provoke positive effects, while negative emotions provoke negative effects. Following is a discussion of the appropriateness, or lack of the same, in the suppression of negative emotions, encouraging positive ones; the function of emotional regulation of teachers; and the possible benefits of the inclusion of emotional competence as a formative part of teacher preparation.

Keywords: emotions effect, teacher emotions, teachers' influence, emotional regulation, emotional intelligence, teachers' emotional competence.

1. Introduction

Emotions play a fundamental role in our existence. As human beings, our emotions, as well as those of others around us, influence our conduct, attitudes, and thinking. In like manner, we influence others through our emotions. Teaching is an emotional activity (Hargreaves, 1998, 2001), and as such, it carries with it our own emotional experience as well as that of those who surround us.

We know that emotions have an important influence upon students in the learning process. Pekrun, Goetz, Titz and Perry (2002) have investigated in depth the impact of emotions upon learning, coming to the conclusion that while negative deactivating emotions on the part of the teacher take a negative toll in the classroom, positive activating emotions render a positive effect on student learning. In like manner, teachers are susceptible to the influence that emotions exert over them (e.g., Day & Leitch, 2001). However, not only does emotions exercise an influence over their work, but also diverse aspects of their work influence their emotions. Hagenauer, Hascher and Volet (2015) analyzed emotions both positive and negative as generated by the interpersonal relationship between the teacher and the student, classroom discipline, as well as the student's engagement in classroom activities, finding that these important relationships were combined with experiencing the emotions of joy, anger and anxiety.

Frenzel, Götz, Stephens, and Jacob (2009) describe the relationship that occurs between teacher emotions and student behavioral responses. Their model proposes that teachers' emotions, impacted by student behaviors, in turn influence instruction; thus continuing the cyclical effect in the impact of teachers' emotions on student behaviors and outcomes. In spite of the minimal amount of research on this theme, it is possible to find in scientific literature a relatively important number of works which refer to how emotions are generated in teachers (e.g., Chen, 2016) and how students influence these emotions (e.g., Hagenauer, Hascher & Volet, 2015); but the obtained results over the effects produced upon students because of teacher emotions are few. In this work we will concentrate on the impact generated in students as provoked by the felt and expressed emotions of their teachers, attempting to review the entire accessible peer reviewed articles that offer data on this theme.

Emotions involved in teaching are varied. In scientific literature, we do not find any agreement as to which emotions are most present in performing professorial duties other than the general classification of positive and negative. Frenzel (2014) carried out a review of literature analyzing which emotions are the most present in educational work and with what frequency. The results show a list of seven discrete emotions (i.e., enjoyment, pride, anger, anxiety, shame and guilt, boredom, and pity) which differ slightly from the five emotions (i.e., joy, love, sadness, anger and fear) presented most recently by Chen (2016) in a quantitative study of more than 250 participating teachers. Nevertheless, both works agree that the emotion most present in teaching is by a significant margin, joy. However, as Chen (2016) points out, it is common to encounter among teachers combinations of emotions of very diverse natures.

A recent theoretical model set forth by Fried, Mansfield, and Dobozy (2015) identifies five distinct functions that would be useful to a professor in the learning-teaching process. These functions, which operate in the intrapersonal as well as the interpersonal context of the teacher, behave in a dynamic manner in social, cultural, and political dimensions, seeing themselves influenced by these same dimensions. Among the functions that teacher emotions exercise in the educational process, we would find, according to authors: "information provision, giving quality to experience, influencing cognitive processes, regulating internal and external processes, and providing motivation" (Fried, Mansfield & Dobozy, 2015, p. 427).

2. Method

This current study was performed by searching those works that might deal with teachers' emotions, including only those that might offer information as to how those emotions influenced their students. The search method for this was both systematic as well as non-systematic in order to encompass the maximum number of results possible. The works selected were required to be based on empirical observations, whether qualitative or quantitative in nature. Literature reviews were not eliminated whenever they offered results having utilized empirical data.

Having selected the works, we have identified in each of them the effects of teacher emotions upon their students and the different discrete emotions which were discussed, classifying the different effects encountered among the diverse areas of the student. In this manner, the type of effect whether positive or negative that provoked each of the discrete emotions were pointed out as they were presented in the works.

3. Results

The search process finalized in 15 works, among those that included diverse investigations, ten of which were quantitative (Becker, Goetz, Morger, & Rallenucci, 2014; Beilock, Gunderson, Ramirez, & Levine, 2010; Brackett, Floman, Ashton-James, Cherkasskiy, & Salovey, 2013; Frenzel, Goetz, Stephens, & Jacob, 2011; Kunter et al., 2008; Morris, Denham, Bassett, & Curby, 2013; Saunders, 2013; Skinner & Belmont, 1993; Trigwell, 2012; Turner et al., 2002), three qualitative (Emmer, 1994; Kimura, 2010; Postareff & Lindblom-Ylänne, 2011), and two literature reviews (Eysenck & Calvo, 1992; Sutton & Wheatley, 2003). The teachers whose emotions were studied crossed the range from pre-school, elementary, intermediate, secondary, university and adult education. The different works were published in their respective journals between 1992 and 2014, although 60% of these works are concentrated between 2010 and 2014. These empirical studies were conducted in different part of the world: United States (6), Australia (2), Germany (2), Finland (1), Japan (1), and Switzerland (1). The following commentary exposes the results obtained from these works. They are presented first according to the different effects that emotions exercise over students and classified according to the different areas of the student as explained below. Next, attention is given to those works which offer results for each of the discrete emotions included in the study, expounding the effects produced for each.

3.1. Areas of Students Affected by Teachers' Emotions

Having identified the effects produced on the students, these effects were grouped according to similarity, thus obtaining a classification that would facilitate their explanation. Concentrating on effects that have been described with empirical evidence, six areas or aspects of the student have been considered: students' emotions and perceptions, emotional competence, motivation, learning, and academic performance, classroom discipline, and social behavior. In the following, the reader will find the exposition of each of these areas.

3.1.1. Students' Emotions and Perceptions

One of the first effects that we will describe is also one of the most evident. Emotional contagion is a well-known reality but with little empirical evidence in an educational context. Becker et al. (2014) completed a crossover process in which they confirmed that emotions of teachers were contagious to the student in determining therefore their conduct. This occurs especially with the discrete emotion of joy, followed by anger, and then anxiety to a lesser degree. Aside from this, other authors note that teacher' emotions can generate diverse reactions and perceptions among the students closely tied to the emotional aspects of the student himself. Through the analysis of different studies, Sutton and Wheatley (2003) conclude that teachers yelling can provoke harmful emotions of guilt, anguish, shame, and inferiority in students.

Moreover, teacher emotions are very important because they affect the manner in which the teachers categorize the students which in turn determines their treatment of them (Sutton & Wheatley, 2003). In this manner emotions are responsible for the reason that a teacher may categorize one student as "trying hard but slowly" instead of "lazy", thus having repercussions of great relevance in the way in which the student perceives himself and his subsequent conduct (e.g., Rosenthal, 1991). It is also possible that certain emotions foment social beliefs that impede the progress of the students. Concrete evidence has been presented (Beilock et al., 2010) that would confirm that teachers' anxiety alters girls' gender ability beliefs in such a way that their mathematical scores are inferior to those other female students whose math teachers do not present anxiety toward the subject matter.

3.1.2. Emotional Competence

Let us continue with the study of evidences that inform the effect of teacher emotion over the development of the emotional competence of their students. There is an important lack of study with regard to this aspect in scientific literature but even so we find certain evidences. Morris et al. (2013) study the effects of the emotions of preschool teachers over the emotional competence of their students, concluding that, in effect, teachers' emotions influence children's emotional understanding. These effects studied by the authors affect early stages of emotional development in the children, stages in which too many negative emotions from the teacher (specifically anger) may interfere with the children's ability to process emotional information.

3.1.3. Motivation

Student motivation is one of the areas of influence from teacher emotions in which the most evidence has been found. Spontaneous positive emotional expression in the classroom, especially when joy is involved, provokes a greater interest in the subject matter and makes the student more participatory (Kimura, 2010), principally because a lot of enthusiasm from the teacher is related to more stimulating instruction (Kunter et al., 2008). In spite of the fact that it seems that positive emotions produce motivation in students, evidence has been found that points specifically to teacher caring as an important motivational generator among students (Sutton & Wheatley, 2003).

When students perceive their teachers as warm and caring they feel more enthusiastic in class (Skinner & Belmont, 1993). Likewise, the communication of enthusiasm, enjoyment, and humor may influence students' goal orientation (Sutton & Wheatley, 2003). Concentrating on the emotions transmitted by the teacher when a student has made a mistake, the results do not show a consensus. On one hand, certain studies affirm that positive emotions increase motivation after the error, favoring creative development in the class (Kimura, 2010), especially when students make mistakes that advance the lesson. Frenzel et al. (2011) studied the role of determined discrete emotions by teachers as they affected the motivation of students, finding that enjoyment is more motivationally supportive in providing enthusiastic lessons than anger, which results in less motivation. Nevertheless, the conclusions reached by Sutton and Wheatley (2003) head a different direction, affirming that students perceive teachers' anger, considering this as provoked by a lack of effort on the part of the student, while teachers' sympathy or pity after failure, is perceived by students as the teachers' lack of faith in their ability. In this manner, it is more motivating for the student to think that the teacher attributes the error to lack of effort, rather than incompetence.

3.1.4. Learning and Academic Performance

Teacher emotions also seem to have a certain influence on their students' academic performance. Given that there is not a great amount of works that offer resounding evidence, there is however sufficient data to throw light on this subject. In the first place, it seems that teacher anxiety plays an important role in the reduction of student performance (Beilock et al., 2010), and that as expected, a lot of teacher enthusiasm makes for more effective instruction and produces better student results (Kunter et al., 2008). Likewise, we can affirm that the quality of teaching received by students is also influenced by the emotions of their teachers. Instructional quality is worse among those teachers who demonstrate negative emotions and dissatisfaction in teaching as compared to those teachers who demonstrate more positive emotions (Frenzel et al., 2011; Postareff & Lindblom-Ylänne, 2011). The results of the studies by Frenzel et al. (2011) with regard to discrete emotions of enjoyment, anger and anxiety, show how students report that teachers who demonstrate enjoyment results in a review of having presented a quality, cognitively challenging and coherent lesson, while teachers who demonstrate anger and anxiety are reviewed as having a low and very low quality of teaching, respectively. According to the authors, tense and nervous teachers proffer less elaborated and less coherent explanations.

We also find a series of indirect effects on students brought about by the teachers' cognitions and methodology, which are also influenced by their emotions. In the first place, the teachers' emotions, whether positive or negative, have a certain effect over their memory and motivation (Sutton & Wheatley, 2003). Positive emotions are an important, but not completely encompassing, element of intrinsic motivation. However, negative emotions frequently diminish the intrinsic motivational level of the teacher (Sutton & Wheatley, 2003).

In the second place, teaching methodology, closely tied to the attainment of student academic achievement (e.g., Mohammadjani, & Tonkaboni, 2015) is closely related to the emotions of the teacher. A study carried out by Trigwell (2012) shows how a teacher-centered approach may be directly correlated with negative emotions. In contrast, however, intrinsic motivation, pride and low frustration level may provoke methods that involve engagement among students (i.e., student-focused). It seems that lower levels of frustration are related to methods that involve engagement with students. By the same token, enjoyment provides opportunities for autonomous student behaviors (Frenzel et al., 2011). Trigwell (2012) concludes with the idea that student-focused approaches favor the student in the sense that they generate more ideas and strategies for teaching. The same results have been found for the emotions of joy, interest, pride and love (Sutton & Wheatley, 2003), contrary to what are provoked by insecurity or anxiety (Eysenck & Calvo, 1992; Saunders, 2013). Another interesting observation comes from the work of Brackett, et al. (2013), who submitted teachers, to both positive and negative emotional states just moments before carrying out student evaluations. Their results show how these teachers who acted under emotional states of joy, enthusiasm and optimism while completing student evaluations gave more positive results than those teachers who carried out their evaluator process during a state of pessimism, depression or sadness.

3.1.5. Classroom Discipline

There are various authors (Kunter et al., 2008; Sutton & Wheatley, 2003; Turner et al., 2002) who relate emotions such as joy, enthusiasm, caring and expression of humor with classroom behavior control and the following of rules, which at the same time are highly related to the teacher-student relationship. For this reason, we could affirm a certain consensus with regard to the fact that positive teacher emotions produce a more satisfactory discipline in the classroom. Nevertheless, the situation is different when we refer to the correction of a student in light of a lack of discipline. In this case, some works have affirmed the usefulness of negative emotions, principally anger, as a tool to achieving good classroom discipline, fomenting an atmosphere in which students focus their attention (Emmer, 1994), and strengthen norms already established and agreed (Sutton & Wheatley, 2003), principally if dealing with justified anger (Kimura, 2010). In this manner, students are directed to an understanding of the situation that moves them to behave in the adequate manner. With regard to suppression of negative emotions in this context, Kimura (2010) warns of the dangers of suppressing expressions of anger, ignoring the bad behavior of a student, given that this action generates passivity in student conduct. Nevertheless, the same author defends the use of laughter and jokes to animate class participation whenever there is a case of oversight or lack of attention on the part of the student.

3.1.6. Social Behavior

Student behavior is also a factor influenced by teachers' emotions (Morris et al., 2013). Those students who perceive their teachers for the most part as projecting positive emotions are less involved in offensive actions and avoid risk behavior (Sutton & Wheatley, 2003).

On the other hand, there are significant positive correlations between student disruption and the level of misbehavior, and teachers' use of aggressive techniques (Sutton & Wheatley, 2003), which involves negative emotions. Prosaically behaviors are also relevantly influenced by emotions demonstrated by teachers. Certain studies have revealed that teachers' caring foments student conduct manifested in helpfulness and cooperation toward others (Sutton & Wheatley, 2003), and in early years, those students whose teachers expressed a larger amount of negative emotions report fewer positive pro social behaviors (Morris et al., 2013).

3.2. Effects Produced by Discrete Emotions

Although the impact produced by discrete concrete emotions has not been shown in all of the works (since these works referred to positive emotions as compared to negative emotions); an important number of works show the results according to the different discrete emotions that produce a certain effect. We have found concrete results in nine discrete emotions (i.e., joy, anger, anxiety, caring, pride, love, frustration, pity, and sadness). In the following commentary, the results obtained for each of these discrete emotions will be presented, differentiating the positive and negative effects on the student. In order to maintain an orderly exposition, first will be presented the effects corresponding to positive emotions and then the corresponding negative emotions.

3.2.1. Effects on Students of Teacher's Positive Emotions

The results obtained for each of the discrete emotions considered as positive that were analyzed in the works (i.e., joy, caring, pride, love, and pity) may be seen in Table 1. Pity has been considered as a positive emotion because, although it is closely linked to sadness, in the context in which we use it in the current work, it is born of appreciation and sympathy for the person whom it is directed.

Table 1: Positive and negative effects on students of teachers' positive emotions.

Emotion	Positive effect	Negative effect
Joy	Brings joy (Sutton & Wheatley, 2003)	
	Influences goal orientation (Sutton & Wheatley, 2003)	
	Increases motivation in learning (Frenzel et al., 2011; Kimura, 2010; Kunter et al., 2008)	
	Encourages participation in class (Kimura, 2010)	
	Improve creative developments (Kimura, 2010)	
	Attracts attention (Kimura, 2010)	
	Increases control of the class and discipline (Kunter et al., 2008, Turner et al., 2002)	
	Stimulates task avoidance behaviors (Sutton & Wheatley, 2003)	
	Offers more support (Frenzel et al., 2011; Kunter et al., 2008)	
	Provides quality education (Frenzel et al., 2011; Kunter et al., 2008; Sutton & Wheatley, 2003)	
Provides opportunities for autonomous learning (Frenzel et al., 2011)		
Produces more positive evaluations from the teacher (Brackett et al., 2013)		
Caring	Increases motivation in learning (Skinner & Belmont, 1993; Sutton & Wheatley, 2003)	
	Decreases involvement in delinquency (Sutton & Wheatley, 2003)	
	Encourages helpful and cooperation (Sutton & Wheatley, 2003)	
	Provides quality education (Sutton & Wheatley, 2003; Trigwell, 2012)	
	Stimulates to follow classroom rules (Sutton & Wheatley, 2003)	
Promotes relations with teachers (Sutton & Wheatley, 2003)		
Pride	Provides quality education (Sutton & Wheatley, 2003; Trigwell, 2012)	
Love	Provides quality education (Sutton & Wheatley, 2003)	
Pity		Does not motivate to overcome (Sutton & Wheatley, 2003)

As the reader will observe, in general, we can affirm that teachers' positive emotions produce positive effects on their students. In the literature reviewed, there has only been noted one negative effect produced by teachers' pity or sympathy (Sutton & Wheatley, 2003), consistent with the lack of motivation in order to overcome errors committed. The emotion that has the largest number of positive effects has been joy which is also the most documented emotion, for which we have the greatest number of references. It is worthy of mention that the high quality of teaching received by a student is one of the most repeated effects, finding itself present for each of the analyzed positive emotions with positive effect (i.e., joy, caring, pride, and love).

3.2.2. Effects on Students of Teacher's Negative Emotions

The corresponding results to the effects produced by teachers' negative emotions are presented in Table 2. In this table, are selected four negative emotions (i.e., anger, anxiety, frustration, and sadness), identified in the review of the selected works. We observe in first place that, although there is a greater tendency to negative effects over the students, it is also possible to observe some positive effects over the same students. It is to be noted, however, that the positive effects produced by the negative emotions correspond to the emotion of anger.

Table 2: Positive and negative effects on students of teachers' negative emotions.

Emotion	Positive effect	Negative effect
Anger	Promotes communication and response (Sutton & Wheatley, 2003; Kimura, 2010)	Causes negative emotions (Becker et al., 2014; Sutton & Wheatley, 2003)
	Stimulates to follow classroom rules (Sutton & Wheatley, 2003)	Increases disruption and level of misbehavior (Sutton & Wheatley, 2003)
	Motivates to overcome (Sutton & Wheatley, 2003)	May interfere with emotional development (Morris et al., 2013)
		Provides lower quality education (Frenzel et al., 2011)
Anxiety		Offers less support (Frenzel et al., 2011)
		May cause anxiety (Becker et al., 2014)
		Provides a lower academic performance (Beilock et al., 2010)
		Results in lower quality education (Eysenck & Calvo, 1992; Frenzel et al., 2011; Trigwell, 2012; Saunders, 2013)
Frustration		Alters girls' gender ability beliefs (Beilock et al., 2010)
		Reduces engagement in learning (Trigwell, 2012)
Sadness		Provides lower quality education (Trigwell, 2012)
		Produces more negative evaluations from the teacher (Brackett et al., 2013)

We would affirm, thus, that teachers' anger has both positive and negative effects on students, while the rest of the negative emotions present basically a negative influence. A more detailed analysis of the positive effects found in this group of emotions, reveals that they are all related to discipline and the return to order after a mistake or error, whether it be disciplinary or with reference to the subject matter. Anger in these cases would be in favor of an adequate student response. In the case of a lack of discipline, anger would cause a student reaction (Kimura, 2010) encouraging him to comply with the rules (Sutton & Wheatley, 2003). In the case of error in the accomplishment of an academic task, anger would be responsible to motivate the student to accomplish the task, transmitting the confidence of the teacher in the student capabilities (Sutton & Wheatley, 2003).

Once again we encounter the quality of instruction received as a repeated effect on several emotions, especially anger, anxiety and frustration. In this case, as would be anticipated, we are dealing with a negative effect, delivering to the student a lower quality of instruction.

4. Discussion and Conclusions

In spite of the limited number of works found in this present study, we have been able to bring together an important number of the effects of teacher emotions on students. These effects are not only numerous, but rather additionally of great relevance and influence in the different student areas, among which we have differentiated student emotions and perceptions, emotional competence, motivation, learning and academic performance, classroom discipline, and social behavior. As a general premise, we could affirm that positive emotions have positive effects and negative emotions have negative effects upon students. Nevertheless, it appears that this premise has at least one important exception, since in situations where the student must be corrected, negative emotions (such as anger) can cause positive effects, and positive emotions (like pity or sympathy) can cause negative effects.

In light of this disconnect, we ask ourselves if the teacher should avoid certain emotions, attempting to express others. The results do not permit us to affirm that we should promote positive emotions to the exclusion of negative ones, or at least not in all situations. It seems rather that the teacher needs to have a special ability that permits him/her to know in which situation each emotion should be used. Prior studies (e.g., Sutton, Mudrey-Camino & Knight, 2009), show how a high percentage of teachers deliberately attempt to intensify positive emotions and reduce negative emotions in an effort to achieve the most effective teaching. Nevertheless, as Kimura (2010) suggests, perhaps the most appropriate strategy is not to hide negative emotions, but rather present them openly in a manner adequate and consistent with the situation. Emotional regulation refers to the ability to consciously control emotions with the objective of fomenting emotional and intellectual growth (Mayer & Salovey, 1997). This does not deal with the mere avoidance of some emotions and the emergence of others in their place, but rather the exercise of control over them with a predefined objective. Given the complexity of the task, the abilities responsible for emotional regulation are combined with other different abilities in a tapestry effect that Mayer and Salovey (1997) tried to organize in their model of emotional intelligence.

Emotional intelligence, understood as a combination of abilities related to the emotional processing of information has been defined as the combination of abilities that permit us to identify and express emotions, generate emotions that facilitate our thinking, understand our emotions and our emotional conscience, and manage our emotions, not only in ourselves but in others (Mayer & Salovey, 1997). Relative scientific literature has manifest that high levels of emotional intelligence in teachers have positive repercussions in different areas of their person and their educational work (e.g., Palomera, Fernández-Berrocal, & Brackett, 2008). In like manner, students who scored the highest on emotional intelligence measures seem to have a higher level of academic performance, psychological adjustment, social relations, and social behavior, among others (e.g., Extremera & Fernández-Berrocal, 2013). From this point, we ask if perhaps high emotional intelligence levels in teachers might in some way benefit their students.

Since it seems that teacher emotions have an important effect over students, an identification, expression, application, understanding, and control of these emotions, should have the potential to produce important benefits. If just as these observed results seem to indicate, teachers' emotional competence, influence different areas of student development, then emotional competence should be included in teacher preparation programs as has been suggested previously by several authors (e.g., Palomera, Fernández-Berrocal, & Brackett, 2008) hoping that in this way not only will burnout be reduced, but that job satisfaction will increase, that teachers will become more effective in the classroom (Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010), and that important and beneficial effects will be produced on the students.

5. Limitations and Future Research

With respect to the limitations of this research, we would first like to point out the difficulties associated with the search for works that fulfilled the conditions required for consideration. Due to the difficulty of a systematic search by keywords and the prevision of the lack of works on the theme, it was decided to complete the selection using a non-systematic search, which certainly contributed to an important quantity of works, but does not assure a complete selection of the same. In second place, although the percentage is very small, works with data obtained using qualitative methods have been included in this study, among which are some interviews and case studies. In spite of the scarcity of such studies, and considering these as valid information, we believe that this fact must be taken into account.

Among the future avenues of investigation that may open as a result of this work there can be found the implementation of new and more complete research that confirm the data herein presented, especially for those emotions for which there have been few or little results. This study could be expanded to include burnout, granted the tremendous effect this has over teacher emotions (Chan, 2009) and its influence on students.

Finally, our work encourages the scientific community to continue this line of investigation over the influences that higher levels of emotional intelligence in teachers may assume for the student population and their different areas related to education and personal development.

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