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Flourishing of Positive Psychology in Education: 'Emotional Turn' and Measurement Issues

Elmakki Amiri[1] ✉ **and Abderrahim El karfa[2]**

[12]*University Sidi Mohamed Ben Abdellah, Fez, Morocco*

Corresponding Author: Elmakki Amiri, **E-mail**: amiry.elmakki@gmail.com

| **ABSTRACT**

Positive psychology (PP) has attracted considerable attention in the education context. Yet, positive emotions have largely been left in the shadows. Given the scarcity of research in the last few years on this front, there is now a greatly expanding body of literature that has offered some useful insight. Interestingly, the advent and introduction of PP, with its underlying theories, the control value theory (CVT) (Pekrun, 2006; Pekrun et al., 2007) and the broaden-and-build theory of emotions (Fredrickson, 2001, 2003, 2006) to applied linguistics sparked the interest of researchers to study positive emotions (e.g., enjoyment, hope, happiness...etc.) in greater detail. As such, it marked a shift in psychology away from an emphasis just on fixing the worst aspects of life and toward creating the best aspects of existence in an attempt to produce a novel understanding of the issue. The present paper is a critical review of a great body of literature on the flourishing of PP in education. The paper also highlights the innovative work inspired by PP in respect of the various aspects of the study at hand. In addition, a brief history of the PP movement is briefly discussed. The chapter also sheds some light on the measurement of emotions as being one of the vexing issues in the science of emotions since instruments, on this front, have been largely lacking.

1. Introduction

The topic of emotions has been attracting increasing interest in the past decade, as students and teachers in educational settings experience a wide range of positive and negative emotions. A wealth of studies relating to the role of emotions has appeared in many prominent journals of psychology since Seligman and Csikszentmihalyi (2000) published the groundbreaking special issue of American Psychologist on PP. Interestingly, PP has attracted considerable attention in the education context. Yet, positive emotions have largely been left in the shadows. Given the scarcity of research in the last few years on this front, there is now a greatly expanding body of literature that has offered some useful insight. Interestingly, the advent and introduction of PP, With its underlying theories, the CVT (Pekrun, 2006; Pekrun et al., 2007) and the broaden-and-build theory of emotions (Fredrickson, 2001, 2003, 2006) to applied linguistics sparked the interest of researchers to study positive emotions (e.g., enjoyment, hope, happiness...etc.) in greater detail. As such, it marked a shift in psychology away from an emphasis just on fixing the worst aspects of life and toward creating the best aspects of existence in an attempt to produce a novel understanding of the issue.

Describing the flourishing of PP in the field of education has not been an easy feat. A couple of controversial issues loom as challenges, including the selection of the topics, themes, and contexts to be discussed. Having said that, it is important to argue that the intriguing contemporary discussion raised by the rapid rise of PP helped determine the scope of the bulk of the current paper. Put it differently, we shall look in greater detail at how PP revolutionized the field of education by focusing on the emergence of a positive education field and the CVT approach to research academic emotions. Moreover, emotions, like many other psychological concepts, are complex to understand and notoriously challenging to grasp scientifically. Given this, a section has been devoted to discussing different issues that loom as challenges to measuring emotions, more specifically, self-reports measures.

2. Positive psychology: definition, history and scope

Examining the most prominent and recent research in educational psychology indicates unequivocally how the advent of PP has changed the interest and focus of researchers in the field toward the positive aspects of life by looking into the most underappreciated emotions (positive emotions) (e.g. Dewaele et al., 2019). As such, since emotions were notoriously challenging to explain from a scientific standpoint, there has been an increase in concern and interest in establishing methodological tools and methods to examine emotions in teaching and learning environments. To this point, it is vital to clarify the significance of PP in education.

2.1 What is positive psychology?

The literature reveals a laundry list of definitions of the term. It has been defined in a variety of ways, and each version typically reflects the author's intentions or the context in which it was used. They generally center on the individuals' qualities and positive traits. PP is defined as the scientific study of the essential features, circumstances, and activities that make life worth living (Seligman & Csikszentmihalyi, 2000), constitutes a meaningful life (Batthyany & Russo-Netzer, 2014), and flourishing individuals (Gable & Haidt, 2005). Thus, with a focus on understanding, growing, and enhancing human strengths rather than the prevalent preoccupation with human weakness, positive psychology seeks to promote the flourishing of individuals, groups, and societies.

Interestingly, as the name suggests, PP emphasizes the study of positive human experiences rather than human flaws to improve people's lives and increase productivity. However, PP does not imply that everything in psychology is bad. Instead, it only means that there is a substantial corpus of study done on the opposing side in the PP movement and that many topics have opposing views. Researchers who focus on positive emotions, for instance, acknowledge the existence and significant impacts of negative emotions (Gable & Haidt, 2005). Moreover, research on emotions, for a long time, relied heavily on the study of certain emotions, such as anxiety, which is the emotion most researched in learning a foreign language (MacIntyre & Gregersen, 2012a; Dewaele & Li, 2020). Interestingly, the American social psychologist Barbara Fredrickson pioneered the "broaden and build" theory of positive emotion, which held that positive, pleasant emotions, such as joy, love, and enjoyment, were unintentionally preferred over negative, unpleasant emotions (Fredrickson's, 1998, 2001, 2003, 2006). As a result, several educational psychologists urged for a sophisticated understanding of conventionally long-ignored feelings like pride, happiness, and enjoyment of learning a foreign language (Dewaele & Li 2018; Miyahara 2019). Numerous initiatives have been made to comprehend the nature and implications of positive emotions in the field. As a result, PP has gained enormous popularity and sparked a substantial shift in interest toward developing positive traits and strengths rather than merely focusing on deficiencies, particularly in understanding and evaluating people's emotions.

2.2 From general psychology to positive psychology

Numerous cognitive factors that influence students' academic learning and proficiency have attracted the attention of researchers in the field of second and foreign language education. To identify the traits and characteristics of successful language learners, research on individual differences has attempted to elucidate the psychological aspects of second language learners. It was believed that other external factors, rather than learners' psychological profiles, were more important in determining the standard of their performance in a particular L2 class. One of those crucial factors is the sociopolitical (Dewaele, 2013) and socio-cultural (Amiri & Elkarfa, 2021) contexts. Such interaction between internal and external factors has been a source of interest and motivation for scholars to address critical issues in the field, including emotions.

It should come as no surprise that cognitive research has long dominated applied linguistics research, leaving the subject of emotion in the shadows. The study of positive and negative emotions in teaching and learning processes has drawn the attention of scholars working on second and foreign languages only since the turn of the third millennium. As such, with the exception of anxiety and its various affective roles in the classroom context, which has been thoroughly explored, such a topic, however, has received little attention and has not been fully researched (Dewaele & Li, 2020). In this respect, Swain (2013) noted that "emotions are the elephants in the room – poorly studied, poorly understood, seen as inferior to rational thought" (p. 195).

As mentioned earlier in this section, anxiety, including state and trait anxiety, was extensively studied by scholars in second and foreign language learning (see Goetz et al., 2007; MacIntyre & Gregersen, 2012a; Dewaele & MacIntyre, 2014; MacIntyre 2017; Dewaele & Li 2018; Boudreau et al., 2018; Dewaele & Li, 2020). As such, there have been over 1000 publications on test anxiety alone worldwide since 1952 (Stober & Pekrun, 2004). To this end, this intensive focus on anxiety dealt with half of the issue, with the other half not being as widely investigated. Seligman & Csikszentmihalyi (2000) stressed that much of psychology focuses on unpleasant and negative emotions such as stress and depression. It has generally ignored positive and ideal functioning in favor of reducing maladaptive emotions and actions. After World War II, psychology evolved into a science predominantly focused on healing. It focused on mending damage by simulating human disease using a disease model. This nearly sole focus on disease ignored the notion of a comfortable individual and a flourishing community, as well as the potential that gaining strength is the most effective treatment strategy. (Seligman, 2002). Crucially, the advent and introduction of PP to applied linguistics sparked the interest of researchers to study positive emotions in greater detail and marked a shift in psychology away from an emphasis just

on fixing the worst aspects of life and toward creating the best aspects of existence, in an attempt to produce a novel understanding of the issue. A number of positive emotions have been widely studied right after, including enjoyment, which is believed to be the positive counterpart of anxiety (Dewaele & MacIntyre, 2014). Seligman (2013) asserted he used to believe that the aim of PP was increasing life satisfaction as the focus is happiness, but now such belief has been changed, claiming that the main goal of PP is boosting flourishing and the focus is well-being.

It is worth noting that many psychologists contributed to the flourishing of PP in different domains. The American distinguished professor of psychology, Barbara Lee Fredrickson, was among the first scholars whose work revolutionized the field of psychology. At the University of North Carolina at Chapel Hill, she has served as the director of the Positive Emotions and Psychophysiology Lab (PEPLab). She developed the *"Broaden-and-Build" Theory of Positive Emotions* to describe why positive emotions are essential for survival. She claimed that positive, pleasant emotions, such as interest, joy, love, and contentment, were unintentionally preferred over negative, unpleasant emotions (Fredrickson, 1998, 2001, 2003, 2006). The theory promotes the notion that a person's psychological and behavioral repertoire can be expanded by boosting positive emotions while reducing negative ones.

3. Flourishing of positive psychology in educational settings, strengths and weaknesses

Since the groundbreaking special issue of *American Psychologist* on PP was published by Seligman and Csikszentmihalyi (2000), PP has rapidly increased in a variety of educational contexts, and Second Language Acquisition (SLA) is no exception. Peterson (2006) asserted that PP has a very short history and a very long past. Such belief could be applied to the SLA field. Through the work of various educational psychologists (Egbert, 2003, 2004; Lazarus, 2003; Tardy & Snyder, 2004; Dörnyei, 2007; Schutz & Pekrun, 2007), the scientific community has been investigating PP in applied language research since the beginning of the third millennium. However, the PP movement did not begin until MacIntyre and Gregersen's seminal work in 2012a, and it has only really gained traction among the general public in foreign language settings after 2016 (Dewaele et al., 2019).

3.1 Opportunities:

This new movement in psychology has shifted its emphasis to a full grasp of what is right and wrong about individuals, as was previously mentioned. PP has gained traction in a variety of fields thanks to groundbreaking research on positive and negative emotions conducted by positive psychologists. The research into the study of positive emotions in educational settings was really expanded as a result of this. In light of this, academics are now interested in exploring how emotions affect places where people are learning foreign languages (MacIntyre et al., 2016). Given the fact that teaching is emotional (Schutz, 2014; Lee et al., 2016), it is important for all stakeholders, especially instructors, to appropriately handle the situations and events that arise in the classroom.

It goes without saying that because of the developments at many levels, the necessity for PP has taken center stage. Enhancing students' well-being and making the most of their life has become essential during the COVID-19 pandemic because of the vast spectrum of negative emotions that they encountered. Importantly, PP has been rapidly gaining ground in educational settings that promote FLA. A "positive renaissance" (Dewaele & Li 2020) was sparked by MacIntyre & Gregersen's (2012b) publication, which indicated that PP had a significant impact on SLA and encouraged academics to focus on the hitherto understudied emotions. It is noteworthy that the most significant findings in the realm of education focused on flaws. However, recognizing the advantages helps decrease the drawbacks brought on by unfavorable effects on students (Gable & Haidt, 2005). The goal of PP is to improve everyone's health and quality of life. This is accomplished through making teachers' lives better and providing advice on how to control their emotions. In order to foster an environment where students feel emotionally at ease (such as excited and enthusiastic), it is crucial that educational curricula be based on positive feelings (Schutz, 2014).

3.2 Criticism:

Given that a great body of research has focused on people's strengths and wellbeing to make life fulfilling and productive, psychologists paid close attention to positive emotions. However, detractors emphasized that there are drawbacks and critiques to the flowering of PP in FLA contexts. Gable and Haidt (2005) claimed that there are several restrictions. They consider the name itself to be the first area of criticism. In other words, if we think that PP exists, then negative psychology, which aided researchers in exploring negative issues, must also exist. In a similar vein, Kashdan & Steger (2011) emphasized that since positive psychology researchers typically focus on pleasant emotions in order to help people's lives flourish, then why would not researchers who study people's frailty also try to enhance people's quality of life? If this turns out to be the case, the labeling is meaningless.

Moreover, considering merely the positive facets of life simply results in an overabundance of positive feelings. This clearly leads individuals to forget about unpleasant things and focus only on pleasant ones (Pollyannaism or positivity bias). They thus fail to comprehend the negative aspects of life. Furthermore, despite the efforts of various psychologists to provide the foundations to discern the positive and negative aspects of life, separating what is terrible from what is good in psychology is, in fact, a riddle; it is complex and multidimensional. An interesting study on this front was conducted by Norem (2001), who investigated optimism and pessimism and came to the conclusion that optimism is associated with positive outcomes while pessimism is linked to bad outcomes as one of the greatest examples.

Succinctly stated, despite the aforementioned drawbacks and restrictions, it is crucial to argue that the implementation of PP in schools can assist stakeholders and direct policymakers to take the right actions, including cultivating positive emotions to win students' hearts and minds as well as protect them from negative emotions. As a result, PP is more necessary than ever because 50 percent of teenage disorders are mental in nature (Allen & McKenzie, 2015). In order to provide a conducive learning environment, several institutions emphasized the necessity to create programs and curricula based on PP, bringing theory and practice (Kern & Wehmeyer, 2021).

3.3 Positive Education
Positive education has emerged thanks to the PP movement's explosive growth in educational settings (White, 2016). Interestingly, multiple terminology are used to define positive education. In general, it is thought of as an educational strategy that tends to foster students' academic accomplishment abilities, happiness, strengths, virtues, and well-being (Seligman et al. 2009) to boost learning and academic success. To this point, positive education is the implementation of PP in schools (Green et al., 2011). Given this, positive education seeks to connect the PP principles to all effective methods of teaching and learning to promote thriving in educational situations (Norrish et al., 2013).

In the discussion of whether PP can be applied in schools, it is of paramount importance to consider whether positive emotions can be teachable and measurable and whether students who experience a wide range of positive emotions do better academically. In this respect, Seligman et al. (2009) polled hundreds of parents on these issues by asking them two questions regarding what their children should learn in school and what they should learn at home. According to parents, happiness and life satisfaction are among the things they truly desire. In contrast, schools provide knowledge of math, reading, discipline, and other success-related abilities.

Seligman and his colleagues argued for the necessity of these distinct types of abilities. Additionally, they emphasized how surprisingly widespread and strong the unpleasant emotions associated with disorders, such as despair and anxiety, are. As a result, they offered two key justifications for why PP (such as happiness and well-being) ought to be taught in schools. The first has to do with improving students' academic performance, which is closely related to improvements in wellbeing. In addition, a good mood has a significant impact on decision-making and problem-solving abilities (Isen, 2001), as well as intuitive coherence assessments (Bolte et al., 2003). Conversely, it has been discovered that low mood has a negative impact on students' learning processes, control mechanisms (Wortha et al., 2019), and team performance (Jordan et al., 2006).

Following this line of thought, Seligman and his colleagues at Geelong Grammar School (GGS) conducted promising research. The school's approach to applying PP was based on Seligman's PERMA model of wellbeing and happiness (Seligman, 2011, 2018). The model has been seen as a whole-school approach that acts as a road map for PP implementation and integration in classrooms with the goal of enhancing pleasant mental health in education contexts.

3.4 Control value theory of academic emotions
The PP trend in education has contributed to the revolution in the theories and approaches used to investigate emotions. A prominent theoretical framework called the Control value theory of academic emotions was developed by Reinhard Pekrun, a German psychologist, for studying and exploring emotions in academic contexts. The CVT, often known as the academic emotion theory of achievement emotions, was pioneered by Pekrun (2006). One of the most well-known modern theories of emotions, the CVT, aims to better understand emotions in education. There are three key axes in this multidimensional paradigm of academic emotions: positive/negative, activating/deactivating, and activity oriented/outcome oriented. It differs from other multidimensional theories in terms of focus as it places a strong emphasis on education-related learning. Each work on achievement emotions includes numerous references to Pekrun and his colleagues, but outside of education research; they are ignored (Eliot & Hirumi, 2019). The theory's primary objective was to offer such an integrative framework to fully explain the causes and effects of achievement emotions (Pekrun, 2006; Pekrun et al., 2007). Additionally, according to this theory, achievement emotions are those that are closely associated with achievement actions and consequences. Examples of these emotions include enjoyment, hope, and pride (positive emotions), anxiety, boredom, and hopelessness (negative emotions).

Figure 1: The three-dimensional taxonomy of achievement emotions based on CVT (Pekrun & Stephens, 2010).

Object Focus	Positive[a]		Negative[b]	
	Activating	**Deactivating**	**Activating**	**Deactivating**
Activity	Enjoyment	Relaxation	Anger Frustration	Boredom
Outcome/ Prospective	Hope Joy[c]	Relief[c]	Anxiety	Hopelessness
Outcome/ Retrospective	Joy Pride Gratitude	Contentment Relief	Shame Anger	Sadness Disappointment

[a]Positive = pleasant emotion.
[b]Negative = unpleasant emotion.
[c]Anticipatory joy/relief.

According to the theory, achievement emotions, like anxiety before an exam, are fleeting events that happen at a specific time. Within CVT, social and achievement emotions are distinct but sometimes overlap, like in instances where a student shows empathy at work or cares for a classmate (Pekrun et al., 2007). There is a lot of evidence in the literature that these feelings of achievement are regularly felt in educational settings (Pekrun & Stephens, 2010a; Titz, 2001; Pekrun et al., 2002). The CVT categorized these emotions into groups based on their valence (positive vs. negative), degree of activation (activating vs. deactivating), and action focus/outcome focus (see Figure 1 above). Positive achievement emotions, like as hope and pride, are therefore considered a technique to increase students' motivation within CVT, but negative achievement emotions, such as anxiety and shame, might negatively impact the teaching-learning process (Pekrun et al. 2007; Pekrun & Stephens, 2010a).

It's significant that research psychologists like Pekrun (2006), Pekrun et al. (2007), Davidson et al. (2003), and Pekrun & Stephens (2010) have highlighted a number of appraisal antecedents related to individual factors of control and value that cause emotions, such as neuro-hormonal processes, cognitive appraisals, situational perceptions, genetic dispositions, and so on and so forth. Additionally, CVT demonstrates the significant impacts of success emotions and results on students' academic performance, as well as their motivation and cognitive capabilities. The antecedents, emotions, and anticipated effects stated above are thought to have a strong relationship with time (Pekrun et al., 2007). In a similar vein, researchers investigated proximate factors and reasons that act as precursors of academic emotions. For instance, Amiri et al. (2022) investigated the different antecedents of boredom and different coping strategies that students use to cope with it. The study yielded that the proximate factors that act as precursors of boredom are related to the nature of tasks and teacher-dislike.

Regarding the universality of emotions, CVT asserts that all people experience emotions in similar ways. However, the strength and duration of emotions may vary between cultures, genders, and environments. For instance, a study on perceived classroom surroundings and emotions in mathematics was undertaken by Frenzel and colleagues in 2007. They came to the conclusion that males and girls show emotions like enjoyment and anxiety differently in mathematics. In other words, compared to men, girls exhibit less happiness and more shame and anxiety. Additionally, gender emotions vary in terms of average intensity across domains (e.g. science, mathematics and languages).

4. Measurement issues of emotions
In addition to the scarcity of theories of emotions in a wide range of disciplines, the study of emotions has long been seen as unscientific. Scientific evidence asserts that measuring emotional state is one of the vexing issues in the science of emotions (Mauss & Robinson, 2009). The assessing students' academic emotions instruments, including scales, have been largely lacking, with the exception of test anxiety scales. Importantly, this debate about measurement includes both dimensional and discrete emotions, in the sense that dimensional viewpoints assert that underlying elements like valence, arousal, and motivational state organize emotional states. Contrarily, viewpoints on discrete emotions contend that every emotion, including anger, sadness, and happiness, has distinct sensory, physiological, and behavioral correlates. To this end, a number of prominent theoretically grounded measures have been developed and validated by scholars and experts in the field.

4.1 Self-Report Measures

It should come as no surprise that self-reports of emotions are one of the prominent measures of emotions. These feelings about emotional events can be expressed verbally and in writing on rating scales, as well as in surveys and interviews with open-ended questions, self-evaluations, impressions of others, and responses to projective instruments. Too often, the reliability of self-reported emotional states is viewed as an all-or nothing issue (Mauss & Robinson, 2009), given the fact that such reliability is controversial in the sense that it is determined by the type and time of the self-reports (Robinson & Sedikides, 2009). To substantiate this, reporting current emotional states seems to be more valid than self-reports made later in time and space (Robinson & Clore, 2002). In this regard, Barrett et al. (1998) conducted interesting research on gender trait emotions. They asked women and men to report their emotions and reactions towards daily events. The study yielded that both genders reported experiencing different emotions, while daily sex differences were relatively minimal and inconsistent. This suggests that self-reports could be biased when they are not made right away in an event. In other words, self-reports of emotion are probably more reliable when they are related to the emotions that are currently being experienced.

4.2 Positive Affect Negative Affect Schedule

Positive Affect Negative Affect Schedule (PANAS) (Watson, Clark & Tellegen, 1988) has been the most championed and commonly used tool to measure positive and negative state and trait emotions. It was cited more than 1400 times in January 2002 (Huelsman et al., 2003) and 2800 times in 2006 (Dasborough et al., 2008), according to the Social Sciences Citation Index (SSCI). As such, ten positive and ten negative adjectives are included in the scale, which respondents score on a Likert scale from "not at all" to "extremely". It is worth mentioning that this powerful scale is not without limitations. Some scholars, including Russell and Carroll (1999), highlighted some concerns with the model. The crucial one has to do with the spectrum of negative and positive affect that Watson and his colleagues suggest. They believed that it was not entirely represented by the scales. In other words, PANAS deals only with high activation of positive and negative emotions and not with low activation. Another concern is related to the adjectives that make up the scales. That is, semantic opposites are not included in the PANAS adjective sets.

4.3 The Achievement Emotions Questionnaire

A multidimensional instrument called the Achievement Emotions Questionnaire (AEQ) was developed by Pekrun et al. (2005) to assess students' achievement emotions based on the CVT of achievement emotions. It is a 24-point scale divided into three primary sections to evaluate eight achievement-associated emotions related to learning, tests, and the classroom. Such emotions include enjoyment, pride, hope, anxiety, anger, shame, boredom, and hopelessness. The current version of AEQ was released in 2011 by Pekrun and his colleagues, who also introduced the original version in 2002. Some professionals in the field translated the scales from their original German language. Additionally, Pekrun et al. (2005, 2011) emphasized that researchers can utilize any combination of the three AEQ sections to study emotions in achievement situations. The measure's items are used by students and/or teachers to express their emotions and assess their encounters with academic emotions on a five-point Likert scale that ranges from "Strongly agree" to "Strongly disagree". As such, AEQ has been modified and validated to assess teachers' emotional intelligence as well as students' emotional intelligence in academic settings. The most significant of these studies (e.g., Peixoto et al., 2015) supported the internal validity and reliability of the AEQ.

Importantly, like any other measurement instrument, AEQ has a number of limitations. One of these is the length. Put it differently, the AEQ takes between 40 and 50 minutes to complete when the three sections and all 232 items are administered at once. Because self-report evaluations of emotions under unpleasant circumstances frequently contain response bias (Pekrun et al., 2005). Therefore, considering that testing time is typically limited in empirical studies of educational research, it can be difficult or even impossible to administer the AEQ due to its length. Thus, measurements of participants' experiences may become problematic (Gogol et al., 2014).

4.4 Challenge to Self-report Measures

It is worth pointing out that self-reports are based on asking the respondents to report on their emotions and attitudes. They require participants to use certain mental and memory skills to fill out the form. Given this, though Self-reports assert that it is the participant who is aware of their current emotional state, the investigator could be doubtful whether these evaluations accurately represent individual variations in the phenomenological experience of emotions or their individual variations in the mental structures of emotion language (Huelsman et al., 2003).

Another prominent challenge to measuring emotions is cultural differences. Although the CVT advocated the universality of emotions, there are still a set of concerns linked to verbal differences caused by some factors, such as translation (Oishi et al., 2004). In addition, there may be cases in which the absence of words to express certain emotions can be found. One best example is the German word '*schadenfreude*', which means the pleasure derived from another person's misfortune. Although these emotions are experienced by people from all cultures, there is no equivalent word to express such emotion in the English language (Huelsman et al., 2003).

5. Conclusion

The present study aimed to provide a critical review of a great body of literature on the flourishing of PP in education. It also aimed to explore how PP revolutionized the field of education. In addition, the paper provides a thorough examination of an extensive range of literature concerning the growth of PP in the field of education. It also emphasizes the novel contributions influenced by PP, specifically related to the various aspects of the subject being studied. Additionally, a concise historical account of the PP movement is presented. Moreover, the chapter addresses a significant challenge in the field of emotional science, namely, the measurement of emotions, as there has been a notable scarcity of instruments designed to tackle this particular issue.

It is worth pointing out that giving a thorough and comprehensive overview of the flowering of PP is not an easy feat. To this point, the present paper focused intensively on the revolution of the field of education, as well as some methodological issues related to measuring emotions. This critical review contributes to our understanding of the revolution of PP in education. Thus, learning about its flourishing is of utmost significance. This will highlight the importance of research in this field and give future researchers access to resources they may use to further explore emotion related issues.

As mentioned earlier, explaining the growth of PP within the education field has proven to be a challenging task. Two contentious issues stand out as obstacles: determining which topics, themes, and contexts should be included in the discussion. Given this, future papers should cover other aching topics within the PP trend, including the joint predictive effects of teachers' and students' emotions in educational settings (Amiri et al., 2023)

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