Teachers’ Efficacy Beliefs: Narrative Systematic Review

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Abstract

Teachers’ beliefs represent an important element in teaching and classroom management. Teachers’ efficacy represent a base concept in beliefs domain researches, because of its correspondence with teachers’ availability to apply innovative methods, and to remain in educational system. This paper presents a systematic narrative review of articles, which approach teachers’ beliefs, indexed in PsycInfo, ERIC, ProQuest Dissertations and Theses, and Google Scholar. There were analysed 22 articles (N=3572) which used as a research instrument, different scales to measure teachers’ efficacy. This concept was introduced fourth decades ago, as a highly predictor of pupils’ motivation and learning being a measure of perceived capability. The results of this review reflected the decisive role of teachers’ beliefs about efficacy in pupil and subjects to teach approach, pupil control, on pupil motivation, achievement and learning, their beliefs acting as a filters, frames, or guides. Teachers’ beliefs exist as a complex system, and one of the main challenges is to change those beliefs, which are dysfunctional. The complexity on this concept generated three other concepts: self-efficacy, general efficacy, and collective efficacy.

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1. Introduction

Teachers of all times have wanted to be able to confront classroom problems while maintaining a dignified attitude in front of their students. What differs nowadays is the way they need to treat their students, which supposes much more tact from both administration and teachers since violence is no longer tolerated by democratic states. Discipline in the classroom is one of the challenges teachers need to face. Unfortunately, many teachers are not aware of the major differences between punishments and discipline (Rich, 1984). Guiding teachers from the perspective of controlling students directs their behaviour in front of their students and school administration; teachers of humanities are much more efficient in the classroom (Shahid & Thompson, 2001).

Maintaining discipline in the classroom has represented a sensitive issue for teachers, no matter the subject, the country or the time. Changes at macro-social level have brought about changes at micro-social level (school environment), since people need to be treated with dignity and respect. Children that copy the models seen in their families or in society are no longer submissive and obedient, but they want to be treated respectfully though their behaviour in the classroom is inappropriate. Changes in the discipline philosophy have been repelled by the teachers because of their beliefs regarding education and the implementation of changes. Information from external sources, when accepted, is “filtered” by beliefs, which influences the teachers’ thinking.

Disciplinary methods are chosen and applied depending on the way a teacher believes he/she should treat students: he/she decides when and how to apply them to get the desired results (Appleton & Stanwick, 1996). Thus, the teachers’ systems of beliefs regarding modern methods of teaching such as constructivism (Barkatsas & Malone, 2005) influence them and help them manage the current issues they need to face (Nespor, 1987). In many schools, both teachers and managers believe it is important to maintain an educational environment that favours learning. In their opinion, proper discipline is the main perquisite for good learning (Silberman, 1970).

1.1. Problem statement

Individuals’ beliefs in their efficacy influence the type of anticipative scenarios they build up and repeat. Thus, people with a high sense of personal efficacy visualise successful scenes, which provides them with information that will help them getting the expected results. In exchange, individuals that do not see themselves as efficient unfortunately visualise failure scenes insisting on aspects and things that will not go well (Bandura, 1993).

Beliefs about education differ a lot from teacher to teacher; according to Rideout & Windle (2010, p. 12) are “the foundation for one’s actions for what one intends to do and how, in relation to teaching and learning”. Teachers’ contribution is decisive not only from the perspective of the teaching-learning-evaluation process but also from that of school evaluation, since “schools can be no better than the teachers and administrators who work within them” (Guskey, 2002, p. 381). This supposes special attention for teachers’ preparation in faculties of education sciences or for departments of teaching staff training, for professional development through attendance of courses for the adaptation to the changing
students’ demand, which will help the former to mutually understand each other and themselves and get able to understand and relate with the other members of the school organisation.

During the pre-teaching period, students mould a very wide range of strong beliefs, mainly uncontrolled ones that will influence both the way they will approach the teaching-learning process and the knowledge they will acquire while experiencing events (Fives & Buehl, 2008).

At school, teachers’ efficacy largely depends on everybody’s ability to contribute to the common effort, to put together their abilities or to promote students’ achievements. As for the morality and image of the school, teachers’ feelings of satisfaction contribute to a positive environment of teaching-learning (Caprara et al., 2006).

Definitions of teachers’ beliefs include a few features such as (a) an explicit and implicit nature, (b) time stability, (c) situational or generalised nature, (d) knowledge-related, (e) have the shape of individual sentences or of wider systems (Fives & Buehl, 2012).

1.2. Research questions:

1. How do we approach and define the concept “teacher’s efficacy”?  
   To answer this research question, we have identified studies approaching, analysing and defining teacher’s efficacy (narrative reviews and empirical studies).

2. How does “control ideology” influence teachers’ efficacy?  
   To answer this research question, we have analysed the articles approaching the relationship between these two concepts or with other close concepts.

1.3. Purpose

The purpose of this systematic review is to examine and to clarify the concept of teacher efficacy beliefs and to explore the relationship between teachers’ beliefs of efficacy and their control ideology to better understand and explain it.

2. Methodology

This study relies on the systematic research of studies indexed in the following databases: PsycINFO, ERIC and Proquest Dissertation and Theses. We selected only studies in English, both experimental and empirical. For this research, we used the following search phrases: “teacher beliefs” OR “efficacy beliefs” OR “teacher efficacy beliefs” AND “control ideology”. We have found 135 titles and abstracts. To avoid missing articles dealing with teachers’ efficacy beliefs or control ideology, we also used Google Scholar that supplied other 17 records. After removing those abstracts irrelevant for this research, we considered eligible only 32 abstracts. We managed to find 22 full-text articles that represent the ground for our narrative systematic research. This search approach was carried out in August 2015.
3. Results

Teachers’ efficacy is a construct underlying research in teachers’ beliefs; it is a field of interest for researchers: they study, besides the relation with students’ achievements, teachers’ efficacy relation with (a) the teachers’ wish to implement innovation, (b) the teachers’ stress level, and (c) the teachers’ wish to keep being teachers (Tschannen-Moran et al., 1998). According to Woolfolk & Hoy (1990), “teacher’s efficacy” first appeared in Barfield & Burlingame (1974, p. 10, in Woolfolk & Hoy, 1990), who defined it as “a personality trait that enables one to deal effectively with the world.”

The concept “teacher’s efficacy” derives from two research directions different from the one regarding Rotter’s Locus of Control (1966) and Bandura’s socio-cognitive theory (1977).

3.1. Locus of Control and RAND Research

The first research direction, the Locus of Control, is a concept that refers to the degree in which an individual believes that the cause(s) of intended results are inside or outside it; this leads to two concepts – Inner Locus and Outer Locus (Rotter, 1966). The two locations of the Locus of Control reflect the degree in which a person believes certain events of life situations are caused by personal actions (Parkay et al., 1988).

Personal efficacy has been conceptualised in such terms as Locus of Control: this is why teachers’ efficacy is seen as the degree in which they believe that the factors they can control have a greater influence on learning situations and experiences than the beliefs according to which the environment influences results in a decisive manner (Tschannen-Moran et al., 1998).

Ever since 1979, Fenstermacher anticipated that research in beliefs would play an important part in teachers’ efficacy (Appleton & Stanwick, 1996). When teachers are confronted with issues in the classroom, they solve them based on their personal beliefs and experiences (Hoy, 1969, in Appleton & Stanwick, 1996).

The first evaluation in the field of teacher’s efficacy was in the study of the RAND Organisation (Armor et al., 1976) that added to a rather complex questionnaire two more questions:

1. “A teacher cannot do too much because most of the students’ motivation and achievements depend on their home environment.”

2. “If I try hard, I can overcome problems even with my most unmotivated and difficult students.” (Berman et al., 1977, p. 137, in Fives, 2003)

RAND researchers considered the two aspects (Locus of Control and its place in teachers’ learning experiences), introduced the two questions and got relevant data for the building-up of the concept “teacher’s efficacy” based on the analysis of the responses (Tschannen-Moran et al., 1998). The two items correlate strongly with a few aspects essential for the teaching-learning process: accepting change demands/suggestions and increase of the probability that teachers successfully implement innovative methods (Berman et al., 1977).

The interest in teachers’ efficacy was emphasised by research and scales evaluating this concept. Thus, Rose & Medway (1981) developed and advanced the Teacher Locus of Control Scale (TLC) to identify teachers’ responsibility in students’ success and failure when the two results are under or outside the teachers’ control. Another study was that of Guskey (1981), who developed the
Responsibility for Student Achievement Scale (RSA) with 30 items as a result of the combination of elements specific to Weiner’s theory of attribution (1979) and Fives’ locus of control (2003). The interest is fully justified because it influences students’ results, attitude and affective development (Shahid & Thompson, 2001).

Studies reflect, in general, teachers’ acceptance and good will of acting depending on the control level they believe they have on students’ achievements. Thus, they can counteract, through their actions, the negative influence of external sources such as family, media and TV violence (Fives, 2003).

3.2. Bandura’s Social Cognitive Theory

The second research direction derives from Bandura’s (1977) research on the concept of personal efficacy (Fives, 2003), considered as the main motivational force behind an individual’s actions. There are three forms of cognitive motivators supported by their related theories: causal attributions (supported by attribution theory), outcome expectancies (supported by expectancy-value theory) and cognized goals (supported by goal theory) (Bandura, 1998).

Individuals’ beliefs of personal efficacy influence cognitive processes in different ways. Thus, establishing personal goals can be done after self-evaluating one’s capacities and abilities necessary to reach them. Thus, the greater self-confidence is, the more challenging the goals and the more involved the individual will be (Bandura, 1991).

Bandura (1977, p. 193) defined the concept personal efficacy as “the conviction that one can successfully execute the behaviour required to produce the outcomes.” According to Bandura (1986, 1997), it has four sources: mastery experiences, physiological and emotional arousal, vicarious experience, and social persuasion. These sources play an important role in analysing the tasks related to teaching and in self-perception of these competencies (Tschannen-Moran, Woolfolk Hoy & Hoy, 1998).

Mastery experience is the most important source regarding efficacy, an individual’s perception that he/she can successfully accomplish a task thus generating beliefs about efficacy. The more difficult the task accomplished, the stronger the beliefs about efficacy (Bandura, 1986, 1997).

Physiological and emotional arousal is the second source in importance. Thus, depending on emotional and physiological stimulus level, self-perception regarding one’s teaching competencies also is influenced. Positive emotions of a teacher during teaching make him/her feel confident and successful (Bandura, 1996, in Tschannen-Moran, Woolfolk Hoy & Hoy, 1998). In exchange, if a teachers’ hand tremble, if he/she sweats or if he/she has “butterflies in the stomach”, these can be both positive and negative signs (Bandura, 1986, 1997).

Vicarious experiences are the source that values teachers while teaching. Here, we need to emphasise the role of observative teaching practice during the pre-teaching period. From reading literature to the talks from the teachers’ hall, everything is informative. Observing “models” of teachers during teaching activities makes debutants self-analyse to identify the competencies necessary to teach (both true ones and those that need to be developed). Comparison allows them to see what they should do in similar situations (Bandura, 1986).
Verbal persuasion is an important source of information regarding the nature of teaching, providing encouragements and strategies to overcome problem situations. Teachers are recommended to participate in courses of professional development to learn as much as possible about teaching. This source has no real impact on self-perception until it is successfully used in students’ learning improvement (Schunk, 1989).

Teachers’ efficacy is a “future-oriented motivational construct that reflects teachers’ competence beliefs for teaching tasks” (Fives, 2003, p. 2). It is worth mentioning that efficient teachers promote not only learning, but also personal development, responsibility and enthusiasm, behaviours that can be models of good practices or sources of success in one’s teaching career (Caprara et al., 2006).

Teachers’ beliefs of personal efficacy are not enough from the perspective of their expectations: they are completed by their beliefs regarding a group’s or a school’s efficacy and abilities of applying what is necessary to be successful as a student (Skaalvik & Skaalvik, 2010). This type of beliefs is called collective teacher efficacy (Bandura, 1997; Goddard, Hoy & Woolfolk Hoy, 2000, 2004).

There is a particular interest in teachers’ efficacy and in building a scale to measure efficacy, such as the eight scales in the study by Tschannen-Moran, Woolfolk Hoy & Hoy (1998). They studied the relationship between the efficacy of teachers with different variables, for instance, teacher’s behaviour in classroom, openness to new ideas and attitude towards teaching (Shahid & Thompson, 2001), but few attention was paid to the relationship between teachers’ efficacy and their control ideology.

Information about and definitions of the concept “teacher’s efficacy” answered the first research question: “How do we approach and define the concept ‘teacher’s efficacy’?”

3.3. Teacher’s Control Ideology

The interest in the field of control ideology started with Gilbert & Levinson’s (1957) study regarding control in psychiatric hospitals and penitentiaries. Thus, control ideology is a continuum between humanism and authoritarianism. This concept was later extended to the educational system due to certain common elements: the asymmetrical relationships between suppliers and beneficiaries of services as well as the impossibility of deciding on the joining of these organisations. Willower et al.’s (1967) study is the basis of research in pupil control ideology (Hoy, 2001; Mandache-Samfira, 2015). They advanced measuring pupils’ control ideology with the Pupil Control Ideology (PCI) scale.

Control is one of the main concerns for debutant teachers – both teachers’ control of students and school’s control of students (Woolfolk & Hoy, 1990). Perception of control is only one aspect of self-efficacy. Individuals can consider the idea that they can control the use of learning strategies, effort and persistence, and yet have a low sense of self-efficacy in learning because they believe it is not important to learn (Schunk & Pajares, 2002).

One of the eloquent studies on the relationship between teacher’s efficacy and pupils’ control ideology belongs to Woolfolk & Hoy (1990): it was carried out on a sample of 182 prospective teachers. They evaluated teachers’ efficacy using a version of the Teaching Efficacy Scale (Gibson & Dembo, 1984), the control ideology with a PCI & scale and motivational orientation with a Problems in School Inventory scale (Deci et al., 1981). Results pointed out the existence of a correlation between Teaching Efficacy and Pupil Control Ideology of $r = -.50, p<.01$. Thus, the more teachers believe in the
school’s power of overcoming and managing home or background issues, the more humanistic their orientation in pupil control. In exchange, Personal Efficacy did not correlate significantly with control ideology \( r = -.04 \). Bureaucratic orientation correlates with Personal efficacy, so that teachers who believe in their personal abilities of influencing pupils have a more bureaucratic vision. To get conclusive results in each study, authors recommend considering the definition of the concept of efficacy with maximum attention.

Zimmerman’s research (2000) focused on the evaluation of the relationship between self-efficacy and outcome expectancies, self-concept and locus of control. We present these results to focus on the relationship self-efficacy and control, despite the fact that it does not concern teachers. Rotter’s scale (1966) for the evaluation of the locus of control has not items specific to a certain field, but it refers to general beliefs related to inner or outer causality. The author cites Bandura’s study (1986) supporting the importance of general beliefs for control, arguing the differences between students from the perspective of the presence or absence of anxiety related to performances or knowledge in a certain field. For certain students, it is rather difficult to solve certain exercises within a limited time. Smith’s results (1989) support that the locus of control does not predict an improvement of students’ performances, nor does it reduce the level of anxiety in anxious students even if they attended a coping training programme, but the scales evaluating self-efficacy can predict the improvement of academic performances.

Guskey’s study (1987) approaches this topic but with different results depending on the perception of efficacy and certain results obtained by a single student or group of students. The research was carried out on a sample of 114 teachers, with a revised Responsibility for Student Achievement scale. This perception differs significantly only in the case of negative results of students. Thus, when performances are low, teachers claim personal responsibility and lower efficacy in the case of a single student than in the case of an entire group of students or class. Thus, poor results in a single student are attributed to situational factors external to the teacher’s control.

Likewise, Guskey & Pasaro’s study (1994) analysed results on a research carried out on a sample of 283 teachers and 59 teacher-students and identified two dimensions of efficacy that follow the line of internal-external control orientation and less along the line of general efficacy-personal efficacy.

Friedman & Kass’ research (2002) was carried out on a sample of 555 teachers applying the factorial analysis and getting a factor structure made up of self-efficacy in the classroom and in the school-organizational domain. The model presents the two social systems in which a teacher functions (class and organisation) and the persons with whom he/she needs to relate within the two systems (students, colleagues and managers).

Caprara et al. (2006) citing Cousins & Walker (1995) and Guskey (1988) according to which teachers with a high level of self-efficacy beliefs use proper approaches in class management and reduce authoritarian control.

Enochs, Scharmann & Riggs’s study (1995) on a sample of 75 teachers evaluated teachers’ sense of self-efficacy in relation to the teaching of sciences, and analysed the concept pupil control. They identified a significant correlation between teaching self-efficacy & pupil control ideology but no correlation with outcome expectancy.
Teachers’ sense of self-efficacy, separately for the two sub-scales, general and personal teaching efficacy, motivation and pupil control ideology, were evaluated on a sample of 55 religious schoolteachers. Results show that the higher the level of personal efficacy in teachers, the more humanistic in pupil control ideology they are. Likewise, the stronger the teachers’ beliefs in successful teaching, no matter how unmotivated and difficult the students (general teaching efficacy), the more humanistic the teacher is in teachers’ pupil control orientation and the more he/she will support autonomy in solving homework.

Chambers & Hardy (2005) carried out a study in which one of the research questions was whether the relationship between class control and teaching experience can predict teachers’ efficacy. Using the Attitudes and Beliefs on Classroom Control Inventory Scale to measure classroom control and the Teacher Efficacy Scale to measure personal and general teaching efficacy, the authors of the study concluded, after hierarchical multiple regression, that all the factors explain 19.4% of the variance in teacher efficacy. As unique factor, only instructional management predicts teacher efficacy (16.1% of the variance).

Henson’s study (2001) on a sample of 126 preservice teachers concluded that the more efficient the teacher students are, the least interventionist their attitude regarding class management is. The subjects filled in such questionnaires as the revised Teacher Efficacy Scale, the short form of the Attitudes and Beliefs on Classroom Control Inventory, and the Mean-End Teaching Task Analysis. The article also found out that an increase in self-efficacy could make failure idea less scaring and decrease the need for classroom control.

4. Conclusions

The results presented in this study point out the complexity of the concept “self-efficacy”, a concept that has generated numerous evaluation scales. What all studies recommend it the need for researchers to identify relevant definitions of the concept, to establish what they wish to measure in order to choose a scale properly. This is necessary if we wish to avoid erroneous results and conclusions.

The analysis of these studies shows that teacher self-efficacy relates with pupil control. Be it about pupil control ideology measured with the Pupil Control Ideology Scale, or about pupil locus of control measured with different scales, teachers expected to be more efficient in the classroom tend to be more humanistic in pupil control ideology and have a place of internal control. Likewise, the manner in which teachers with a high level of self-efficacy interact is much more personal and humanistic. It is important to emphasize that efficient teachers have negative feelings about pupil control in the classroom.

The limits of our study consist in the limited number of articles on the teacher self-efficacy & pupil control ideology relationship, which makes conclusions different in a large number of articles on this topic.

References


Gilbert, D.C., & Levinson, D.J. (1957). 'Custodialism'and 'humanism'in mental hospital structure and in staff ideology. The patient and the mental hospital, 20-35.


