

TEACHER SELF-EFFICACY OF FUTURE PHYSICAL EDUCATION TEACHERS IN CONTEXTS OF INCLUSION IN BASIC EDUCATION¹

AUTOEFICÁCIA DOCENTE DE FUTUROS PROFESSORES DE EDUCAÇÃO FÍSICA EM CONTEXTOS DE INCLUSÃO NO ENSINO BÁSICO

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ABSTRACT: This study investigated the level of teacher self-efficacy of future Physical Education teachers to the inclusion in Physical Education classes and its relation to the source of physiological and affective states, as well as the personal and contextual variables. The participants were 188 Physical Education undergraduate student teachers from two universities in the state of São Paulo, Brazil. The participants were between 18 and 38 years old ($M = 22.6$) and 51,6% were male. Data were collected through a questionnaire of characterization, self-efficacy scale for the inclusion of students with disability In Physical Education classes and, the sources of the teacher self-efficacy scale. The data, analyzed by means of descriptive statistics, revealed that the participants presented moderate levels of teacher self-efficacy for inclusion in Physical Education classes, being the inclusion of students with physical disability the dimension with the highest mean score. Physiological and affective states were related more powerfully to inclusion of students with intellectual disability than with physical and visual disability. Physiological and affective states were more strongly related to the inclusion of students with intellectual disabilities than to those with physical or visual disabilities. Given the relevance and regularity that inclusion has been present in Physical Education classes, it is essential that teacher education programs are able to offer opportunities for future teachers to acquire experiences that are fundamentally essential in building, strengthening and trusting their own competencies, in order to promote inclusion in regular school classes.

KEYWORDS: Special Education. Beliefs. School Inclusion. Teaching. Professional education.

RESUMO: Este estudo investigou o nível de autoeficácia docente de futuros professores para a inclusão em aulas de Educação Física e sua relação com a fonte dos estados fisiológicos e afetivos e variáveis pessoais e contextuais. Participaram do estudo 188 estudantes de Licenciatura em Educação Física de duas universidades do interior de São Paulo. Os participantes tinham idade entre 18 e 38 anos ($M = 22,6$ anos) e 51,6% eram do sexo masculino. Os instrumentos de coleta de dados foram compostos por um questionário de caracterização, escala de autoeficácia para a inclusão de alunos com deficiência em aulas de Educação Física e escala de fontes de autoeficácia docente. Os dados, analisados por meio de estatística descritiva, revelaram que os participantes apresentaram níveis moderados de autoeficácia docente para inclusão em aulas de Educação Física, sendo a dimensão que obteve maior escore médio a da inclusão de alunos com deficiência física. Estados fisiológicos e afetivos relacionaram-se com maior força à inclusão de alunos com deficiência intelectual que à daqueles com deficiência física ou visual. Dada a relevância e a regularidade com que a inclusão está presente nas aulas de Educação Física, é fundamental que a formação inicial possa oferecer oportunidades para que licenciandos adquiram experiências que lhes sejam essenciais na construção, no fortalecimento e na confiança nas próprias competências, para promover a inclusão nas aulas regulares na escola.

PALAVRAS-CHAVE: Educação Especial. Crenças. Inclusão escolar. Ensino. Formação profissional.

¹ <http://dx.doi.org/10.1590/s1413-65382519000200003>

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1 INTRODUCTION

Inclusion of people with disabilities is relevant in different spheres of society. Opportunities for everyone to enjoy their rights and duties in the exercise of citizenship is an essential condition to promote the development of a more just and equalitarian society.

Brazilian laws that defend the inclusion of people with disabilities in society argue that it is the duty of society, family and the State to offer learning opportunities that guarantee students access to the Basic Education system (Law no. 13,146, of July 6, 2015). According to data from the latest School Census, “57.8% of Brazilian schools have students with disabilities in regular classes. In 2008, this percentage was 31%” (Censo Escolar, 2017, p. 14). Although inclusion has occurred in schools, research has pointed to the superficiality and disarticulation with other curricular elements by which the theme of inclusion has been addressed in the initial educational courses (Avramidis, Bayliss, & Burden, 2000; Pletsch, 2009). An example of this is when Physical Education teachers declared the activation of different emotions linked to pedagogical practice in the school focused on inclusive education due to weaknesses in the initial education process, which did not allow them to develop competences for school inclusion (Falkenbach, Battisteli, Medeiros, & Apellaniz, 2007; Faria & Camargo, 2018).

The National Curricular Guidelines for Physical Education courses (Resolution no. 7, March 31, 2004) have oriented that the needs of people with disabilities, among various dimensions and populations, in order to provide physical activity, care for health and quality of life, should be contemplated. However, Physical Education teachers have identified the presence of barriers in promoting inclusion in school, since the structure and faculty are not always prepared for this (Mauerberg-decastro et al., 2013; Palla & Mauerberg-decastro, 2004).

The few practical experiences, derived from the curricular structures of the training courses, had a negative influence on the teachers’ perception of inclusive education (Campos, Ferreira, & Block, 2015; Gutierrez Filho, Monteiro, Silva, & Silva, 2012). Despite their positive attitude, the absence of these experiences has led future teachers to become disinterested in inclusive education in regular physical education classes at school (Mauerberg-decastro et al., 2013; Palla & Mauerberg-decastro, 2004). Thus, both the feeling of unpreparedness and the perception of barriers contribute to the activation of negative physiological and affective reactions, such as insecurity, fear, anguish and frustration, when faced with this context in the school (Avramidis et al., 2000; Campos et al., 2015; Faria & Camargo, 2018).

In theory, one of the factors that can influence inclusive education is how much the teacher believes in being able to do it. Much of the way he/she teaches is related to his/her beliefs, attitudes and knowledge of that domain. Personal beliefs affect the perception of knowledge on the subject and teaching skills (Loreman, Sharma, & Forlin, 2013). Pajares (1992) pointed out that the teacher’s belief about what he/she can or cannot accomplish is a predictor of his/her behavior, beyond the knowledge of the content itself.

Among the beliefs related to teaching work, self-efficacy stands out. This personal belief in ability is a predictor of a “future action insofar as his/her levels of perception affect what an individual does, how much persists in his/her activity against adversities, how much effort is undertaken and how he/she feels” (Azzi, Polydoro, & Maciel, 2005, p. 2). It is a domain-

specific belief, since the perception of capacity can vary from the evaluation of the tasks to be performed. In this sense, this work will address the belief of teacher self-efficacy, defined by Tschannen-Moran and Woolfolk Hoy (2001) as the personal judgment of the teacher about his/her abilities and skills to achieve expected results of involvement, engagement and learning of students, in diverse and challenging contexts.

The importance of the effect of this belief comes when it helps explain the change in attitudes, concepts and behaviors before a task. As noted by Conatser, Block and Lepore (2000), teachers' attitude towards inclusion of students with more severe disabilities in swimming classes has changed as a result of an increased perception of the belief in the ability to perform inclusive education. The authors emphasized the importance of self-efficacy beliefs, since they can persuade professionals during the development of teaching situations, also influencing the results that inclusion brings to the students.

Bandura (1997) postulated that beliefs of self-efficacy are formed by four sources of information: direct experience, vicarious experience, social persuasion, and the physiological and affective states perceived by individuals. Direct experience refers to the interpretations that individuals give to the results obtained because of the action itself. In general, successful results influence positively, whereas experiences of failure may decrease perception of belief. Vicarious experience occurs from the observation of social models when performing a similar task, either live or through videos. In such cases, the individual witnesses actions that are meaningful to him/her and can rely on it in order to create his/her sense of ability for similar accomplishments.

Social persuasion, usually verbally expressed, occurs through praise, guidance, and evaluation, which are intended to convince someone of the ability to perform a given task. Finally, the source of physiological and affective states relates to physical reactions (pain, tiredness, sweating, etc.), physiological (change in heartbeat rate, visceral agitation, etc.) and emotional reactions (fear, anxiety, joy, etc.) perceived in the face of the task. Depending on the level of self-efficacy and the context of the task, this information may promote or weaken the self-efficacy judgment. As Klassen and Durksen (2014) have pointed out, information from physiological and affective states is more present at the beginning and end of the practical teaching activities developed during the teacher training course.

In fact, researches have shown that teachers tend to present a belief in over-valued teacher self-efficacy at the end of vocational training (Schunk & DiBenedetto, 2016; Woolfolk Hoy & Spero, 2005). It is this heightened awareness that can help teachers sustain the motivation and effort required to overcome the difficulties of the induction period in the teaching career (Bandura, 1997). Such an effect can help to support and even modify the way teachers perceive their own emotions. As Faria and Camargo (2018) have pointed out, these are quite intense when it comes to fostering inclusive education.

Research on teacher self-efficacy for inclusive education has taken place in different countries. Among the results, it was found that self-efficacy to teach children with autism was associated with the number of credits obtained in subjects related to inclusive education, both in initial training (Engstrand & Roll-Pettersson, 2014) and in graduation (Roll-Pettersson, 2008).

Loreman et al. (2013) found a significant difference in self-efficacy for inclusion, in which future teachers from Australia ($M = 4.53$) and Canada ($M = 4.51$) felt more able to teach in an inclusive manner than their peers in Indonesia ($M = 4.38$) and Hong Kong ($M = 3.93$). The authors argued that this difference could be explained due to the particular regional cultural issues of each country in which the data were obtained. They also pointed out that, although all participants had started a course on inclusive education, all were at different times at initial training, with some, such as Canadian participants, also at the beginning of professional training. They also found positive relations between the perception of self-efficacy and the initial education, knowledge of the legislation, policies related to inclusive education, experience and coexistence with people with disabilities.

In the field of Physical Education, Triezenberg (2014) found that teachers who were graduated on adapted Physical Education had higher levels of self-efficacy to include students with physical disabilities and to assist students in instructing visually impaired classmates, compared to teachers who did not have such training.

In the national context, to this date, teacher self-efficacy has been identified as an important variable that mediates the motivation to teach adapted Physical Education. However, more robust beliefs were observed in professionals involved in sports training when compared to other segments, such as school and recreation (Venditti Júnior, 2005, 2010). Until then, these studies have used a scale of teacher self-efficacy that did not specify the context of inclusive teaching. Recently, an instrument that investigates the self-efficacy belief of teachers of students with autism has been translated and adapted to the Brazilian context, which may leverage interest in this subject (Canabarro, Teixeira, & Schmidt, 2018).

In summary, researches have also reinforced a positive influence of teacher self-efficacy for inclusive education. This is because teachers whose self-efficacy is elevated feel more able to induce and provide learning for their students. We also highlight the negative influence that feelings such as fear and insecurity can present for the judgment of ability and for the accomplishment of inclusive practices in Physical Education classes.

Therefore, self-efficacy becomes central in the understanding of the aspects that influence the behaviors of the teacher on the choice and selection of tasks, amount of effort, persistence and resilience in the face of the inclusion of students with disabilities in regular classes of Physical Education. Since the belief in self-efficacy is linked to the teacher's motivational processes, it is important to highlight its role in overcoming any probable impediments or barriers that are present, so that inclusion takes place properly.

Allied to this, this study is also justified due to the scarcity of research related to the discussion of self-efficacy in inclusive education, at least in the Brazilian scenario, and in the training of future Physical Education teachers. The value of this construction is acknowledged both for teaching (Zee & Koomen, 2016) and for the process of preparing future teachers (Costa Filho & Iaochite, 2015; Souza Neto & Iaochite, 2013; Woolfolk Hoy & Spero, 2005), especially when the right of all students to participate in classes is at stake.

Thus, the objective of this study was to investigate the level of teacher self-efficacy of future Physical Education teachers for inclusive education and the source of physiological

and affective states, as well as their relationship with personal variables such as age, previous experience, number of subjects studied related to the inclusion of people with disabilities, and contextual, such as course time and type of educational institution.

2 METHOD

This research adopted quantitative and exploratory procedures (Dancey & Reidy, 2017). The choice for quantitative research was in line with research on teacher self-efficacy, in which the use of Likert-type scales projects a statistical analysis (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). It is exploratory, because it sought to investigate a phenomenon of teacher beliefs in the context of initial education, understanding “that human behavior is better understood in the social context where it occurs” (Piovesan & Temporini, 1995, p. 321). Thus, this study may contribute to the understanding of the variables involved in the self-efficacy judgment of future Physical Education teachers for inclusive education.

A total of 188 Physical Education student teachers enrolled from the second year on at the undergraduate course, in a private institution and a state public institution, both from the hinterland of the state of São Paulo, participated in this study. As Table 1 shows, 51.6% of the participants are male, aged between 18 and 38 years. The majority studied in the private institution (78.2%) and were attending their second (47.3%) and third year (41.5%) when they answered the data collection instruments. More than half of the participants had no experience with teaching people with disabilities (60.1%), nor had they studied any subject related to the subject (54.5%).

Variable	Categories	n (%)	
Gender	Male	97	(51.6%)
	Female	91	(48.4%)
Age Minimum = 18 Maximum = 38 Mean (standard deviation) = 22.6 (4.1)	From 18 to 22 years old	118	(62.8%)
	From 23 to 27 years old	48	(25.5%)
	From 28 to 32 years old	13	(6.9%)
	From 33 to 38 years old	9	(4.8%)
Type of institution attending	Public, state or federal	41	(21.8%)
	Private	147	(78.2%)
Current year of study	2 nd	89	(47.3%)
	3 rd	78	(41.5%)
	4 th	14	(7.4%)
	6 th	7	(3.7%)
Teaching experiences with people with disabilities (extension project, volunteer work, etc.)	Yes	75	(39.9%)
	No	113	(60.1%)

	0	102	(54.5%)
Number of subjects in the Undergraduate course related to Physical Education teaching people with disabilities	1	57	(30.5%)
	2	19	(10.2%)
	3	6	(3.2%)
	5	2	(1.1%)
	6 or more	1	(0.5%)

Table 1. Characterization of participants (N = 188).

Source: Research data.

This study followed the ethical procedures of research, and was approved by the Committee of Ethics in Research in Human Beings of a public university, under Opinion No. 1.479.299. After the authorization of the course coordinators of the educational institutions and the teachers who gave classes at the time of the data collection, the instruments were answered individually, in the classroom and on printed sheets.

Data were collected between May 9th and 20th, 2016. At the time of data collection, the objectives of the research were explained; those who felt enlightened and showed interest in participating completed and signed the Informed Consent Form. Then, data collection took place, which had an average duration of 45 minutes with each class.

For data collection, three instruments were used: characterization questionnaire, teacher self-efficacy scale, and scale of sources of teacher self-efficacy. The characterization questionnaire aimed to obtain personal, academic and contextual data of the participants.

The Self-efficacy Scale for the Inclusion of Students with Disabilities in Physical Education Classes was translated and adapted from Block, Hutzler, Barak and Klavina (2013). It is a five-point Likert scale (1 for I do not feel capable and 5 for completely capable), with 33 items, separated into three subscales: intellectual disability (11 items, $\alpha = 0.936$); physical disability (12 items, $\alpha = 0.952$); and visual impairment (10 items, $\alpha = 0.960$). Each subscale is preceded by a description of the class context and the student's disability. For example, the student with intellectual disability is described as presenting difficulties in learning, understanding instructions and communicating with colleagues; because of this, he/she also has less developed motor skills than his/her peers. Thus, the subscales aim to assess how capable future Physical Education teachers feel about proposing adaptations to the activities, safety and attention of students with disabilities and collaboration of classmates for inclusion in the regular classes of Physical Education at school.

The Teacher Self-Efficacy Sources Scale (Iaochite & Azzi, 2012) is composed of 16 six-point Likert-type items (1 for totally false and 6 for totally true) and four dimensions that reflect sources of teacher self-efficacy. For this study, the dimension of the physiological and affective states ($\alpha = 0.783$) was used, composed of five items, which refer to the physiological, affective and emotional reactions in the evaluation of the information that compose the self-efficacy judgment to teach.

For the Self-efficacy Scale for the Inclusion of Students with Disabilities in Physical Education Classes, three confirmatory factorial analysis were carried out by the principal

component method, one for each part of the scale, to evaluate the factorial structure. In each analysis, a factor with an eigenvalue higher than 1 was found, indicating the existence of only one factor in each of the subscales. In addition, Cronbach's alpha values were higher than 0.90, indicating high levels of internal consistency (reliability).

Regarding the comparison of quantitative variables between two independent groups, this was done with Student's T-Test. The association between quantitative variables was studied with the Pearson Correlation Coefficient and the relationship between quantitative and ordinal variables with the Spearman Correlation Coefficient. In the statistical tests, a level of significance of 5% ($p < 0.05$) was considered.

The statistical treatment of the data was performed through the Statistical Package for the Social Sciences (SPSS), version 22 for Windows.

3 RESULTS AND DISCUSSION

In Table 2, the descriptive and correlation analysis regarding the self-efficacy and the source of physiological and affective states is presented. For self-efficacy, average values were observed, slightly above the midpoint of the scale (score 3), indicating moderate levels of self-efficacy in relation to the inclusion of students with intellectual and physical disabilities and visual impairment. As for the source of self-efficacy, the mean score of the source of physiological and affective states was less than 3.5 points, being below the scale average.

In the correlation between the source of physiological and affective states and the dimensions of self-efficacy, significant negative correlations ($p < 0.001$) were observed between the physiological and affective states and the three dimensions of self-efficacy.

Scale/Dimension	Minimum	Maximum	Mean (standard deviation)	Physiological and affective states (r)
Self-efficacy Scale				
Intellectual disability	1.00	4.82	3.17 (0.73)	-0.312**
Physical disability	1.00	5.00	3.25 (0.79)	-0.233**
Visual impairment	1.00	5.00	3.14 (0.90)	-0.199**
Teacher's Self-efficacy Sources				
Physiological and affective states	1.00	6.00	3.23 (1.06)	

Table 2. Characterization and correlation (r) of the dimensions of the Self-efficacy Scale and physiological and affective states.

Source: Research data.

Legend: Pearson's Correlation Coefficient (r): * $p < 0.05$; ** $p < 0.01$.

These results indicated that participants with lower scores on the source of self-efficacy associated with physiological and affective states had higher levels of self-efficacy in relation to the inclusion of students with intellectual and physical disabilities and visual impairment.

There were no significant differences between the participants of public institutions and those of private institutions in the dimensions of self-efficacy ($p > 0.05$), coming close to the statistical significance in the source of physiological and affective states (Table 3).

Scale/Dimension	Public (n = 41)	Private (n = 147)	Student T-Test
Self-efficacy Scale			
Intellectual disability	3.19 (0,72)	3.16 (0,74)	$p = 0.822$
Physical disability	3.38 (0,81)	3.21 (0,78)	$p = 0.222$
Visual impairment	3.15 (0,87)	3.14 (0,91)	$p = 0.933$
Teacher's Self-efficacy Sources			
Physiological and affective states	3.51 (0,91)	3.15 (1,09)	$p = 0.051$

Table 3. Comparison of self-efficacy and source of self-efficacy by educational institution.

Source: Research data.

Legend: Results presented in the mean form (standard deviation).

The comparison between future teachers with and without teaching experience (Table 4) showed that those with experience had higher mean scores in the dimensions of self-efficacy. The differences were statistically significant in the physical disability dimension. As for the source of physiological and affective states, there was no significant difference ($p > 0.05$).

Scale/Dimension	With experience (n = 75)	Without experience (n = 113)	Student T-Test
Self-efficacy Scale			
Intellectual disability	3.29 (0,70)	3.08 (0,74)	$p = 0.053$
Physical disability	3.42 (0,81)	3.14 (0,75)	$p = 0.016$
Visual impairment	3.28 (0,90)	3.04 (0,89)	$p = 0.073$
Teacher's Self-efficacy sources			
Physiological and affective states	3.26 (1,00)	3.21 (1,10)	$p = 0.757$

Table 4. Comparison of self-efficacy and the source of self-efficacy by teaching people with disabilities experiences.

Source: Research data.

Legend: Results presented in the mean form (standard deviation).

When investigating the correlation with age, the current year and the number of undergraduate disciplines related to the Physical Education teaching people with disabilities, the values of Spearman's Correlation Coefficients (Table 5) in relation to the physical disabilities of the undergraduate term currently attending ($p < 0.05$) and the source of physiological and affective states with the number of disciplines ($p < 0.05$) are weak, but significant, indicating an association between these variables.

Scale/Dimension	Age	Term currently attending	Number of disciplines
Self-efficacy Scale			
Intellectual disability	-0.071	0.079	0.063
Physical disability	-0.041	0.145*	0.103
Visual disability	0.020	0.140	-0.011
Teacher's Self-efficacy sources			
Physiological and affective states	0.004	0.061	0.186*

Table 5. Correlation of self-efficacy and the source of self-efficacy with age, course year and number of disciplines in the undergraduate course related to Physical Education teaching people with disabilities.

Source: Research data.

Legend: Spearman's Correlation Coefficient: * $p < 0.05$; ** $p < 0.01$.

Participants showed moderate levels of self-efficacy in the dimensions evaluated, a result similar to the one found by Loreman et al. (2013) and Triezenberg (2014). It was emphasized that the self-efficacy to teach students with physical disabilities received higher values in relation to other disabilities. This is a promising indicator, as teachers with high levels of teacher self-efficacy are more likely to persist in the task and are often successful in doing so, as well as being more amenable to introducing innovative practices and methodologies and being democratic with students (Block et al., 2013; Pajares, 1992). In addition, high levels of self-efficacy beliefs can help maintain the levels of motivation and persistence of future teachers to cope with challenges when they enter the teaching career (Schunk & DiBenedetto, 2016; Woolfolk Hoy & Spero, 2005).

The source of physiological and affective states received a moderate rating, indicating that these psychophysiological states may somehow compromise the self-efficacy judgment of the participants of this study. This result corroborates recent studies on sources of teacher self-efficacy and teacher education (Costa Filho & Iaochite, 2015). However, this source had negative and significant correlations with all dimensions of self-efficacy to teach in an inclusive manner, being stronger in relation to intellectual disability ($r = -0.312$).

Emotional reactions such as fear, anxiety and shyness, and physiological reactions such as sweating and increased heartbeat are more common in future teachers and negatively influence the judgment of self-efficacy to teach, especially when linked to the inclusion of students with some type of disability (Avramidis et al., 2000; Pletsch, 2009). Emotional activations interpreted as negative can diminish the perception of self-efficacy to teach and, consequently, the accomplishment of teaching practices (Faria & Camargo, 2018).

Depending on the formative experiences and the perception of self-efficacy of future teachers, this information can be debilitating and diminish the belief in self-efficacy. On the other hand, they can help the teacher achieve an adequate level of physiological activations that make future teachers feel more capable of teaching (Bandura, 1997). Physiological responses influence beliefs of self-efficacy and can negatively or positively affect task performance. In this way, it is considered relevant to offer situations that help the future Physical Education teacher to feel more capable of teaching, as well as internal control strategies to deal with the information coming from the source of physiological and affective states, thus contributing to

reduce stress and emotions that can potentially be harmful (Faria & Camargo, 2018; Klassen & Durksen, 2014).

The results of the participants of the public institution were close to the significance at the source of physiological and affective states, being slightly more influenced by the dimensions of self-efficacy and the physiological and affective states for teaching people with visual, intellectual or physical disabilities. The portrayed public institution offers a Physical Education course in the full-time modality, with possibilities of experiences in the context of inclusion in both compulsory disciplines and in extracurricular actions (extension projects and research). In a way, this may have contributed to the opportunities for contact and development of the issues that influence the beliefs of self-efficacy and the source investigated.

As the student teachers had a greater possibility of contact with people with disabilities due to the different projects that the university offered at the time of the research, the participants may have acquired and developed skills and competences that made them feel more capable and able to deal with children in a context of inclusion in Physical Education classes at school (Mauerberg-decastro et al., 2013). Similarly, this perception of competence tends to generate fewer negative physiological and emotional reactions. As the results showed, participants who had teaching experiences with students with disabilities had higher levels of self-efficacy than those with no experience, but the statistically significant difference was found only in the dimension of physical disability.

The experiences provided during initial training are very important and contribute to the development of self-efficacy beliefs (Loreman et al., 2013; Souza Neto & Iaochite, 2013; Woolfolk Hoy & Spero, 2005). On the one hand, a positive and significant relationship was found between the year of initial training and self-efficacy, accompanying the literature, which shows that at the end of the graduate course, future teachers have high levels of self-efficacy to teach (Loreman et al., 2013). Considering the context investigated in this research, this is a positive result that shows that the period of initial training contributed in some way to strengthen the belief of future teachers for teaching in an inclusive way.

On the other hand, it was also found a positive and significant relationship between the source of the physiological and affective states and the number of disciplines related to the inclusion of students with disabilities. Engstrand and Roll-Pettersson (2014) found similar results; however, the authors pointed out a greater force of self-efficacy considering the number of disciplines studied. Bandura (1997) argues that there is an ideal level of physiological activation of the organism that makes the individual feel more capable of performing the task. As the relationship found was positive, however weak, it is believed that the level of perception of physiological information may be adjusted to the domain and the context, in terms of the perception of the capacity to perform an inclusive teaching in the school. Considering the workload of teachers, and adding the variable of inclusive education, the physiological and affective activations also become an important factor for the teachers' self-efficacy judgment.

Even with a moderate level of teacher self-efficacy, it is necessary to devise strategies for strengthening beliefs. Thus, during the course of Physical Education, knowledge related to inclusion should be provided, making essential the offering of practical experiences during classes, mandatory supervised internships, extension courses for the community, and the

constant promotion of qualified discussions of this theme in other areas of the initial training curriculum (Palla & Mauerberg-decastro, 2004).

4 FINAL CONSIDERATIONS

School inclusion must be viewed responsibly, as there are many barriers to its implementation with quality. In theory, when the teacher believes that he/she is capable and motivated to do his/her job, he/she tends to remain committed for a longer period of time and may face greater chances of learning success, involvement, unity and respect from his/her students.

Thus, we highlight the relevance of studying the self-efficacy of future Physical Education teachers to work in an inclusive way in Basic Education. As evidenced by the literature, teachers do not feel confident about including pupils with different disabilities in regular school classes. Especially in Physical Education, a curricular component that houses the different dimensions of behavior, especially the motor dimension. In this sense, this insertion becomes even more challenging. It has been shown in this text that teachers tend to engage in behaviors and tasks, in which they perceive themselves capable of accomplishing them with some possibility of success.

The construct of teacher self-efficacy is a benchmark that contributes to the understanding of what teachers think, feel and how they act in the classroom. Therefore, it seems essential to invest in research to understand the development of this belief, in order to subsidize training programs and professional development. Such programs could contribute to the task of training teachers who, in addition to possessing knowledge, skills and competences for inclusion in their classes, believe that they will be able and capable to develop better practices for students with and without disabilities. Considering the results found, we reiterate the importance of practice situations and acquisition of various knowledge related to the context during the initial education to develop and strengthen the beliefs of self-efficacy. Among these situations, opportunities for direct contact, through internships and university extension projects with children with multiple disabilities, visits to schools that include students in regular classes, knowledge about both the disabilities and the laws that organize and regulate inclusive education, are some examples of formative situations that can make the difference for a future teacher to develop his/her ability to teach Physical Education in an inclusive way.

Some limitations should be highlighted regarding the generalization of these results, such as the number of participants and application in a small region. Although the reliability index of the Self-efficacy Scale for the Inclusion of Students with Disabilities in Physical Education Classes was very satisfactory, it is in validation process, being translated from the original scale in English in order to be applied to the participants of this study. Further research in the area of professional teacher education for the teaching of adapted Physical Education, related to teacher self-efficacy, may contribute to the clarification of how these beliefs behave throughout the training and professional activity in the area, as well as for offering subsidies for future research in inclusive education.

Finally, it is necessary to extend this discussion to other areas, in addition to Physical Education, so that researchers can investigate and analyze how the initial education is preparing future teachers who will work in the schools, seeking to understand, for example, which teaching strategies could promote and strengthen self-efficacy for inclusive education.

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Received on: 04/08/2018

Reformulated on: 21/02/2019

Accepted on: 27/02/2019