

PROFILE AND BELIEFS OF SELF-EFFICACY OF CONDUCTORS OF MUSICAL GROUPS IN BASIC EDUCATION SCHOOLS IN BRAZIL



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ABSTRACT

Musical groups represent a relevant and well-developed activity in basic education schools in Brazil, requiring teachers to perform the function of conductors. Understanding who these professionals are and how they perceive their capabilities is fundamental for the area of music education. The main objective of this article was to characterize the sociodemographic and professional profile of teachers who act as conductors of musical groups in basic education schools in Brazil and to analyze the level of their Self-Efficacy Beliefs (CAE) in five dimensions: D1 - teaching music, D2 - managing student behavior, D3 - motivating students, D4 - considering student diversity, and D5 - dealing with changes and challenges. A quantitative approach was used, through an online intersectional survey with the snowball collection technique. 147 teachers/conductors from all regions of the country participated. The instrument included profile questions and the Music Teacher Self-Efficacy Scale (EAPM), adapted from Cereser (2011). The results indicate a mostly male profile (68%), with a mean age of 38 years, with men being significantly younger than women. The sample had a high level of education (91.2% with undergraduate and 40.8% with graduate studies), higher than the national average of teachers. As for the CAE, the conductors presented medium to high levels in all dimensions, with higher averages in "teaching music" (D1; M=4.39) and "motivating students" (D3; M=4.36), and the lowest mean in "dealing with changes and challenges" (D5; M=4.12), the latter associated with contextual difficulties such as inadequate infrastructure and teaching material. It is concluded that the conductors of school musical groups in Brazil form a group with a specific profile, with a high level of education and that, despite perceiving themselves as self-effective in most of their attributions, they face contextual challenges that impact their beliefs in the ability to deal with changes.

Keywords: Teacher Self-Efficacy Beliefs. Music Education. Musical Conducting. School Musical Groups. Basic Education.

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INTRODUCTION

The presence of musical groups such as choirs, bands and orchestras is a consolidated reality in many basic education schools in Brazil, representing an important path to musical education (CRUZ; MONTEIRO, 2019; PENNA, 2014; WOLFFENBÜTTEL, 2012). These activities, often inserted in integral education programs or as extracurricular practices (BRASIL, 2010; PENNA, 2016), require teachers capable of assuming the role of conductor, a complex task that involves both musical and pedagogical skills (GRINGS, 2011; ZANDER, 2008).

In this context, teachers' Self-Efficacy Beliefs (CAE), defined in Social Cognitive Theory as judgments about their own abilities to perform certain tasks (BANDURA, 1997), play a crucial role. According to Bandura (2012), "increasing people's beliefs in their capacities (increasing Self-Efficacy Beliefs) promotes efficient self-regulation and increases motivation, persistence in the face of difficulties and performance achievements" (BANDURA, 2012, p. 24). Teacher self-efficacy, within the scope of Social Cognitive Theory (BANDURA, 2008), influences motivation, planning, effort expended, persistence in the face of obstacles and, consequently, the quality of pedagogical practice and student performance (BANDURA, 1997, 2012; ZEE; KOOMEN, 2016). Teachers with higher CAE tend to adopt more innovative practices, to persist more in the face of students with difficulties and to present lower levels of stress and *burnout* (FERREIRA; AZZI, 2011; KLASSEN et al., 2010).

Although research on CAE professors has developed significantly in Brazil (BZUNECK, 1996; GUIMARÃES; BZUNECK, 2008; IAOCHITE et al., 2016) and internationally, including studies with music teachers (CERESER, 2011; HENTSCHE et al., 2017; MATTHEWS; KITSANTAS, 2012, 2016), there is a gap in the literature regarding the CAE of teachers who act specifically as *conductors* of musical groups in the Brazilian school context (GRINGS, 2020). The conduction of musical groups in the school context, although it shares aspects with the teaching of music in the classroom, has particularities, such as the management of heterogeneous groups, the preparation for public performances and the need to deal with different instruments and formations (GRINGS, 2011; HART JUNIOR, 2019). For teachers who act as conductors of musical groups in basic education schools – an activity that intrinsically combines pedagogical, artistic and group management challenges – the CAE assume a preponderant role. They influence not only the willingness to take on challenging tasks, such as choosing complex repertoires or

organizing performances, but also the effort invested in planning and conducting rehearsals, persistence in the face of the difficulties inherent in working with heterogeneous and amateur groups, and emotional resilience to deal with performances below expectations (BANDURA, 1997; ZIMMERMAN, 2000).

Considering the relevance of school musical groups and the importance of CAE for teaching practice, this study seeks to contribute to filling the aforementioned gap. Thus, the objectives of this article are: to describe the sociodemographic and professional profile of teachers who act as conductors of musical groups in basic education schools in Brazil; and analyze the levels of their Self-Efficacy Beliefs to govern these groups, in five specific dimensions: teaching music (D1), managing student behavior (D2), motivating students (D3), considering student diversity (D4), and dealing with changes and challenges (D5).

METHODOLOGY

This study adopted a quantitative approach, employing the *intersectional* survey method (*cross-sectional*), appropriate to describe characteristics of a population at a specific point in time (BABBIE, 1999; CRESWELL, 2014). The *survey* was conducted in an online format, as part of a larger survey by the group Training and Performance of Professionals in Music – FAPROM, of the Graduate Program in Music at the Federal University of Rio Grande do Sul (GRINGS, 2020).

PARTICIPANTS

The sample consisted of 147 teachers who declared that they worked as conductors of musical groups (choirs, bands and fanfares, orchestras, etc.) in public or private basic education schools (kindergarten, elementary or high school), located in different states and regions of Brazil during the collection period. The selection of participants used a non-probabilistic *snowball sampling* type, started with contacts from the FAPROM research group and expanded through dissemination on social networks and e-mail lists of music educators (COHEN; MANION; MORRISON, 2007).

INSTRUMENT

A self-administered online questionnaire was used, developed on the *Survey Monkey* platform, consisting of two main sections:

1. *Profile Characterization*: Questions about personal data (gender, age group, state of residence), education (higher level of education, music training, musical learning trajectory) and context of action (time of work as a teacher of general music and in schools, number of schools, administrative dependence, link with the school, type(s) of musical group(s) governed, function(s) performed, stage(s) of teaching in which they work).
2. *Self-Efficacy Beliefs*: An adapted version of the Music Teacher Self-Efficacy Scale (EAPM), originally developed and validated by Cereser (2011), was used. From the original 21 items, 13 items were selected distributed in the five theoretical dimensions: D1 - Teaching Music (2 items), D2 - Managing Student Behavior (2 items), D3 - Motivating Students (2 items), D4 - Considering Student Diversity (3 items), and D5 - Dealing with Changes and Challenges (4 items). The answers were given on a 5-point Likert scale (1 = I can't do it; 5 = I can do it fully). The Cronbach's alpha coefficient for the 13 items in the present sample was 0.873, indicating good internal consistency.

DATA COLLECTION PROCEDURES

Data collection took place between February 5 and June 21, 2016. The questionnaire link was widely disseminated electronically (email, social networks), as detailed in section 3.1.4 of the thesis (GRINGS, 2020). Free and informed consent was obtained on the initial page of the questionnaire, which also informed about anonymity and estimated response time.

DATA ANALYSIS PROCEDURES

The data were exported from the *Survey Monkey* platform to the SPSS software, version 22.0. Descriptive analyses (frequencies, percentages, means, standard deviation) were performed to characterize the sample profile and CAE levels. To examine the relationships between profile variables and the dimensions of the EAPM, non-parametric tests (Chi-square, Mann-Whitney, Kruskal-Wallis, Friedman) were used, with a significance level $\alpha = 0.05$ (FIELD, 2009; LARSON; FARBER, 2010). The analysis of adjusted residuals was used in the Chi-square tests.

RESULTS

The results are presented sequentially, detailing the sample profile, the levels of Self-Efficacy Beliefs and the statistical relationships found.

SAMPLE PROFILE (N=147)

The sample was composed mostly of male teachers (68%, n=100). The mean age was 38.03 years (SD=10.54), with men being significantly younger (M=35.73) than women (M=42.94) ($p < 0.001$). Most respondents were from the South region (39.5%). Regarding education, 91.2% had at least an undergraduate degree, and 40.8% had a graduate degree, with women presenting a higher proportion of *stricto sensu* graduate degrees. The most common degree was a degree in Music (70.1%). The average time working in schools was 9.12 years (SD=8.87), with 46.3% working for up to 5 years. Most worked only in public schools (55%).

LEVELS OF SELF-EFFICACY BELIEFS (EAPM)

The regents had medium to high levels of CAE (Table 1). The highest averages were in D1 - Teaching Music (M=4.39) and D3 - Motivating Students (M=4.36). The lowest mean was in D5 - Dealing with Changes and Challenges (M=4.12). The differences between the dimensions were statistically significant ($p < 0.001$, Friedman's test), with D5 being significantly lower than D1 and D3. It is noteworthy that among the lowest averages are the contextual challenges of Dimension 5.

Table 1: Means of the scale questions grouped into the five dimensions

	n	Average	Standard Deviation	Minimum	Maximum
D1 - Teaching music	147	4,39	,668	3,00	5,00
D2 – Manage behavior	147	4,27	,700	2,50	5,00
D3 – Motivate students	147	4,36	,636	3,00	5,00
D4 – Consider diversity	147	4,30	,713	2,00	5,00
D5 – Dealing with change and challenges	147	4,12	,727	2,25	5,00

RELATIONSHIPS BETWEEN CAE AND PROFILE VARIABLES

No significant differences were found in the EACs by sex or age group (Tables 2 and 3).

Table 2: Average of the posts between the 5 dimensions and the gender of the regents/teachers

Dimension	Sex	N	Average of the stations	Sum of posts
D1 - Teaching Music	Male	100	72,10	7209,50
	Female	47	78,05	3668,50
	Total	147		
D2 - Behavior	Male	100	73,98	7398,00
	Female	47	74,04	3480,00
	Total	147		
D3 - Motivation	Male	100	72,09	7209,00
	Female	47	78,06	3669,00
	Total	147		
D4 - Diversity	Male	100	71,78	7177,50
	Female	47	78,73	3700,50
	Total	147		
D5 - Changes and Challenges	Male	100	72,25	7225,00
	Female	47	77,72	3653,00
	Total	147		

Table 3: Average of the posts of each dimension with age groups of the regents

Dimension	Age Groups	N	Average of the stations
D1 - Teaching Music	Up to 30 years old	41	62,78
	31 to 40 years old	50	78,35
	41 to 50 years old	33	75,70
	51 to 65 years old	23	82,11
	Total	147	
D2 - Behavior	Up to 30 years old	41	67,38
	31 to 40 years old	50	68,80
	41 to 50 years old	33	82,92
	51 to 65 years old	23	84,30
	Total	147	
D3 - Motivation	Up to 30 years old	41	67,79
	31 to 40 years old	50	76,19
	41 to 50 years old	33	71,89
	51 to 65 years old	23	83,33
	Total	147	
D4 - Diversity	Up to 30 years old	41	64,40
	31 to 40 years old	50	74,20
	41 to 50 years old	33	74,73
	51 to 65 years old	23	89,63
	Total	147	
D5 - Changes and Challenges	Up to 30 years old	41	68,74
	31 to 40 years old	50	74,41
	41 to 50 years old	33	72,55
	51 to 65 years old	23	84,57
	Total	147	

Total 147

Schooling was significantly associated only with D1 ($p=0.007$; Table 4)

Table 4: Average of the positions between the 5 dimensions and the highest level of education

Dimension	What is your highest level of education?	N	Average of the stations
D1 - Teaching Music	Basic Education	13	55,27
	Higher Education	74	66,33
	Lato sensu postgraduate	43	86,69
	Stricto sensu graduate studies	17	89,62
	Total	147	
D2 - Behavior	Basic Education	13	85,08
	Higher Education	74	72,01
	Lato sensu postgraduate	43	73,28
	Stricto sensu graduate studies	17	76,03
	Total	147	
D3 - Motivation	Basic Education	13	86,96
	Higher Education	74	70,56
	Lato sensu postgraduate	43	74,83
	Stricto sensu graduate studies	17	76,97
	Total	147	
D4 - Diversity	Basic Education	13	77,58
	Higher Education	74	74,67
	Lato sensu postgraduate	43	71,28
	Stricto sensu graduate studies	17	75,24
	Total	147	
D5 - Changes and Challenges	Basic Education	13	91,81
	Higher Education	74	70,51
	Lato sensu postgraduate	43	72,71
	Stricto sensu graduate studies	17	78,82
	Total	147	

The administrative dependence of the school was significantly related to D1, D3 and D5, with higher CAE for those who work in both systems (public and private) ($p<0.05$; Table 5). The time of work (general and in schools) was positively correlated with most of the dimensions of CAE ($p<0.05$).

Table 5: Average of the posts between the 5 dimensions and administrative dependence

Dimension	Q13 - The school(s) where you currently teach is:	N	Average of the stations
D1 - Teaching Music	Public Only	81	66,28
	Private Only	41	79,07
	Public and Private	25	90,70
	Total	147	
D2 - Behavior	Public Only	81	70,43
	Private Only	41	76,33
	Public and Private	25	81,76
	Total	147	
D3 - Motivation	Public Only	81	69,51
	Private Only	41	71,70
	Public and Private	25	92,32

	Total	147	
D4 - Diversity	Public Only	81	69,56
	Private Only	41	71,84
	Public and Private	25	91,94
	Total	147	
D5 - Changes and Challenges	Public Only	81	67,47
	Private Only	41	73,20
	Public and Private	25	96,48
	Total	147	

DISCUSSION

The profile of the conductors of school musical groups in this Brazilian sample reveals a male predominance, contrary to the general profile of music teachers in basic education (HENTSCHKE et al., 2017). High education reflects a search for formal qualification, although previous practice and in diversified contexts are also relevant, according to the trajectories reported.

The levels of perceived self-efficacy were mostly high, indicating confidence in teaching abilities (D1) and motivation (D3), central aspects of musical pedagogical practice. This positive result is in line with the theory, which associates high CAE with greater engagement and better results (BANDURA, 1997; ZEE; KOOMEN, 2016). However, the lowest confidence lies in the ability to deal with changes and challenges (D5), specifically those of a contextual and structural nature (lack of space, material, large classes). This shows that, although they feel pedagogically capable, the regents perceive their effectiveness limited by external factors over which they have little control, a recurring issue in the Brazilian school reality (GRINGS, 2020). As Bandura (1997) states, the perception of control over the environment is a component of self-efficacy.

The confirmation of the positive relationship between length of experience and CAE reinforces the importance of direct mastery experiences (BANDURA, 1997; 2009) in the construction of professional confidence. Continued practice allows regents to refine their skills, overcome challenges, and thus strengthen their beliefs of effectiveness, as illustrated in the reports of the thesis interviews (GRINGS, 2020). The greater CAE of teachers who work in multiple systems (public and private) may come from exposure to a wider range of situations and the need to adapt strategies, enriching their repertoire of experiences.

This study contributes by providing a quantitative profile and an analysis of the CAE of a specific group of music educators in Brazil. Limitations include non-probability sampling and the use of self-report. The adapted scale focused on general dimensions of teacher self-efficacy applied to music, and may not have fully captured the specificities of

conducting, such as the management of collective performance and interdependence with students, a factor highlighted as relevant in the original thesis (GRINGS, 2020).

CONCLUSION

This study characterized the profile and analyzed the Self-Efficacy Beliefs of 147 teachers in charge of school musical groups in Brazil. The profile revealed a male majority, with a high level of education. Regents demonstrated medium to high levels of perceived self-efficacy for dimensions related to teaching, motivation, behavior management, and diversity consideration. However, confidence was significantly lower in the ability to deal with contextual challenges, such as inadequate infrastructure and resources. Professional experience emerged as a key factor associated with higher levels of self-efficacy. It is concluded that, although confident in their pedagogical and musical abilities, school regents face contextual barriers that impact their perception of effectiveness, highlighting the need for improvements in working conditions and continuing education focused on overcoming these challenges.

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