



Social representations and education: a study on theses and dissertations in the period from 2016 to 2018 in Paraná-Brazil

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ABSTRACT. This research has the aim to map the theses and dissertations produced in Graduate Programs in Education (PPGEs), with the SRT theoretical framework, in Paraná universities, in the period from 2016 to 2018, as well as to understand if they contemplate theoretical and methodological possibilities of the SRT. Through a 'state of knowledge' type research, we used the search tools available in the Theses and Dissertations Catalog of the Coordination for the Improvement of Higher Education Personnel (Capes), with the descriptor/expression 'Social Representations'. The abstracts were submitted to textual analysis processing by Iramuteq: word cloud, similarity analysis and descending hierarchical classification. The results were analyzed based on philosophical hermeneutics (Gadamer, 1998), which allowed for interpretations and inferences with the theoretical support of SRT (Moscovici, 1978; 2003). From the lexical analysis, teacher, study and school were highlighted, whose focus is on the teacher, the student and the school, either because it is the locus of research, or because it is the place where studies can impact understandings/transformations of the school reality, since we infer that studies anchor social representations from the school context. The corpus presents theoretical and methodological aspects of SRT, territories of belonging and focus on the teacher. However, there are weaknesses, such as: lack of theoretical articulation with other areas of the educational field, including educational policies and teachers' education, little diversification of data collection instruments and few inferences which reveal anchors. However, we infer the researchers' efforts to advance qualitatively.

Keywords: social representations theory; educational policies; teachers' education.

Representações sociais e educação: um estudo sobre teses e dissertações no período de 2016 a 2018 no Paraná-Brasil

RESUMO. Essa pesquisa tem como objetivo mapear as teses e dissertações produzidas em Programas de Pós-Graduação em Educação (PPGEs), com o aporte da TRS, em universidades paranaenses, no período de 2016 a 2018, bem como compreender se elas contemplam possibilidades teóricas e metodológicas da TRS. Por meio de uma pesquisa do tipo 'estado do conhecimento', utilizamos as ferramentas de buscas disponíveis no Catálogo de Teses e Dissertações da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Capes), com o descritor/expressão 'Representações Sociais'. Os resumos foram submetidos ao processamento de análise textual pelo Iramuteq: nuvem de palavras, análise de similitude e classificação hierárquica descendente. Os resultados foram analisados com base na hermenêutica filosófica (Gadamer, 1998), que permitiu realizar interpretações e inferências com o aporte teórico da TRS (Moscovici, 1978; 2003). Da análise lexical, destacam-se professor, estudo e escola, cujo foco incide sobre o professor, o estudante e a escola, seja por ser o *lôcus* das pesquisas, seja por ser o local no qual os estudos podem impactar compreensões/transformações da realidade da escola, uma vez que inferimos que os estudos ancoram representações sociais a partir do contexto escolar. O *corpus* apresenta aspectos teórico-metodológicos da TRS, territórios de pertencimento e foco no professor. Porém, há fragilidades, como: ausência de articulação teórica com outras áreas do campo educacional, entre elas, as políticas educacionais e a formação do professor, pouca diversificação dos instrumentos de coleta de dados e poucas inferências que revelam ancoragens. No entanto, depreendemos os esforços dos pesquisadores em avançarem qualitativamente.

Palavras-chave: teoria das representações sociais; políticas educacionais; formação de professores.

Representaciones sociales y educación: estudio de tesis y disertaciones en el período 2016 a 2018 en Paraná-Brasil

RESUMEN. Esta investigación tiene como objetivo mapear las tesis y disertaciones producidas en los Programas de Posgrado en Educación (PPGEs), con el marco teórico de la TRS, en las universidades de Paraná, en el período de 2016 a 2018, así como comprender si contemplan posibilidades teóricas y metodológicas de la TRS. A través de una investigación tipo 'estado de conocimiento', se utilizaron las herramientas de búsqueda disponibles en el Catálogo de Tesis y Disertaciones de la Coordinación para la Perfeccionamiento del Personal de Educación Superior (Capes), con el descriptor / expresión 'Representaciones sociales'. Los resúmenes fueron sometidos a procesamiento de análisis textual por Iramuteq: nube de palabras, análisis de similitud y clasificación jerárquica descendente. Los resultados fueron analizados con base en la hermenéutica filosófica (Gadamer, 1998), lo que permitió interpretaciones e inferencias con el apoyo teórico de la TRS (Moscovici, 1978; 2003). Del análisis léxico se destacaron el docente, el estudio y la escuela, cuyo foco está en el docente, el alumno y la escuela, ya sea porque es el locus de la investigación, bien porque es el lugar donde los estudios pueden incidir en entendimientos / transformaciones de la realidad escolar, pues inferimos que los estudios anclan representaciones sociales desde el contexto escolar. El corpus presenta aspectos teóricos y metodológicos de la TRS, territorios de pertenencia y foco en el docente. Aunque existan debilidades como: falta de articulación teórica con otras áreas del campo educativo, incluidas las políticas educativas y la formación del profesorado, poca diversificación de los instrumentos de recolección de datos y pocas inferencias que revelen anclas. Sin embargo, inferimos los esfuerzos de los investigadores por avanzar cualitativamente.

Palabras clave: teoría de las representaciones sociales; políticas educativas; formación de los profesores.

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Introduction

The Theory of Social Representations (TSR) has gained prominence in research in the field of education, especially since 1996, due to its wide range of possible analyses (Ogliari & Ens, 2019). This theory has shown vitality and great potential, and research carried out in Brazil has contributed to the development of the theory itself, as pointed out by Jodelet (2011a). This research has been carried out in different areas of knowledge, and has made it possible to understand and respect the common sense knowledge constructed by individuals in the multiple objective and subjective relationships they maintain with other subjects and with the social group to which they belong, as it is sustained by the effects of the types of communicative experiences shared on the values, attitudes, and objects (physical or otherwise) that surround their experiences.

In Brazil, the consolidation of research on social representations (SR), according to Santos (2013, p. 14, our emphasis), is related to the

[...] the creation of study and research groups, mainly "within the postgraduate programs *stricto sensu* (master's and doctoral)"; the exchange and collaboration of foreign researchers such as Jodelet, Wagner, and Moscovici himself; the existence of an international communication network on social representations; and the debates and exchange of experiences between these study and research groups at national and international scientific events on the theory of social representations.

Gonçalves and Sousa (2015, p. 263), based on Jovchelovitch (2007), state that "[...] it is from social mediations that social representations emerge, understood as strategies that subjects develop to face the world [...]", since "[...] social representations express the knowledge that a group produces and which gives them their social identity [...]", given the relationship between self and other and object. Social representations [...] express the knowledge that a group produces and which gives it its social identity [...]", since the relationship between self and other and object, as well as the inseparability between this relationship and the context, are fundamental to the constitution of social representations. The authors go on to explain

[...] the Moscovite theory of social representations is based on the inseparability between subject and society, the internal and the external, the subject and the object of representation; on the reciprocity between psychological and social phenomena; on the assumption that reality is constructed symbolically; and on the relevance of the social, material, and ideational context in which the subjects' actions take place (Gonçalves & Sousa, 2015, p. 265).

We can say, focusing on a psychosocial analysis of research in the field of education, that it has begun to point to the power of social communication when based theoretically and methodologically on the Moscovici theory of social representations, which has contributed greatly to a better understanding of the phenomena that occur in this field (Gilly, 2001).

This proposal is based on the work *La psychanalyse, son image, son public* (Psychoanalysis, its image and its public), published in 1961, in which Serge Moscovici presented his analytical, methodological and theoretical proposals that underpin the theory of social representations.

The SRT constructed by Moscovici (1961, 2012), based on the propositions of Emile Durkheim (2001) on the differences between collective and individual representations, established the supremacy of the collective over the individual, in other words, a collective representation would act in a coercive way over an individual representation, perceived as something ephemeral and fleeting, incapable of influencing the collective, because, according to Durkheim (2001, p. 609), if the representation:

[...] it is common to all because it is the work of the community. If it doesn't bear the mark of a particular intelligence, it's because it's created by a single intelligence where all the others come together and in a way feed off each other. If it has more stability than sensations or images, it's because collective representations are more stable than individual ones, because while the individual is sensitive to even small changes in his internal or external environment, only sufficiently serious events can affect the mental balance of society.

In contrast to Durkheim, Moscovici (2001, p. 62) emphasizes the dynamic nature of individual representations, stating that they are "[...] simultaneously constructed and acquired". In this way, Moscovici disagrees with Durkheim's thesis, both in terms of the pre-established, predictable view of individual representations and in terms of the constant nature of collective representations, since these do not serve descriptive analyses of social phenomena. Based on this reading of the dynamics of the social versus the individual, Moscovici proposes a change of perspective to explain the process of the emergence and constitution of social representations: an analytical approach to representations, instead of the descriptive plan that reduces them to a mere reflection of the collective.

Because of these conceptual differences, Moscovici (2003, p. 49, emphasis added) clarifies the use of the term "social" in the designation he uses for representations by stating:

[...] if, in the classical sense, collective representations are an explanatory tool and refer to a general class of ideas and beliefs (science, myth, religion, etc.), for us, they are phenomena that need to be described and explained. They are specific phenomena that are related to a particular way of understanding and communicating - a way that creates both reality and common sense. It is to emphasize this distinction that I use the term 'social' instead of collective.

Therefore, for Moscovici (2003), representations are social and are constructed/acquired by the subject in relation to other subjects and to the object of representation, the understanding of which requires taking into account the social, historical and cultural context of the subject's experiences. In this sense, representations can be restructured and subject to change, depending on communication, since it is through and with them that people share and interact with each other, qualifying them as social agents and mediators.

Representations, as Moscovici (2003, p. 52) points out, "[...] restore the collective consciousness and give it form, explaining objects and events in such a way that they become accessible to everyone and coincide with our immediate interests [...]", because

[...] they are almost tangible entities. They circulate, intersect and crystallize incessantly through a speech, a gesture, an encounter, in our everyday universe. Most of the social relationships established, the objects produced or consumed, the communications exchanged, are impregnated with social representations. We know that social representations correspond, on the one hand, to the symbolic substance that enters into the elaboration [... of reality] and, on the other, to the practice that produces said substance (Moscovici, 1978, p. 41).

These representations enable the subject to make familiar what is unfamiliar, in which they translate the sum of their experiences and memories, since these are dynamic and not inert. To explain how memory acts on these occasions, Moscovici (2003, p. 78) proposed two processes: anchoring and objectification, in order to clarify how they work:

The first [... of anchoring] is directed inwards, it is always placing and removing objects, people and events, which it classifies according to type and labels with a name. The second [... of objectification] is more or less directed outwards (towards others), it takes concepts and images from them in order to bring them together and reproduce them in the outside world, to make things known out of what is already known.

The fruitfulness of Moscovici's proposal, highlighted by Jodelet (2011a), its scope and impact on different fields of knowledge (Philogene, 2011), were aspects analyzed by Jodelet (2011b), as well as the movement of its introduction and repercussions in our country (Jodelet, 2011c).

In the analysis of academic production in Brazil, various efforts have been made to identify and qualify the production of those who defend their dissertations, these and other publications in the field of social representations in education, such as: Alves-Mazzotti (2008); Duarte (2010); Menin and Shimizu (2005); Menin, Shimizu, and Lima (2009); Sousa, Bôas, and Novaes (2011); Gonçalves and Sousa (2015); Ens (2018), among others. In addition to highlighting the potential of SRT for explaining and understanding the knowledge and practices of a given social group, these researchers also warn of some methodological problems in the research they studied, as well as the lack of depth in some of them.

Therefore, we believe that it is necessary to investigate whether these problems identified in the research that adopts the SRT have been overcome by a greater appropriation of the potential of this theory, in other words, whether the research has advanced and shows a greater appropriation of the theoretical-methodological possibilities of using the SRT in its procedures, analyses, conclusions and suggestions. Some of the difficulties pointed out by these authors stem from the fact that: few studies verify the anchoring of representations; almost none investigate the relationship between common sense knowledge and school knowledge; most studies prioritize the description of representations to the detriment of the processes of their origin and the maintenance or otherwise of these representations; poor/incomplete characterization of the research subjects, among other difficulties.

In continuity with this research, we carried out a bibliographic, documentary and exploratory investigation, with the aim of outlining and analyzing the mapping of research completed with the aim of producing theses and dissertations, in *stricto sensu* postgraduate courses in Education in the State of Paraná, from 2016 to 2018.

Research paths and characterization of productions

In this study, we examine the theses/dissertations produced by students from PPGes in Paraná that use the theoretical framework of Social Representations. Our goal is to understand whether the theses/dissertations produced are organized in a way that takes into account the theoretical and methodological possibilities of SRT. Continuing the research already carried out by other researchers, we aim to present the specificity of this production in the state of Paraná/Brazil.

The choice to map theses and dissertations defended in PPGes in Paraná is based on the guidelines of Romanowski and Ens (2006) that studies to understand a state of knowledge make it possible, based on the analysis of these productions, to obtain information to critically design what has been produced and contribute to understanding the use of a theoretical contribution and the points silenced by researchers, in this case on social representations of aspects anchored in education.

This research had two phases, and this text will focus on the second. However, they are interrelated and that is why we consider it essential to point out that the first phase was based on the mapping of theses and dissertations produced in PPGes, through exploratory research in the Catalogue of Theses and Dissertations of the Coordination for the Improvement of Higher Education Personnel (Capes), in Brazil and Paraná, using the contribution of TRS with the search descriptor "Social Representations", in all fields of knowledge and especially in the field of Education, from 1987 to 2018. In the second phase, since we believe that the last review of theses/dissertations with this focus was carried out by Gonçalves and Sousa (2015), we studied theses and dissertations produced between 2016 and 2018, in order to continue the research work already done by other researchers to understand the production in this field, with a focus on the state of Paraná.

The mapping carried out in the first phase made it possible to detect that, in Brazil, the first theses and dissertations using the theoretical and/or methodological contribution of SRs were defended in 1996 and totaled 8,044 theses and dissertations by 2018, 1,784 of which were in the field of education. This was followed by Psychology (587), Nursing (523) and Sociology (427). In Paraná, production began more intensively around the 2000s and by 2018 there were 353 theses and dissertations, 104 of which were in the field of education.

This data reinforces that the field of education represents a significant portion of the theses and dissertations in RS defended in Brazil and Paraná. The mapping carried out in the first phase contributed to the analysis, understanding and inference of the data in the second phase, as it allowed us to understand the field of research in social representations in Brazil and Paraná with its research institutions, PPGes, researchers, lines of research and objects of study.

In the second phase of the research, we expanded our understanding of the mapping and characterization of the theses and dissertations produced, taking into account: the focus of the investigations, the topics, the context in which they took place, the theoretical and methodological possibilities, among other characteristics presented in the abstracts of theses and dissertations in education in Paraná, from 2016 to 2018, which used the TRS. Based on this time frame, we identified 24 works produced in higher education institutions in Paraná, whose abstracts constituted the corpus selected for this phase.

This corpus was systematized and subjected to textual analysis processing using the Iramuteq software[1] (acronym for Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires). The results of the analysis were studied by the researchers and interpreted with the help of philosophical hermeneutics (Gadamer, 1998). For the interpretations and conclusions, we took into account the relationships between the whole - understood here as the available research on SR, as well as the results of the exploratory research carried out in the first phase of this investigation, which quantitatively represent the knowledge of SR research in Brazil and Paraná - and its parts (abstracts of each thesis and dissertation), with the aim of understanding what the theses and dissertations say about SR in Paraná.

In addition to creating the corpus, each abstract was identified in Iramuteq by a command line that included the abstract number (from 1 to 24), the institution where the research was conducted, the master's or doctoral program, and the year of defense. In this way, each abstract was given an identifier that made it possible to link the text segments (Elementary Context Units - ECUs) from the Descending Hierarchical Classification with the characteristics of its author/institution, i.e. one of the command lines used: **** *trab_19_uepg_04 *dout_2017, which identifies the nineteenth work analyzed, the fourth of UEPG, Ph.D., whose thesis was defended in 2017, for example.

When a linguistic corpus is processed by Iramuteq, using the software's subroutines it is possible to: (1) the construction of a 'word cloud', derived from a simpler analysis and culminating in a graphical representation according to the frequency of words; (2) obtaining the strength of the relationship/connection between words with the 'similarity analysis', a program that identifies the co-occurrences between words that occur together in the corpus, indicating the respective connection between them; and (3) 'descending hierarchical classification', which makes it possible to analyze classes of text segments; and (3) "descending hierarchical classification", which makes it possible to analyze classes of text segments that have both a similar vocabulary to each other and a different vocabulary from the text segments in the other classes (Nascimento & Menandro, 2006; Camargo & Justo, 2013a; 2016). Through the formation of these classes, derived from the Descending Hierarchical Classification, we categorized the analyzed corpus, after identifying the main characteristics present in the text segments in each of the abstracts of the theses and dissertations studied, by the "colored corpus".

Table 1 shows the institution of origin, the number of abstracts per category (thesis/dissertation) and the number of supervisors involved in the development of these productions in education in Paraná during the selected period.

The three institutions that have historically stood out in the academic production of theses/dissertations on SR in education in Paraná are PUCPR, UEPG and UEM, followed by the Tuiuti University of Paraná, which has begun to gain visibility in recent years. Despite the quantitative increase of theses/dissertations, we found that only four programs *stricto sensu* in Paraná are dedicated to educational research with the support of SRT, concentrated in a few supervisors of research groups.

Table 1. Number of abstracts of theses and dissertations produced in the PPGEs/Paraná selected to make up the research corpus (2016-2018).

Institution	Dissertations	Thesis	Total	Advisors
PUCPR	04	04	08	01
Tuiuti	04	00	04	01
UEPG	04	01	05	03
UEM	07	00	07	03
Total	19	05	24	08

Source: The authors, based on consultation of the Capes Catalog of Theses and Dissertations (Brazil, 2019).

The theses and dissertations analyzed deal with a variety of topics, but 11 of them focus on teacher training (initial and/or continuing), which indicates that the authors are concerned with understanding everyday school life, school educational practices and, above all, the necessary training of professionals, with the theoretical support of educational policies to work in schools.

In terms of the type of methodological approach, there are mentions of a mixed type of research, with 'qualitative' aspects; there are references to the use of software (Iramuteq, Alceste and EVOC) and possible analyses based on it, such as similarity analysis and content analysis. There are also references to research tools, with questionnaires and semi-structured interviews being the most frequently mentioned.

Another methodological tool used in this study was similarity analysis. Camargo and Justo (2013a, p. 6) explain that this "[...] type of analysis is based on graph theory and makes it possible to identify co-occurrences between words, and its result provides indications of the connection between words, helping to identify the structure of the representation". The choice of this analysis made it possible to interpret the strength of the connection between the words present in the textual corpus (Figure 2).

By reading the graph of the maximum tree, we performed a similarity analysis (Figure 2). From this reading, we can see the existence of five blocks ("teacher", "study", "theoretical", "instrument" and "analysis"), delimited by halos that represent the proximity and the strength of the connection between their words in the texts and that constitute categories of analysis. The blocks are interrelated, although they have different strengths of connection and are understood in an integrated way.

The first block ('teacher') is associated with the elements 'school' (f = 08) and 'context' (f = 04), which shows that the theses and dissertations focus their research on the teacher in the school context. It is worth noting that 'school' is related to 'problem' (f = 05) and 'problem' to 'indiscipline' (f = 03), which reveals an attempt to understand the difficulties that influence teachers' work in everyday school life. In addition, 'school' is related to 'rural' (f = 07), which allows us to conclude that the theses and dissertations consider the territories in which the educational institutions are located, which is reinforced by the relationship between 'teacher-context' (f = 04).

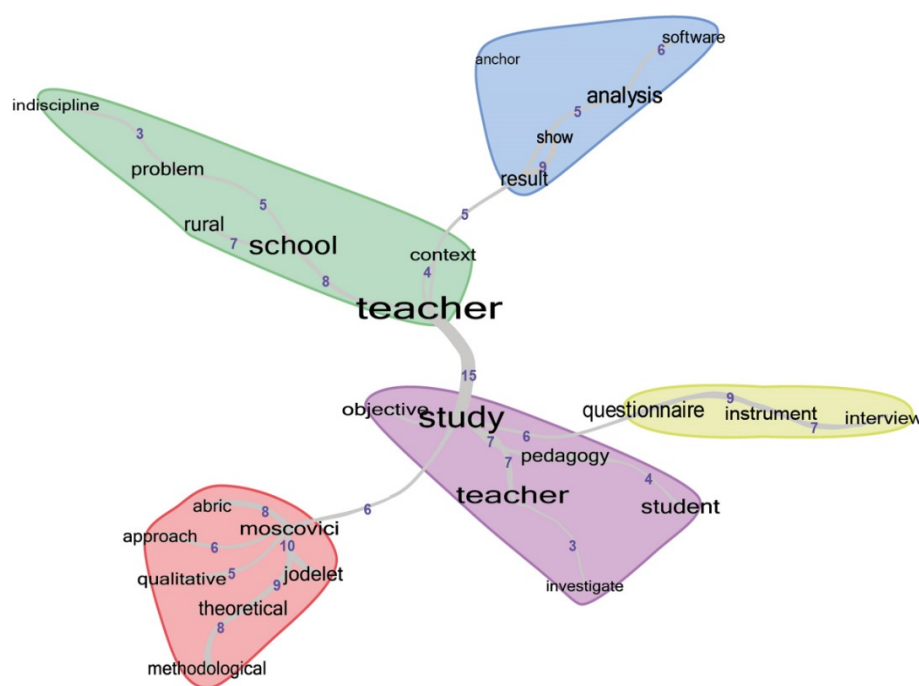


Figure 2. Similarity analysis based on the processing of the text corpus using Iramuteq software. Source: The authors (2020).

Professor shows a strong connection with 'study' (f = 15), which demonstrates the link between the two blocks ('teacher' and 'study'). It is clear that the focus of SR research confirms studies on teachers, with emphasis on initial training, since there is a link between 'study-pedagogy' (f = 07) and 'pedagogy-student' (f = 04), and for continuing training through the link between 'study-teacher' (f = 07) and 'teacher-research' (f = 03).

The two blocks analyzed so far allow us to point out that the studies analyzed establish a relationship between 'teacher', 'study' and 'school', as the connection between them is evident in the maximum tree graph in Figure 2. These interconnected elements in the first and second blocks suggest that the studies carried out have tried to take into account the complex reality in which the work of teachers is carried out in schools, their training and their appreciation, as indicated by Marcelo García (1999), Nóvoa (1995), Ens, Ribas, Oliveira and Trindade (2019), among others.

By highlighting this relationship, we conclude that the theses and dissertations, in their conceptions of teacher education, move away from the perspective of technical rationality, in which the teacher is understood as an applicator of pre-established techniques whose professional performance is independent of factors of any other nature, and seek to unravel the complexity of teacher education in relation to school reality. Technical rationality considers that "[...] professional activity consists in the instrumental solution of a problem through the rigorous application of a scientific theory or technique [...]" (Schön, 1983, p. 21), which is therefore external to the school context and alien to teachers, which is far from the related elements found in this study.

For Zeichner (1993), defending a perspective of teachers as reflective practitioners leads the author to reject a view of top-down approaches to educational reform in which teachers passively apply plans developed by other social, institutional, and/or political actors. The elements linked so far indicate that this is the perspective adopted by the research.

Understanding the school as a space for research that reveals aspects of teacher education means being in self-education, whether initial or continuing, that is relevant to understanding teacher education. In this way, research looks at the school "from the inside" rather than "from the outside".

On the basis of the aspects derived from the analyses, we agree with Pimenta (1997, p. 12) that

[...] training involves a twofold process: that of the self-education of teachers, based on the constant re-elaboration of the knowledge they acquire in their practice, confronting their experiences in school contexts; and that of training in the school institutions in which they work. For this reason, it is important to make the school a place of work and training, which implies democratic management and participatory curricular practices, encouraging the creation of continuous training networks, the first level of which is initial training.

By considering "teacher" in connection with "study" ($f = 15$) and "school" ($f = 08$), the theses and dissertations admit that teachers do not simply reproduce the contents of their training, but are able to rework their knowledge when confronted with experiences in schools, in a permanent training process. This could be a possibility for further research in RS, as it reveals the comparison between common sense knowledge and school knowledge, one of the weaknesses pointed out in the research and which justifies this study.

Psychosocial research using social representations, by giving voice to the subjects and respecting the common sense knowledge of the social group to which they belong, becomes an approach that captures these complex realities and formative processes, highlighting what Tardif (2012) calls "experiential knowledge". This knowledge, although social, can be captured through a psychosocial analysis, as Silva and Reis (2007) have done. From this perspective, the processes of anchoring and objectification of social representations of this knowledge have been studied.

As a result of the specificity of the 'study' block, two others emerge, related to the theoretical-methodological aspects of the investigations and the research tools. In this sense, the link between 'study-moscovici' ($f = 06$), 'moscovici-jodelet' ($f = 10$), 'moscovici-abric' ($f = 08$) shows the main theoretical frameworks used in the theses and dissertations. The links between 'study-questionnaire' ($f = 06$), 'questionnaire-instrument' ($f = 09$) and 'instrument-interview' ($f = 07$) indicate the research instruments and procedures most used by researchers. We didn't find a great diversification since these correspond to Brazilian researchers' associations with the structural dimension (Abric) of the SRT.

The study and theoretical blocks show a direct relationship of connectivity through the relationship between the "study-Moscovici" elements ($f = 06$). This connection reveals Moscovici as a reference for the works since the author established the conceptual pillars of the TRS. There is a connection between 'moscovici-abric' ($f = 08$) and 'moscovici-jodelet' ($f = 10$), which shows two approaches to SRT based on Moscovici's foundations: the processual approach to SRs (Abric, 2001b; Jodelet, 2009) and the structural approach of Central Core Theory (Abric, 2000). It is worth noting that the strongest connection is with 'moscovici-jodelet' ($f = 10$), because she is the researcher who continued the theoretical development of SRT from a Moscovite perspective, and therefore has a high connection between them. It can also be explained by the use of the researcher's definition of social representations.

The "theoretical" block allows us to visualize the specificity of the theses and dissertations in the use of theoretical references specific to SRs, with few links to other references and the absence of others, such as educational policy, teacher training and didactics, for example, despite the fact that these productions cover these topics and include these references in the body of the theses and dissertations. The abstracts present the theoretical framework that defines the analysis, i.e. the SRs.

The fact that there are few references to theoretical contributions from other fields of educational research in the abstracts implies that the authors prioritize the theme of social representations to the detriment of the relationship between references. We believe that this relationship could be presented more strongly, as the TRS allows this approach due to its transversal nature.

The block "analysis" is connected to the block "teacher" by the elements "context-result" ($f = 05$). This block influences the analysis of the theses and dissertations by considering the context of the teacher and the school in their results. This inference is strengthened when we observe the link between 'result-reveal' ($f = 09$), 'reveal-analysis' ($f = 05$) and 'analysis-software' ($f = 06$), which allows us to infer that the teacher, the school, their studies and contexts, articulated directly in the graph in Figure 2, are revealed in the results of the analyses by means of software, since they are connected to each other. The link between 'reveal-anchor' ($f = 03$) is the weakest in this block, which indicates that this relationship is not so evident in the summaries, but seems to reveal anchoring from the school. We infer that in this block the focus is more on analyzing the results of the software than on understanding the anchors.

In order to confirm and deepen the understanding of this study, as a result of the Descending Hierarchical Classification (DHC), the corpus (24 abstracts/initial context units - ICUs) was divided into 258 CEUs (text segments/elementary context units), of which 215 were used to build six thematic classes, forming two groups (A and B). Thus, we can see that there was a high utilization (83.3% of the CEUs), which is an acceptable percentage since only 16.7% of the CEUs differed from the other classifications (Figure 3).

In CHD, text segments are classified "[...] according to their vocabularies, and the set of vocabularies is broken down based on the frequency of reduced forms (words that have already been lemmatized). This analysis aims to obtain classes that have similar vocabularies to each other and different vocabularies to other classes" (Camargo & Justo, 2013b, p. 516).

Figure 3 shows the percentage usage of text segments (UCEs) in each class and provides a prior contextualization of the lexical world to which the words belong, allowing the characteristics of each class to be identified, with the most important words in each class. The chi-square (χ^2) next to the word indicates its representativeness within the class, i.e. the larger the chi-square, the greater the representativeness of the word.

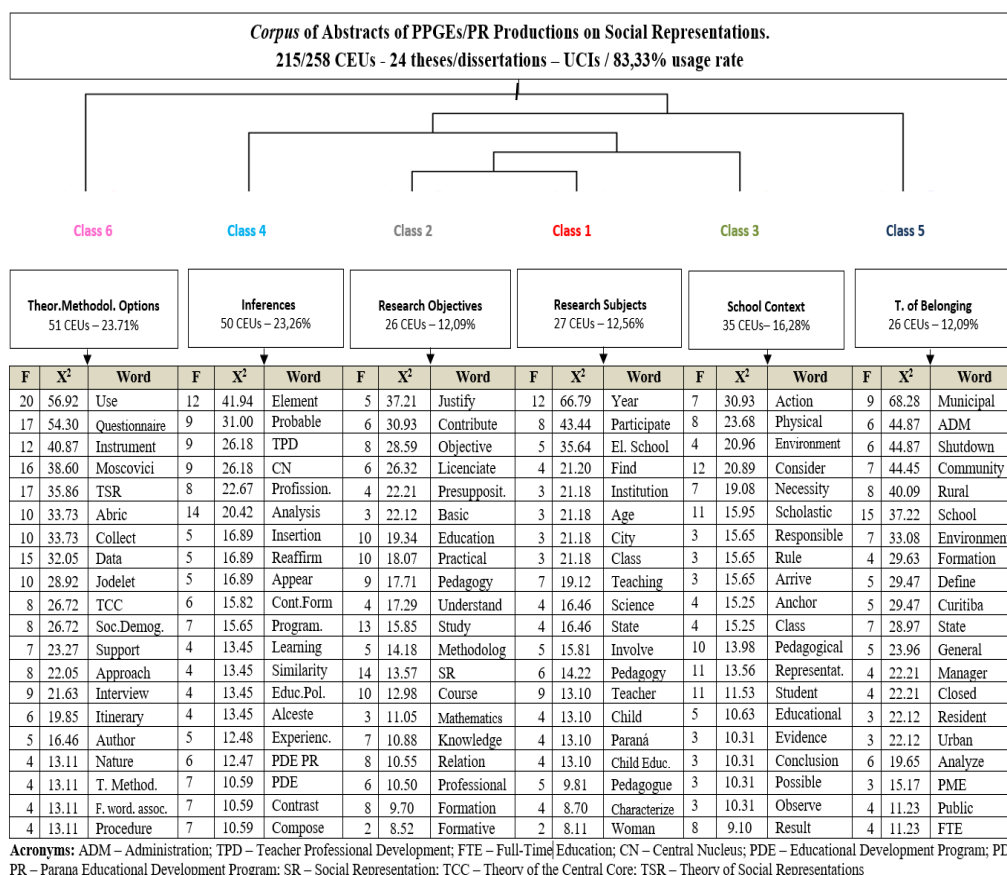


Figure 3 - Descending Hierarchical Classification obtained based on the processing of the text corpus by the Iramuteq software, containing X^2 and frequency values. Source: The authors (2020).

From the dendrogram obtained (Figure 3), we can see that the hierarchical structure of the thematic classes (defined by the six classes) was grouped into two blocks (A and B). Block A includes the lexicons of class 5 ("Territories of Belonging"), class 3 ("School Context"), class 1 ("Research Subjects"), class 2 ("Research Objectives"), and class 4 ("Inferences"), while block B includes the lexicons of class 6 ("Theoretical-Methodological Options") and covers the whole of block A.

The denomination of each class was built based on the study of all the abstracts that made up the corpus of this study, and the reading of the text segments of each class formed by Iramutec took as a starting point the TRS and the exploratory research data resulting from the first phase of this research. When processing the data, the software highlighted the strongest and most representative words of each class in the corresponding text segments, as well as providing access to the text segments of each subject in the classes, which made it possible to make inferences about their content.

The Descending Hierarchical Classification supported and expanded the interpretative analyses carried out using the Word Cloud and Similarity. In this sense, class 6, made up of 23.71% of the text segments analyzed and therefore the largest class, indicates the theoretical and methodological relationship chosen by the authors of the theses and dissertations that served as the pragmatic foundation for the development of their research. From this interpretative perspective, it can be said that the authors of the theses/dissertations examined are concerned with demonstrating the choices made, since most of the text segments are related to this demonstration, especially the productions carried out in the sphere of the PUCPR and UEM programs, since the term 'use' appears with the highest χ^2 value for the class, which indicates its greater power of representation in the class.

As an example, we present the text segment with the highest score that contributes to the understanding of class 6, which we call "Theoretical and methodological options": "[...] we 'used' as 'theoretical-methodological support' the theory of social representations 'proposed' by 'Serge Moscovici', focusing on the 'theory of the central core', and we used a 'multi-methodological methodology', applying as 'procedure' to generate the 'data' the free association of words with an 'inducing term' and a semi-open 'questionnaire' and another socio-demographic one" (Abstract No. 2, PUCPR, Master's Degree, 2017). The words highlighted in the transcript excerpts underline those with the greatest strength within this text segment in articulation with this class (Figure 3).

Class 5 seeks to characterize the "places," the "territories," the communities around the school and their specificities, as well as to identify the sphere of governance (state, community, rural, urban). In this sense, we named this class "territories of belonging", which was found in 12.09% of the text segments belonging to the analyzed corpus. This class allowed us to understand that the summaries try to locate the school institution as part of a physical space, with singularities, influenced by aspects external to it. We conclude that this may be the whole/part relationship that articulates the hermeneutic interpretation, with the spheres of belonging playing an important role in the TRS, with analyses focused on the subjective (the school unit itself), the intersubjective (the relationship between schools, such as urban and rural schools, for example) and the transsubjective (the educational policy established in Paraná), although the transsubjective sphere is not so explicit in the summaries.

Of the text segments extracted from the analysis, the one with the highest 'score' in class 5 was: "[...] Considering these aspects, we 'defined' as a 'general objective to analyze' the impact of the 'closure' of 'rural municipal schools' in the municipality of Almirante Tamandaré through the social representation of 'residents', the subjects of the research are 09 'residents' of the 'communities' surrounding the 'closed rural schools' in the 'municipality'" (Resumo nº 23, UTP, Master's degree, 2016). We have noticed that this characteristic is more pronounced in the productions related to the UTP and PUCPR programs.

The text segments that make up class 4 try to show aspects related to the analyses and considerations made in the theses/dissertations, evoking words such as "reaffirm," "appeared," "inferred," "iramuteq," "similarity," "analysis," and "thesis," among others. In this sense, we conclude that it is a class that highlights elements of analysis, as well as the researcher's beliefs that allow him to make his considerations and conclusions. Class 4 represented 23.26% of the text segments and we have renamed it "inferences", the second largest class formed. This shows that, after the theoretical and methodological options represented by class 6 (Figure 3), inferences have taken center stage in theses/dissertations on RS in Paraná, in the field of education, especially in PUCPR productions. This can be seen in the text segment: "[...] they also consider that it provides 'professional' valorization through 'progression' in the teaching 'career' to 'reaffirm' the 'analysis' processed with the 'iramuteq' software' and prove the relevance of the 'elements' located in the

'probable central nucleus' of social representations about the 'Educational Development Program of Paraná'". (Resumo nº 6, PUCPR, Master's Degree, 2018).

This segment of text also shows an inference that links the TRS to the educational policies implemented in Paraná, such as the PDE and the State Teachers' Career Plan. From the analysis of the words that make up Class 4 (inferences) of the CHD, we highlighted "educational policies" and found that the frequency with which it appears in the "corpus" is low, since it is cited only 4 times out of a total of 9,084 occurrences and does not acquire relevance in the summaries.

The educational policies implemented can anchor social representations and, because of this important possibility, they could be further explored and articulated in the summaries analyzed, with a view to understanding what remains and what changes in the context of practice, which can show processes of anchoring and objectification.

Ball and Bowe (1992), cited by Mainardes (2006), state that

[...] the context of practice is where policy is subject to interpretation and re-creation and where policy produces effects and consequences that can represent significant changes and transformations in the original policy. For these authors, the key point is that policies are not simply 'implemented' within this arena (context of practice), but are subject to interpretation and then to being 'recreated' (Mainardes, 2006, p. 53, emphasis added).

Considering that the context of the school (practice) is evident in the summaries analyzed and that the educational policy that guides teacher training can be "transformed" when it is implemented, we understand that the summaries could focus more intensely on the articulation with educational policies. This could give the summaries a more in-depth interpretive character, articulated with the spheres of belonging described by Jodelet (2009, p. 695).

From the text segments that make up class 3 (16.28% of the total), we can conclude that it focuses on the context of the object of study studied in the theses/dissertations, especially the school context. Class 3 is related to the school context and everything that is part of it: teachers, pedagogical action, professional development, teacher training within the school and its difficulties. This seems to indicate that the theses/dissertations dealing with SR in Paraná are aware of the importance of the school space as a site of research and knowledge production, and credit the school space and its practices with anchoring the social representations studied, which confirms what we pointed out in the similarity analysis. In this sense, we have named this class "school context" and we present a segment of text to illustrate it: "'Actions' aimed at improving, 'developing' and even 'correcting' 'possible problems' arising from inadequate initial training 'processes' have been investigated and the 'results' of this research 'point' to the 'need' to 'consider' the school space as a basis" (Abstract No. 3, PUCPR, PhD, 2018).

Class 2 expresses the intentionality of the research proposed in the theses/dissertations, sometimes with its justification. We refer to the definition of "research objectives". This class represented 12.09% of the analyzed text segments, which indicates that researchers try to show what they intend to achieve with their research. The definition of the research objectives is fundamental and fundamental for the researcher to carry out his research. The analysis carried out shows that this is one of the points observed by the authors in the theses/dissertations included in this study, which are clearly evident in the productions related to the UEPG and UEM programs. We present a part of the text related to this class: "[...] we 'justify' this 'study' by the 'need' to understand the conceptualization of 'bullying' by the 'academics' of this 'course, future teachers', aiming to 'contribute' to the 'training' of 'future professionals' of 'education' by expanding their 'knowledge' related to the topic, considering that the curricular structure of this 'course' does not yet address it in a direct 'way'" (Abstract No. 14, UEM, Master's Degree, 2017).

Last but not least, Class 1, called "Research Subjects", identifies the subjects of the theses/dissertations, sometimes indicating their age, length of service, positions held in the educational institution, territories in which they live or work, among others. Like Class 2, which indicates the research objectives, Class 1 contains an important and essential element of the TRS, which is the characterization of the research subjects. Thus, it seems that the theses/dissertations, especially those related to the PUCPR and UEM programs, present this characterization or at least take care to present some outline characterizing the subjects of investigation, which can be verified through the text segment: "[...] 'participated' in the 'study' 50 teachers or 'educators', most of them 'women', over 41 'years old' and with at least 10 'years' of service in the public network of the State of Paraná, 'because' in order to 'carry out' the Paraná Educational Development Program, the teacher or 'educator' must reach at least Class 8 of 'Level' II of the 'Teaching Career' Plan of the 'State'" (Resumo nº 6, PUCPR, Master's Degree, 2018).

From the interpretations made so far, it has been possible to see that the abstracts of the theses and dissertations analyzed are structurally coherent and that their authors are attentive in trying to overcome the weaknesses pointed out by the various researchers who have tried to understand the state of knowledge of RS research. However, they do not yet allow us to draw conclusions about the quality of the construction of the classes that emerged from the CHD in this research. This will require new investigative efforts in order to perceive the rigor in the characterization of the subjects, the definition of the objectives, the detection of the anchoring processes, the quality of the inferences that go beyond the mere description of social representations, among others.

Final considerations

This "state of knowledge" research focused on analyzing the abstracts of theses and dissertations in education that used the TRS as a theoretical and/or methodological basis. The methodological path considered two phases of research: the first, linked to the mapping of productions, carried out through the Capes Catalogue of Theses and Dissertations, in the period from 1987 to 2018, in addition to considering the national production and that of the State of Paraná. This mapping made it possible to point out, as in other research, the quantitative growth of productions, with significant emphasis on the educational field, which concentrates most of the theses and dissertations, with theoretical and methodological shortcomings. The second phase, the subject of this text, focused on the abstracts of 19 dissertations and five theses in PPGEs in Paraná, produced between 2016 and 2018, which were subjected to textual analysis using Iramuteq software: word cloud, similarity analysis and descending hierarchical classification.

The analysis of the abstracts allowed us to understand the structure of the dissertations analyzed. We found that the focus of the research is on the teacher, the study and the school, especially teacher education, as well as the consideration of the school context. These abstracts explain the purpose of the research, the school context, the territories to which the institutions and subjects belong, as well as the theoretical and methodological options adopted and the conclusions drawn, which characterizes an adequate systematization of scientific work.

The textual analyses carried out by means of word cloud, similarity analysis and CHD were complementary and made it possible to identify similar aspects and others that differed due to the specificities of each work.

In terms of the theoretical contribution made explicit in the abstracts, the TRS is mentioned almost exclusively, with almost no articulation with other theories in the educational field, which indicates that the productions do not include theoretical approaches from other areas of the educational field.

In this sense, we found that areas such as educational policy, teacher training and didactics are not relevant in the abstracts studied, as they are hardly mentioned. From this finding, we conclude that the abstracts of research on social representations in the field of education need to highlight educational policies and their theoretical domains more strongly in order to reveal more in-depth analyses, including in the sense of detecting possible processes of anchoring and objectification based on the context of practice in which the policies are implemented and transformed. This articulation could make the summaries more relevant by highlighting educational policies as spheres in which SRs belong.

With regard to teacher training, although its theoretical reference was not mentioned, it was possible to infer a move away from technical rationality and a rapprochement with perspectives that consider the school as a training space. This perspective understands that when teachers work and encounter the reality of the school, they resignify their knowledge in a continuous process of training, a process that can reveal interesting aspects of RS in the sense of comparing common sense knowledge (such as experiential knowledge) with school knowledge.

The field of these investigations still needs to be explored in greater depth, as it is necessary to analyze these productions beyond the abstracts, in a third phase of investigation. It would be possible to understand the full texts on the basis of the theoretical and methodological options and the articulation between the possibilities of the TRS and the ways in which it unfolds in the research, in other words, through the full texts. In short, it is necessary to analyze how the theses/dissertations describe the subjects and what relationships they present between the subjective, the intersubjective and the transsubjective, as well as to understand how the school reality is considered and how they credit the school with anchoring the social representations and, among other things, what elements were considered to support the conclusions constructed.

Therefore, the research carried out so far has made it possible to find some answers, but it is necessary to continue searching for others, with the aim of always improving the research processes that have not yet been carried out.

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