

Qualitative Research Method in Türkiye: A Systematical Overview of Doctoral Theses in Educational Sciences

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ABSTRACT

This study provides a systematic overview of doctoral theses in the field of educational sciences in Türkiye that use qualitative research methods. To ensure both comprehensiveness and accessibility, the national theses database was reviewed. A total of 491 doctoral theses aligned with the qualitative research paradigm were identified through keyword searches. The data were analyzed using content analysis techniques, focusing on various aspects such as research design, sampling methods and groups, data collection tools, data analysis methods, trustworthiness criteria, the researcher's role, and presentation of findings. The results showed that while certain elements—such as qualitative design types, sampling strategies, and data analysis techniques—were commonly used, other components received less attention. Notably, the presentation of trustworthiness and the role of the researcher were often vague or missing, indicating inconsistency across the theses. Most of the studies lacked sufficient detail regarding the methodological rigor expected in qualitative research. Overall, the findings suggest several methodological shortcomings and a need for improvement in the effective and consistent use of qualitative research methods in doctoral theses in the field of educational sciences in Türkiye. The study emphasizes the importance of providing detailed methodological information and adhering to qualitative research standards to enhance the quality and credibility of future research in this field.

Keywords: Qualitative research method, systematical review, educational sciences, descriptive analysis.

Introduction

Science establishes evidence-based connections with reality, creating reliable knowledge (Sönmez, 2011). It systematically explores natural and social phenomena, testing cause-and-effect relationships (Çakmak et al., 2015; Usta, 2012). Given its evolving nature, universities play a key role in advancing knowledge and training researchers. Doctoral programs at universities are vital for training scientists in independent research, problem-solving through scientific methods, and thorough data analysis (Keskinçilic & Ertürk, 2009; Şenyurt & Özer Özkan, 2017). These programs contribute to knowledge production, influencing practices across fields by generating, interpreting, and reconstructing knowledge (Keskinçilic & Ertürk, 2009). Research in the field of educational sciences, as a branch of social sciences, has traditionally employed a positivist and quantitative approach to address a wide range of educational issues (Türnüklü, 2001). However, limitations in depth and interpretation have driven researchers toward qualitative methods, such as observation and interviews (Yıldırım, 1999). Qualitative research methods have been increasingly utilized in educational sciences, complementing the predominant quantitative approaches. These methods offer a comprehensive understanding of social phenomena by exploring the experiences and perspectives of individuals in natural settings. The growing adoption of qualitative methods in Türkiye's educational sciences literature is evident, although issues remain in validity, reliability, design, sampling, and analysis (Karadağ, 2010; Özdemir, 2010). This study aims to provide a systematic overview of the application of qualitative research methodologies in doctoral theses within the field of educational sciences in Türkiye.

The Theoretical Framework

Qualitative research is a methodological approach aimed at understanding human behaviors, perceptions, experiences and emotions within their natural contexts. Unlike quantitative research, which seeks to generalize findings through numerical validation, qualitative research prioritizes the interpretation of meanings, offering rich, in-depth insights into complex social phenomena (Creswell & Poth, 2018; Corbin & Strauss, 2014; Merriam, 2009). Within qualitative research, several methodological designs are widely employed, each catering to distinct research objectives. These include case studies, phenomenology, grounded theory, ethnography, and narrative research, all of which focus on capturing individual experiences within specific social, cultural, and educational contexts (Creswell, 2013; Usta, 2012). The

selection of a suitable design depends on the research question and the depth of exploration required. However, conducting qualitative research entails addressing several critical elements to ensure rigor and reliability.

One of the foundational aspects of qualitative research is participant selection, as it directly impacts the credibility and relevance of the findings. Qualitative studies typically employ purposive sampling, ensuring that participants are selected based on their relevance to the research objectives rather than through random sampling methods (Cleary et al., 2014; Lee & Landers, 2022). Unlike quantitative research, which values generalizability, qualitative inquiry prioritizes transferability, ensuring that findings remain contextually relevant while offering insights applicable to similar settings (Prabhu, 2020). To achieve a well-rounded understanding, qualitative researchers employ diverse sampling techniques, such as maximum variation sampling (capturing a wide range of perspectives), homogeneous sampling (focusing on a specific subgroup), snowball sampling (recruiting participants through referrals), and typical case sampling (selecting cases that represent standard experiences) (Daymon & Holloway, 2010; Suri, 2011). The sample size in qualitative research is not predetermined but is instead guided by data saturation, which occurs when no new information emerges from additional data collection (Sandelowski, 1995). This approach ensures that the research produces rich, meaningful insights rather than aiming for statistical representation.

Qualitative research employs various data collection methods to explore participants' perspectives in depth. Interviews, observations, and document analysis serve as primary tools, allowing researchers to gather data through both structured and semi-structured formats (Sukmawati, 2023; Taherdoost, 2021; Yıldırım & Şimşek, 2016). Among these, document analysis plays a crucial role in providing insights from existing materials such as reports, diaries, and archival records, which help contextualize findings. The selection of data collection tools depends on the research design and sampling strategy. Researchers often utilize interview guides, behavior charts, and criteria-based observation notes to structure data collection systematically (Eysenbach & Köhler, 2002). Given the subjective nature of qualitative research, data collection must be conducted with a reflexive approach, acknowledging the researcher's influence on the process. Once data collection is complete, qualitative research focuses on systematically analyzing and interpreting information to extract patterns, themes, and relationships. Unlike quantitative analysis, which relies on statistical computations, qualitative analysis is iterative and

interpretative, emphasizing meaning construction (Maxwell, 2008). The analytical process typically begins with data familiarization, where researchers immerse themselves in raw data through repeated readings. This is followed by coding, where data is categorized into themes based on recurring patterns. Common qualitative analysis techniques include content analysis, thematic analysis, discourse analysis, and constant comparison—each offering distinct ways to synthesize findings (Silverman, 2001; Ezzy, 2002; Leech & Onwuegbuzie, 2007). Researchers apply both inductive reasoning (deriving themes from data) and deductive reasoning (applying theoretical frameworks to data) to ensure a comprehensive, multi-layered understanding of the studied phenomenon (Maxwell, 2008; Merriam, 2009).

Since qualitative research does not rely on traditional measures of validity and reliability, it emphasizes trustworthiness as a means of ensuring rigor (Johnson & Parry, 2015; Lincoln & Guba, 1985). Trustworthiness is evaluated through four key criteria: credibility (accuracy of findings), transferability (applicability to similar contexts), dependability (consistency of results), and confirmability (objectivity of interpretations) (Lincoln & Guba, 1985).

To enhance trustworthiness, researchers employ multiple validation strategies, including:

- Prolonged engagement with participants to ensure deeper insights,
- Member checking, where participants review findings for accuracy,
- Expert review, where specialists assess the research process,
- Thick descriptions, providing detailed contextual information to improve transferability,
- Peer debriefing, where colleagues critically evaluate the study,
- Minimizing bias through researcher reflexivity and methodological transparency (Holloway & Wheeler, 1996).

Among these strategies, triangulation is particularly significant, involving the use of multiple data sources, researchers, theoretical perspectives, or methodologies to cross-validate findings (Streubert & Carpenter, 2011; Patton, 2002). By comparing and contrasting different types of data, triangulation enhances both the reliability and interpretative depth of qualitative research (Patton, 2014). Unlike in quantitative research, where the researcher remains detached from the data, qualitative researchers actively engage in the research process, often becoming a key instrument in data collection and interpretation (Patton, 2014; Tutar, 2023). The researcher's background, personal experiences, and

sociocultural positioning inevitably influence the study, making reflexivity essential to acknowledge potential biases (Willig, 2013). To navigate this subjectivity, researchers clearly define their role and position within the study. Common roles include Participant-Observer, Interviewer, Ethnographer, Documentation Specialist, Data Analyzer, Storyteller, and Counselor, each requiring different levels of involvement and interpretation (Usta, 2012). By maintaining transparency about their positionality, researchers can enhance both credibility and ethical integrity in their work.

Literature reviews show that qualitative methods are widely used in educational research, but there are deficiencies in data collection and analysis processes. Watts et al. (2017) and Stanley and Robertson (2024) emphasize that triangulation techniques are rarely used in qualitative research and that data collection processes are not adequately explained. Kambouri-Danos and Pieridou (2020), and Ulum (2016) determined that epistemological elements are included in most studies, while Demir (2024) revealed that qualitative research usually focuses on a single design. Saban et al. (2010) found that case study design is most frequently used in educational research and interviews are the prominent data collection method. Besides, qualitative research has gained traction in Türkiye's educational sciences, as demonstrated using phenomenological, ethnographic, and case study designs to investigate various educational phenomena (Mertkan & Bayraklı, 2017). Researchers have employed qualitative techniques to explore student expectations and satisfaction with the higher education system (Işık, 2022), as well as the unique challenges faced by qualitative researchers navigating the predominantly quantitative research culture. However, the field still faces obstacles in fully embracing qualitative methodologies, which are often perceived as less rigorous or scientific compared to quantitative approaches. Issues related to research design, data collection techniques, sample selection, and data analysis also impact the research's validity and generalizability. Qualitative research in Türkiye's educational sciences is characterized by the interplay between the individual researcher's identity and the contextual power dynamics that shape the research process. Researchers must navigate a research landscape dominated by the post-positivist paradigm, where qualitative approaches have not yet reached the level of maturity observed in other contexts.

Purpose of the Study

To understand the current state of qualitative research in Türkiye's educational sciences, this study conducted a systematic review of doctoral dissertations completed in

the field. The review examined the methodological approaches, data collection methods, and data analysis techniques employed in these studies. The findings reveal a growing interest in qualitative research, with researchers utilizing various qualitative designs, including phenomenology, ethnography, and case studies. The review also identified common data collection methods, such as interviews, observations, and document analysis. However, the analysis also uncovered significant gaps in the reporting of research methods, with many dissertations failing to provide adequate details on sampling, data analysis, or the researchers' positionality.

The study aims to answer the following research questions:

- What are the descriptive characteristics (university, discipline, year) of the analyzed theses?
- What is the distribution of the analyzed theses in terms of the fundamental parameters of qualitative research methods, including: Design/model employed / Methods of data collection utilized / Role of the researcher in the study / Approaches to data analysis adopted / Measures taken to ensure credibility and reliability of findings / Characteristics of the participants involved in the research?

These questions aim to provide a comprehensive overview of the current use of qualitative methods in doctoral theses within Türkiye's educational sciences, offering insights to guide future researchers. Additionally, this study seeks to advance scientific knowledge in educational sciences by guiding researchers toward more effective and reliable applications of qualitative methods.

Method

Research Design

This study analyzed doctoral theses in educational sciences in Türkiye using qualitative methods through a systematic literature review. Systematic reviews synthesize publications based on predefined criteria relevant to specific research questions (Higgins & Green, 2008). The analysis followed PRISMA3 guidelines, adhering to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses framework (Moher et al., 2009), comprising four stages: identification, screening, eligibility, and inclusion, which are detailed in the following subsections.

Document Analysis

This study is designed based on the document analysis method to examine doctoral theses using qualitative methods in the field of educational sciences in Türkiye. It adopts a descriptive case study approach, aiming to provide an in-depth examination of a specific context.

Document analysis enables systematic organization and interpretation of existing data, facilitating comprehensive answers to the research questions.

Data Sources of The Research

The primary data source for this research is the Council of Higher Education (YÖK) Thesis Center, which serves as the official repository of doctoral theses in Türkiye. Additionally, university libraries and thesis archives were utilized as alternative sources to access unavailable or incomplete theses. The study focused on completed doctoral theses written within a specific timeframe (e.g., 2010–2024) in the field of educational sciences. Theses written in Turkish or English were included in the analysis.

The data collected from the theses was categorized under the following themes: descriptive characteristics such as the university, year, and department of the theses; the qualitative research designs employed, data collection methods, and characteristics of the participants; strategies used to ensure reliability and validity; and data analysis methods applied. Within this framework, the study aims to identify the strengths and weaknesses of qualitative research methodologies used in Türkiye's educational sciences literature.

Data Collection Tool

In the PRISMA identification step, relevant documents are located through keyword searches in databases. For this study, the national theses database was chosen for its comprehensive coverage and accessibility. Specific keywords —"qualitative," "qualitative method," and "qualitative research" —were used to identify studies meeting the inclusion/exclusion criteria, resulting in 17.717 theses found in the database.

Elimination of The Thesis

This step involves selecting studies based on predetermined criteria, categorizing qualifying studies as "included" and others as "excluded." In this study, the selection criteria specified doctoral-level theses in educational sciences with access permission. Exclusions applied to mixed methods, mixed meta-thematic analysis, and action research due to their combined quantitative and qualitative techniques, as meta-syntheses may use mixed methods, and mixed meta-thematic analysis is recognized as a distinct approach (Deveci & Aykaç, 2019; Toraman Turk & Dudu, 2022). Studies that did not align with qualitative methods in data collection and analysis were also excluded. A literature review conducted on June 1, 2023, using the keyword "qualitative", yielded 3.190 doctoral theses with access permission, narrowed down to 723 relevant titles in education. During this process, no filtering was applied

regarding date during the reviewing process and an attempt was made to access all existing theses. These results were confirmed by follow-up search on July 9, 2023.

Table 1.
The Criteria for Selecting Data

Category	Inclusion criteria	Exclusion criteria
Access Permission	Access permitted	No access permission
Research Area	Educational Sciences	Social Sciences, Natural Sciences, Health Sciences
Education Level	PhD	Master's degree
Research Method	Qualitative research method	Mixed methods, action research, meta-syntheses, meta-thematic analysis
Data Collection Tools	Tools suitable for qualitative research methods (interview form, observation notes, documents, etc.)	Tools suitable for quantitative research method (Scale, questionnaire, etc.)
Data Analysis	Analyses suitable for qualitative research methods (descriptive analysis, content analysis, etc.)	Analyses suitable for quantitative research method (t-test, ANOVA, etc.)
Data Type	Studies in which qualitative data are included	Studies where quantitative data are included

Compliance

The eligibility assessment phase was initiated to ensure alignment with the inclusion criteria and research objectives. This involved thorough reviews of each thesis's title, abstract, methodology, findings, results, and discussion sections, with outcomes systematically recorded in a table. A total of 214 theses were excluded for not meeting qualitative research methodological standards.

To validate the compiled draft list, input was obtained from three field experts. Their recommendations and additional iterative reviews led to a finalized list of 509 studies for inclusion. Figure 1 presents the flow chart outlining the systematic review process.

This rigorous methodology ensured that only studies meeting strict qualitative research criteria were included, thereby strengthening the reliability and validity of the study's findings in educational sciences.

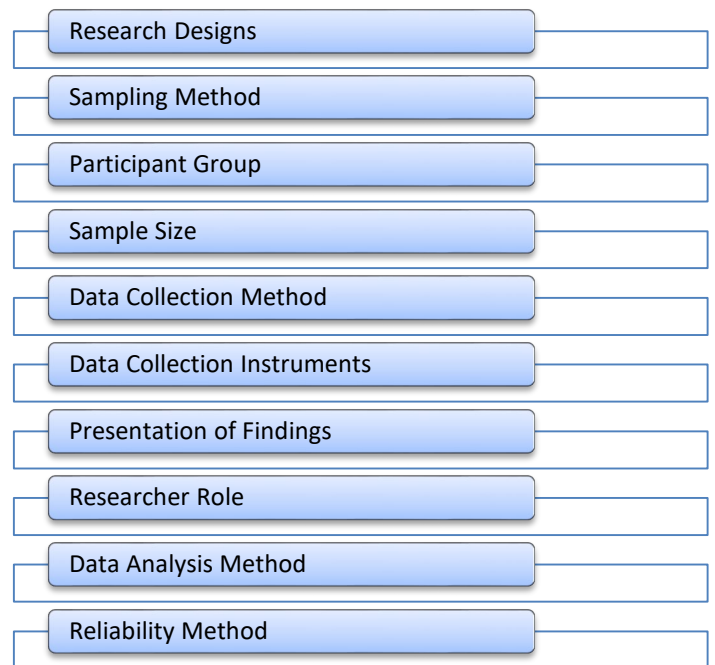
Inclusion

The final step in a Preferred Reporting Items for Systematic reviews and Meta-Analyses PRISMA-based systematic review is the inclusion of eligible theses, where these are systematically analyzed. In this phase, the theses meeting the inclusion criteria were synthesized, as illustrated in Figure 1.

This step culminates the systematic review, consolidating findings from studies that align with the research objectives and qualitative methodologies in educational sciences. Figure 1 visually synthesizes these eligible studies, offering a structured overview of their key characteristics and findings.

Figure 1.

Methodological Criteria in Qualitative Research



Data Extraction

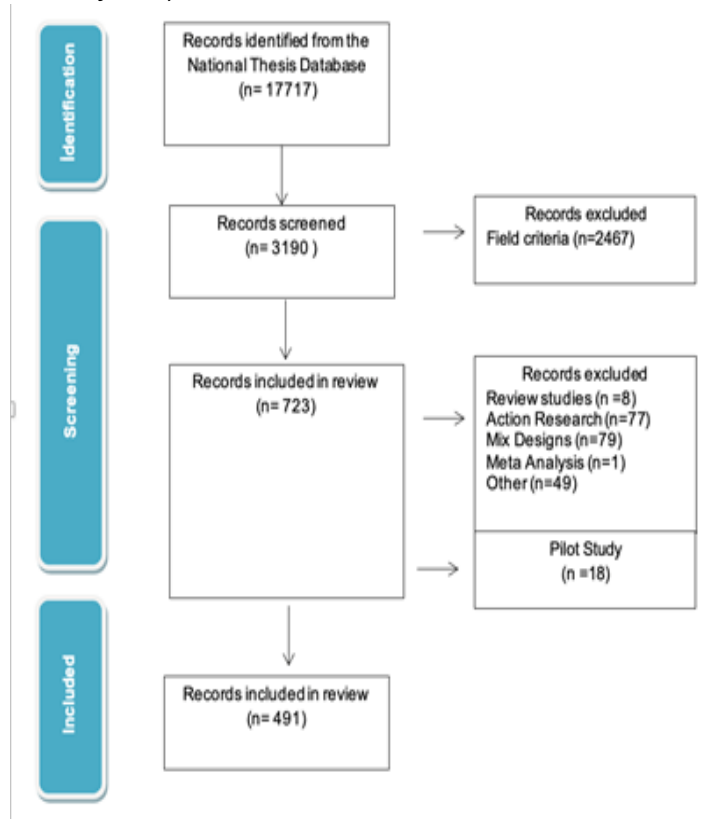
Data extraction and syntheses processes were conducted on 509 theses included within the scope of the research questions. Initially, the authors prepared a data extraction form for this purpose. The form underwent piloting on 18 randomly selected studies across three different phases. Following each phase, the authors convened to review the extraction outcomes and resolve any discrepancies through discussion. After concluding these discussions, the form was finalized.

The data extraction form captures key details, including thesis ID, publication year, university and department, study design, participant information (selection criteria, characteristics, sample size), data collection methods, analysis techniques, credibility assessments, researcher

role, and findings presentation. Sample sizes were categorized in groups of ten. Figure 2 outlines the form's structure, which facilitated comprehensive data collection and systematic synthesis aligned with the study's objectives in educational sciences.

Figure 2.

Codes of study variables



Following the pilot study, a Microsoft Excel spreadsheet was set up to systematically organize and store data extracted from the remaining 491 theses. Each of the theses extracted data was coded to streamline subsequent analyses, as suggested by Gough (2007). These coded data entries were entered into designated columns adjacent to the corresponding theses entries within the spreadsheet.

This methodical approach ensured that the information extracted from each theses could be efficiently managed and prepared for comprehensive analysis as part of the systematic literature review process in educational sciences.

Data Analysis

The analysis used descriptive statistics and trend graphs to illustrate patterns in qualitative methods within Educational Sciences research. Content analysis in the second phase explored the conceptual framework and its evolution over time. This dual approach provided a comprehensive view of both quantitative trends and qualitative developments across the analyzed theses.

Reliability Audibility

The study ensured reliability by addressing validity threats based on guidelines by Petersen and Gencel (2013), adapted from Maxwell's (2008) framework for qualitative research. The guidelines include five categories: (1) descriptive validity, (2) theoretical validity, (3) generalizability, (4) interpretive validity, and (5) repeatability, enhancing the trustworthiness of the findings in educational sciences.

Descriptive Validity: Descriptive validity focuses on accurately defining observations (Maxwell, 2008; Petersen & Gencel, 2013). To ensure this, rigorous inclusion and exclusion criteria were applied in the initial screening of theses based on title, abstract, and keywords, followed by a full-text analysis to prevent oversight. A detailed data extraction form was used to systematically analyze each thesis, ensuring consistent and thorough data capture aligned with the study's objectives.

Theoretical Validity: In this section, researchers explore theoretical validity to ensure they have captured the intended data (Petersen & Gencel, 2013). In this context, the authors specifically selected studies that exclusively employed qualitative research methods and techniques, while excluding those that utilized a combination of quantitative methods, techniques, and data.

Generalizability: This stage pertains to the extent to which the study's findings can be internally or externally generalized across groups and communities (Petersen & Gencel, 2013). In this context, the authors aimed to encompass every theses identified in the national theses database that utilized qualitative research techniques and designs for the current study.

Validity: This form of validity ensures accurate and objective results (Petersen & Gencel, 2013). In this study, detailed parameters for the data extraction form were established to thoroughly assess each thesis's methodology. Systematic use of this form and rigorous evaluation against predefined criteria helped mitigate interpretive validity threats.

In the study, two independent coders were included in the process to ensure objectivity of the data analysis. The research data were analyzed separately by both coders in line with the previously determined themes and codes. Then, the coders compared the results they obtained and determined the common coding points and the points that differed. After the compliance rate between the codes was evaluated, discussions were held on the codes that differed, and a common coding structure was created by reaching an agreement. During this process, a high consistency was observed between the independent

analyses of the coders, and the final codes were determined by reaching a consensus for the codes that disagreed (Miles & Huberman, 1994). Thus, the reliability of the data analysis increased, and the accuracy of the research findings was supported.

Repeatability: This type of validity requires a detailed description of data collection and analysis methods (Petersen & Gencel, 2013). In this study, the authors carefully designed data collection forms based on expert advice and thoroughly outlined each step of the data analysis process.

Results

The study's findings were categorized into two groups: descriptive characteristics and methodological features. These categories were aligned with research questions to ensure clear and relevant presentation.

Descriptive Characteristics of Theses Utilizing Qualitative Methods

Distribution of Theses Included in the Study by Year of Publication

The distribution of the theses analyzed in the current study according to the years of publication is presented in Figure 3.

Figure 3.

Distribution of theses according to years of publication.

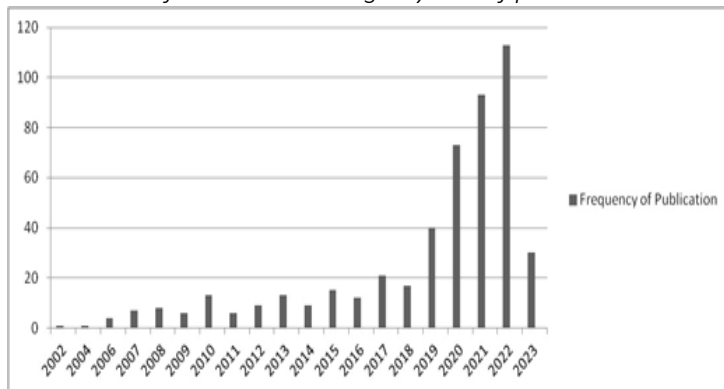


Figure 3 shows that qualitative research techniques began to appear in doctoral theses starting in 2002. The data indicates a general increase in the annual number of theses, peaking in 2022 (113 theses), followed by 2021 (93 theses). The lower count of 30 theses in 2023 may be due to the database reviews for this study being completed in July.

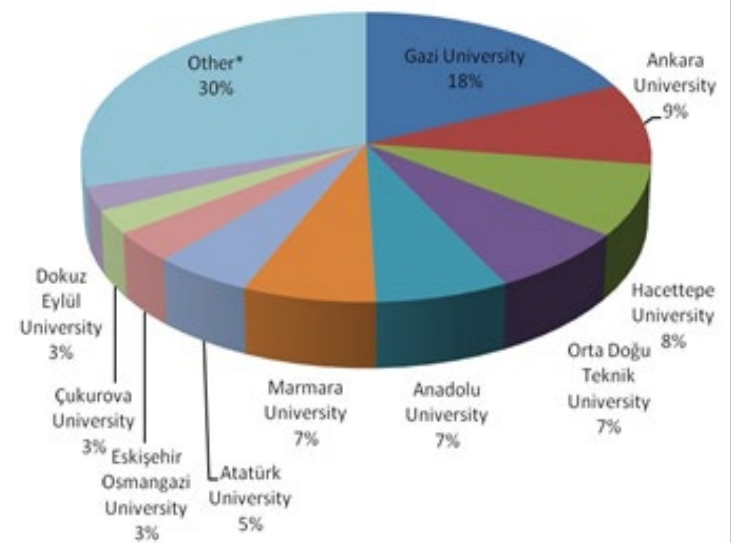
Distribution Of Theses By Publishing Universities

The distribution of doctoral theses employing qualitative methods according to their respective publishing

universities is displayed in Figure 4.

Figure 4.

Distribution of theses according to universities (Universities with 12 or fewer theses)*



Most doctoral theses in the study originated from Gazi University (89 theses) and Ankara University (45 theses) followed by Hacettepe University (40 theses), likely due to their diverse educational sciences departments and large student bodies. Theses were notably concentrated on Educational Administration, Educational Programmes and Teaching, and Turkish and Social Sciences Education.

Methodological Characteristics Of Theses Utilizing Qualitative Methods

Distribution Of Theses According To Qualitative Research Designs

The distribution of the theses analyzed in the current study according to qualitative research designs is depicted in Table 2.

Table 2.

Distribution of Theses According to Qualitative Research Designs

Research Design	Frequency of Publication	Percentage of Publication
Case Study	242	49.28
Other*	81	16.49
Phenomenology	64	13.03
Basic qualitative research	62	12.62
Unspecified	21	4.27

Grounded theory	16	3.25
Historical research method	9	1.83
Ethnography	8	1.62
Qualitative teaching experiment	7	1.42
Design-based research	6	1.22
Narrative	4	.81
Experiment-SemiExperiment	4	.81

*Scanning, Qualitative descriptive research, Ethnographic case study, Qualitative research, A qualitative case study supported by action research, Qualitative data analysis method, Relational scanning design, Phenomenography, Basic interpretive design, Qualitative document analysis, Multimodal critical semiological analysis design based on discourse analysis, Design and development research, educational design research, Inductive analysis model, Descriptive research

Table 2 indicates a strong preference for the case study design among the theses analyzed, followed by frequent use of phenomenological and basic qualitative research designs. In contrast, narrative and experimental-semi-experimental designs are less common.

Additionally, 81 theses were classified under 'other,' utilizing qualitative data analysis methods such as phenomenography, ethnography, basic interpretive design, design and development research, non-interactive analytical analysis, and inductive analysis models. About 4.27% of the theses did not specify a design methodology.

Moreover, 6.72% of the theses employed multiple design approaches simultaneously, such as combining case study with phenomenology or phenomenology with narrative design.

Distribution Of Theses According To Sampling Methods

The distribution of the theses analyzed in the current study according to sampling methods is presented in Table 3.

Table 3.
Distribution of Theses According to Sampling Methods

Sampling Method	Frequency of Publication	Percentage of Publication
Purposive sampling	238	48.47
Criterion sampling	121	24.64
Maximum variation sampling	79	16.08
Unspecified	74	15.07

Convenience sampling	46	9.36
Snowball or chain sampling	27	5.49
Other*	27	5.49
Typical case sampling	13	2.64
Voluntary sampling	12	2.44
Whole population	8	1.62
Random sampling	7	1.42
Stratified purposive sampling	4	.81
Outlier or abnormal case sampling	4	.81
Theory-based sampling	5	.81
Homogeneous sampling	3	.61
Critical case sampling	1	.20

*Easily accessible sampling, cluster sampling, theoretical sampling, random sampling, convenience sampling, forty purposeful sampling, non-probability sampling, theoretical sampling.

Table 3 reveals a notable preference for purposive sampling in the analyzed theses, reflecting the common use of non-probability sampling methods in qualitative research. Among these, criterion sampling, maximum variation, and convenience sampling were most frequently used. Critical case sampling, however, was the least preferred.

Methods such as theoretical sampling, convenience sampling, purposive sampling, and cluster sampling were categorized under 'other'. About 15% of the theses did not specify their sampling methods, while nearly 30% employed multiple methods simultaneously, such as combinations of purposive sampling with theory-based sampling, purposive sampling with criterion sampling, or snowball sampling with maximum variation.

Distribution Of Theses According To Participant Group

The distribution of the theses analyzed in the current study by participant group is presented in Table 4.

Table 4.
Distribution of Theses According to Participant Group

Participant Group	Frequency of Publication	Percentage of Publication
Teachers	151	30.75
Documents/books,	103	20.97

journals, etc.		
Academics	75	15.27
Other*	71	14.46
Secondary school students	62	12.62
Teacher candidates	45	9.16
Undergraduate students	43	8.75
School administrators	42	8.55
Primary school students	24	4.88
Parents	22	4.48
High school/secondary school students	21	4.27
Ministry staff/administrators	15	3.05
Non-education workers	11	2.24
Preschool students	9	1.83
Postgraduate students	7	1.42
Associate degree students	6	1.22
Foreign students	3	.61
Unspecified	3	.61
Non-formal education	1	.20

*All files, People who actively participated in social movements, Syrian refugees, Volunteer adults, Program producers, Children and youth literature centers, Mukhtar, Graduate student, Service worker, University web pages, Game design/development specialist, Members of Parliament, Heads of the Board of Education and Training, Researchers, Students with mild mental retardation and hearing impairment, Representatives of public institutions and organizations and international students on civil platforms, Open and distance education students, Universities, Unregistered students

Table 4 shows that the analyzed theses primarily focused on teachers and academicians, followed by studies on documents/books. Foreign students were the least frequently studied participant group. The theses encompassed a wide range of participants, including preschool, primary, secondary, associate degree, undergraduate students, as well as teacher candidates.

Diverse participant groups were also observed, such as Syrian asylum seekers, volunteer adults, program producers, Member of Parliament (MPs), Board of Education presidents, psychological counselors, servants, individuals with engineering education, village institute

graduates, and sports coordinators. A small percentage of these did not specify the participant group.

Approximately 30% of the theses included multiple participant groups simultaneously, such as combinations like teachers and academicians, teachers and primary school students, or preschool, secondary students, teachers, and parents. Most of them had participant numbers ranging from 0-10, followed by 11-20, while 9.16% did not specify participant numbers.

Distribution Of Theses According To Data Collection Methods

The distribution of the theses analyzed in the current study according to data collection methods is presented in Table 5.

Table 5.

Distribution of Theses According to Data Collection Methods

Method	Frequency of Publication	Percentage of Publication
Semi-structured interview	243	49.49
Document analysis	207	42.15
Interview	189	38.49
Observation	120	24.43
Focus group interview	43	8.75
Other*	34	6.92
Field observations	31	6.31
Participant observation	21	4.27
Unstructured interview	13	2.64
Structured interview	11	2.24
Clinical interviews	10	2.03
Field observations	4	.81
Unspecified	1	.20

*Unstructured observation In-depth interview, Non-participant observation, Semi-structured observation, Survey

Table 5 indicates that the theses predominantly used semi-structured interviews, document analysis, and interviews for data collection. In contrast, clinical interviews and partial participant observation were the least employed methods. Some theses also utilized unique methods such as teacher diaries, card grouping activities, content demonstrations, researcher diaries, unstructured

observations, in-depth interviews, questionnaires, and teaching sessions. A small percentage did not specify their data collection methods. Nearly half of the theses employ multiple data collection methods concurrently, with combinations like document analysis, interview, and observation, semi-structured interview and observation, or interview, focus group interview, and field observations.

Distribution Of Theses By Data Collection Instruments

The distribution of the theses addressed in the current study according to their data collection instruments is presented in Table 6.

Table 6.
Distribution of Theses by Data Collection Instruments

Instruments	Publication Frequency	Publication Percentage
Semi-structured interview forms	271	55.19
Documents/books, programs, films, magazine	208	42.36
Observation forms	156	31.77
Audio recordings	116	23.62
Image/video recordings	94	19.14
Interview forms	86	17.51
Researcher diaries	63	12.83
Field observation forms/notes	47	9.57
Focus group interview forms	33	6.72
Student diaries	26	5.29
Image/ video recordings	16	3.25
Other*	16	3.25
Participant observation forms	15	3.05
Unstructured interview forms	15	3.05
Checklists	9	1.83
Clinical interview forms	8	1.62
Scenario/story-based interview forms	6	1.22
Not defined	5	1.01

* Test, Scale, Rubric, Computer databases, Socio-demographic information form, Student worksheets/products, Open-ended surveys, Academic Publication Evaluation Form, Personal information form, SWOT analysis form, STEM Integration Perception Models Form, Teacher files, Information form, Semi-structured observation form, Inventory, Textbook, Data collection form, Analysis form, Self-assessment form, Lesson plan evaluation form, Activity determination schedule, Lesson plans, Personal information form.

Table 6 indicates that semi-structured interview forms, documents, and observation forms were the most used data collection instruments in the analyzed theses, while clinical and scenario-based interview forms were the least used. The 'other' category included diverse tools like diaries, scenario assignments, interviews, questionnaires, and evaluation forms. About 1% of theses did not specify their instruments. Most of the included theses utilized multiple instruments simultaneously, combining forms like interviews, documents, and recordings.

Distribution Of Theses By Data Analysis Method

The distribution of the theses analyzed in the current study according to their data analysis methods is presented in Table 7.

Table 7.
Distribution of Theses by Data Analysis Method

Analysis Method	Publication Frequency	Publication Percentage
Content analysis	293	59.67
Descriptive analysis	163	33.19
Document analysis	77	15.68
Thematic analysis	44	8.96
Inductive analysis	44	8.96
Other*	29	5.90
Discourse analysis	24	4.88
Not defined	18	3.66
Deductive analysis	13	2.64
Constant comparative method analysis	6	1.22
Cross-case analysis	5	1.01

* Software package, Continuous comparative analysis, Grounded theory, Continuous analysis and retrospective analysis, Grounded theory analysis, Thematic content analysis, Qualitative analysis, Phenomenological analysis, Analysis technique known as cross-case synthesis, Creswell's qualitative data analysis procedure, Frequency and percentage, Open-source code

Table 7 shows that content analysis, descriptive analysis, and document analysis were the most common data analysis methods in the analyzed theses, while cross-case analysis and the constant comparative method were the least used. The 'other' category included methods like grounded theory, thematic content analysis, and interpretive analysis among others. About 3.66% of theses did not specify their methods, and around 40% used multiple methods simultaneously (e.g., descriptive + cross-case + document analysis).

Distribution Of Theses By Reliability Criteria

The distribution of the theses analyzed in the current study according to their reliability criteria is presented in Table 8

Other*	65	13.23
Researcher diversification	47	9.57
Presentation of conceptual framework	32	6.51
Data collection at different times	30	6.10
Use of software packages in data analysis	24	4.88
Conducting data analysis at different times	22	4.48
Theoretical diversification	17	3.46
Random or purposeful sampling	16	3.25
Archiving of data	9	1.83
Inclusion of negative and alternative results	6	1.22
Maximum variation sampling	5	1.01

* Time variation, Intercoder reliability study, Reflectivity, Validity committee meetings, External audit, Search for negative evidence, Collaboration with participants, Confirmation of findings by independent researchers, Credibility, Transferability, Consistency, Verifiability, Linguistic details, Use of a voice recorder, Impartiality of the researcher, Keeping records, Convergence-Agreement-Coverage, Purposive sampling, Deep focused data collection.

Table 8 shows that the analyzed theses primarily relied on expert opinions, co-evaluators, detailed descriptions, comprehensive analyses, participant validation, and multiple data collection methods to ensure trustworthiness. On the other hand, data archiving, inclusion of negative results, and maximum variation sampling were the least used criteria. The theses also employed other trustworthiness measures, such as presenting data without interpretation, participant statements, linking results to literature, and maintaining researcher impartiality. About 14.66% of theses lacked information on trustworthiness criteria, while 70.72% addressed multiple criteria simultaneously, often combining techniques like participant validation, expert opinions, direct quotations, pilot studies, and long-term engagement

Distribution Of Theses By Researcher Roles

The distribution of the theses examined in the current study according to the role of the researcher is presented in Table 9.

Table 8.

Distribution of Theses by Reliability Criteria

Criteria	Publication Frequency	Publication Percentage
Expert opinions /Peer reviews	289	58.85
Detailed descriptions / Step by step processes	205	41.75
Participant confirmations /Member checking	155	31.56
Use of multiple data collection techniques	130	26.47
Long-term studies /Long-term interactions	124	25.25
Using codes	106	21.58
Working with voluntary participants	102	20.77
Data collection from different groups /environments	101	20.57
Data recording permissions	98	19.95
Use of direct quotations	97	19.75
Researcher role inclusions	86	17.51
Conducting pilot studies	88	17.92
Formulations /Coder agreements	83	16.90
Diversification in data analysis	80	16.29
Not defined	72	14.66
Participants' consent forms	68	13.84
Theoretical triangulations	65	13.23

Table 9.

Distribution of The Theses by Researcher Role

Researcher Role	Publication Frequency	Publication Percentage
Not defined	227	46.23
Participant observer	60	12.21
Other*	59	12.01
Observer	46	9.36
Non-participant/ Passive	42	8.55
Active	35	7.12
Participant	29	5.90
Passive Observer	12	2.44
Insider Participant	3	.61
Outsider Participant	2	.40

* Trying to break the researcher-participant hierarchy. Adopting a critical and transformative approach. Being both inside and outside the study. Taking an active role in the collection, analysis and interpretation of data. Talking about researcher experiences. Taking on teacher roles. Non-participant observer role. Taking on a role as a faculty member. Taking on a role as a researcher.

Table 9 shows that a significant number of the analyzed theses do not specify the researcher's role. Among those that did, the most commonly stated roles were participant observer and observer. The 'Other' category includes roles like active participant in data processes, teacher, non-participant observer, and adherence to ethical principles. The researcher's experiences were most frequently mentioned. Only 11.20% of theses identified multiple roles (e.g., active participant and observer, observer and passive observer).

Distribution Of Theses By Presentation Of Findings

The distribution of the presentation of findings in the dissertations examined in the current study is presented in Table 10.

Table 10.
Distribution of Theses by Presentation of Findings

Presentation of findings	Presentation Frequency	Publication percentage
Direct quotations	429	87.37
Tables	381	77.59
Pictures/Photos	147	29.93
Graphics	64	13.03
Frequency tables	61	12.42
Maps/Packet programs	46	9.36

Diagrams	41	8.35
Others	21	4.27

Considering Table 10, it is observed that almost all the dissertations examined in the current study included direct quotations and tables related to the findings. This is followed significantly by pictures and frequency tables. It was determined that diagrams were the least included. In the "other" category of theses, it was observed that figures, charts, matrices, models, and cartoons were also included in the findings. In almost all dissertations, multiple methods were preferred for presenting the data (e.g., direct quotations, graphs, pictures/photos, tables, and frequency tables; direct quotations, pictures/photos, and diagrams, etc.).

Discussion

This study aims to provide a systematic overview of doctoral dissertations using qualitative research methods in educational sciences in Türkiye. A total of 491 dissertations were analyzed based on descriptive characteristics, designs, sampling methods, sample groups, data collection methods and tools, data analysis, reliability criteria, researcher roles, and presentation of findings. The first qualitative doctoral dissertation in Türkiye was published in 2002, with a steady increase since then, peaking in 2022 (113 theses). In the 1990s, dissertations were mostly quantitative, but the 2000s saw a shift toward mixed-methods and qualitative studies (Fazlıoğulları & Kurul, 2012). While mixed-methods and quantitative approaches still dominate (Bıkmaz et al., 2013; Özkal, 2020; Uysal, 2013), qualitative methods are more common for certain topics (Gündüz et al., 2017). Established universities like Gazi University, Hacettepe University, and Ankara University, with broader educational sciences departments, led in dissertation production.

Particularly, the fact that designs such as phenomenology and case study are preferred over others is parallel to the findings of previous content analysis studies (Demir, 2024). This tendency can be explained by the fact that researchers have more knowledge about these designs or that these methods answer research questions in the field of educational sciences better. In fact, methodologists such as Creswell (2013) and Merriam (2009) have also stated that qualitative research in educational sciences generally focuses on certain designs. In order to understand the current situation in Türkiye, more in-depth analyses should be conducted on the content of methodology training for doctoral students in the future. Another important finding

is the inconsistency in the reporting of research methods in doctoral dissertations. This situation reveals the need for more systematic training and guidance on qualitative research methods for doctoral students in educational sciences. Additionally, the lack of information on researcher positionality is a significant oversight, as the role of the researcher is crucial in qualitative studies.

In the study, it was determined that reporting on reliability criteria in qualitative doctoral theses was limited. Similarly, it was determined that explanations regarding the role of the researcher were mostly insufficient. Although the reliability criteria (credibility, transferability, consistency and confirmability) suggested by Lincoln and Guba (1985) have been widely adopted internationally, there is no clear systematic approach on how these criteria are applied in doctoral theses in Türkiye. It is observed that especially in doctoral theses in the United States of America (USA) and Europe, reliability processes are discussed in detail and explanations are provided on how the researcher manages his/her own subjectivity (Patton, 2002; Tracy, 2010). In order to increase the methodological quality of qualitative research in Türkiye, it is recommended that clearer guidelines to be provided regarding reliability criteria and the role of the researcher in the thesis writing guidelines.

It was determined that certain tools were used more frequently in terms of data collection methods in qualitative doctoral theses in Türkiye. Interviews and document analysis were among the most commonly used methods, while data collection techniques such as observation are less preferred (Demir & Çalışkan, 2021). A similar situation has been identified in thesis analyses conducted in countries such as South Korea and China (Zhang, 2021). However, studies on doctoral theses in the USA and Europe reveal that more diverse data collection methods are used in these regions and that more importance is given to data triangulation (Denzin & Lincoln, 2011). These limitations in the data collection process in Türkiye may be associated with the methodological knowledge levels of researchers and access restrictions during the data collection process. In order to increase the diversity of qualitative research, it is recommended that researchers be encouraged more about data triangulation and that greater emphasis be placed on methods such as observation in methodology courses. In summary, this systematic review of qualitative doctoral dissertations in educational sciences in Türkiye reveals both promising trends and areas in need of improvement. The increasing use of qualitative methodologies is a positive development, but the field still grapples with challenges in reporting research methods and addressing issues of validity and reliability. In conclusion, the present study provides a systematic overview of doctoral dissertations employing

qualitative research methods in the field of educational sciences in Türkiye. The findings indicate that qualitative research methods have increasingly been used in doctoral dissertations, with a preference for case studies, purposive sampling, interviews, content analysis, member checking, and detailed narratives. These findings are consistent with the relevant literature and highlight the importance of using appropriate qualitative research methods to enhance the credibility and trustworthiness of the findings.

Conclusion and Recommendations

This study is believed to make a substantial contribution to the field of qualitative research by systematically examining a significant number of dissertations in educational sciences retrieved from the national theses database. The findings provide valuable insights into methodological parameters associated with qualitative research design. Nonetheless, this study is subject to certain limitations. Despite considerable efforts to minimize errors during the systematic review, including keyword selection, categorization, and content analysis, minor inaccuracies may persist. Additionally, the exclusion of dissertations and articles from fields beyond educational sciences represents a limitation, suggesting a potential area for future research. Subsequent studies are encouraged to extend the analysis to other fields and to narrow the focus by examining specific elements such as research design or sampling methods for more in-depth exploration. Higher education policy should enhance training in qualitative research to address current gaps. Methodology courses, especially in qualitative research, should be prioritized and enriched with practical outputs, taught by experts to ensure rigor. Additionally, periodic updates of research methods literature are recommended to reflect emerging trends and maintain conceptual consistency, supporting researchers in adopting appropriate methodologies.

Ethics Committee Approval: Ethics committee approval was not necessary because all the research papers studied were open access.

Informed Consent: All research papers had open access so it was assumed that the researchers give permission to obtain information and research.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept-XX; Design-XX; Supervision-XX; Resources-XX; Data Collection and/or Processing-XX; Analysis and/or Interpretation-all authors contributed; Literature Search-XX; Writing Manuscript-all authors contributed; Critical Review-XX

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