QUALITATIVE RESEARCH
Practices and Challenges

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Preface

This second volume of 'New Trends in Qualitative Research: Practices and Challenges" includes selected papers presented at the 5th annual World Conference on Qualitative Research (WCQR) held virtually from 20-22 January 2021. There are 8 chapters in this volume: four report on qualitative studies, three are literature reviews and one is a review of digital tools for qualitative analysis.

Although research, teaching, and learning has largely moved online since early 2020 when the global COVID-19 pandemic began to take hold, the chapters in this volume illustrate the range of qualitative research being undertaken around the world despite the challenging times we have faced. In particular are the range of methodological contexts and analytic methods discussed in this volume. Two types of literature review are presented - integrative and scoping. The use of theory in qualitative research and the role of theoretical frameworks is discussed. Three chapters report on the use of thematic analysis but in quite different ways: multi-disciplinary thematic analysis, combining thematic analysis of interview transcripts with qualitative experiments, and the use of themes in presenting results of a scoping review. One chapter employs Interpretive Phenomenological Analysis (IPA), and another a mixed-methods design. One chapter presents an in-depth reflexive account of undertaking research, and others also reflect on methodological process in various ways. In addition, one chapter discusses analysis tactics by focusing on digital tools for qualitative analysis. Across this variety in methodological discussion is also the range of substantive topics discussed - including mental health, teaching and learning, and nursing care - and the countries in which the authors are undertaking their research - France, Portugal, and the UK among others. As such, this volume, like its predecessor, champions the breadth and depth of the field of qualitative research.

Chapter 1 by Jakub Niedbalski and Izabela Ślęzak, "Discovering CAQDAS - what can be helpful for a novice user of computer aided qualitative data analysis software?" presents a review of a selection of freely available digital tools designed to facilitate the analysis of qualitative data, focusing on their functionalities and utility assets. The programs discussed are grouped into those designed for working with textual materials (OpenCode, WeftQDA, CATMA and Coding Analysis Toolkit (CAT)), those designed for working on audio and video materials (Stories Matter, ELAN and Transcriber), and those designed for developing concept maps (CmapTools and MindMaster). The authors' intention with their review is to open up understandings of the range of options available beyond proprietary products that are more commonly discussed. In addition to describing some of the features of the selected tools, they offer guidance for choosing between tools, and raise potential affordances and limitations of using digital tools for qualitative analysis that they suggest should be considered before using them.

Chapter 2 by Nienke Moernaut, "Listening Between the Lines: How a Theoretical Framework Prevents Superficial Analysis in Qualitative Research," discusses the use of theory in qualitative research, illustrating how theoretical frameworks can lead to more in-depth analysis. Moernaut's discussion is framed by the continued dominance of quantitative research and the resulting pursuit of objectivity in qualitative analysis and interpretation by many qualitative researchers. Through discussion of their own research (experiences of the negative symptoms in psychosis using Interpretive Phenomenological Analysis (IPA) of in-depth interviews with 12 patients with psychosis) the author argues that use of theoretical frameworks at appropriate stages of an analysis can lift an analysis from mere summary to deeper understandings and interpretations. Moernaut contends that the pursuit of quantitative conceptions of objectivity are not only flawed, but can lead to qualitative researchers avoiding 'real' interpretation for fear of unwarranted critiques of bias.

Chapter 3 by Nadia Steils, "Qualitative Experiments for Social Sciences," discusses the usefulness of qualitative experiments based on combining quantitative and qualitative validity criteria by describing and discussing their combination of an open qualitative approach and a structured and controlled experiment. Steils first presents the theoretical context, highlighting the characteristics of qualitative experiments and discussing qualitative and quantitative validity criteria and techniques. The goals are described, focusing on the benefits and risks of qualitative experiments and providing methodological recommendations based on different validity criteria, and the methods employed are outlined - three studies including in-depth interviews preceded by qualitative experiments with interviews analysed using thematic analysis and the findings compared with those of the qualitative

experiments. They conclude by discussing the value and limitations of qualitative experiments in terms of their value in exploring and identifying patterns, processes and behaviours in alternative ways.

Chapter 4 by Stephen Holmes, "'It Doesn't Rain it Pours' - Reflections on Fieldwork in The Academic Year 2019/20," presents a personal reflective and reflexive account of the challenges faced by postgraduate researchers in the UK during the 2019-2020 academic year. Three key situations that gave rise to challenges in gaining access to research participants are discussed: industrial action across the higher education sector in the UK; regional rial network industrial strikes, and the global COVID-19 pandemic. Framed by an interpretivist epistemology, Holmes reflects on the impact of these challenges on the study into teaching innovation in the UK higher education sector in the UK. The account presented in this chapter is methodologically and personally reflexive as Holmes has a "conversation with oneself" - reflecting both on the impacts on the research process that the barriers to access gave rise to, and on the emotions the situations and resulting experiences created for the author personally. The adaptation of methods and the technologies used to undertake fieldwork whilst in-person data collection was not possible are described, and the problems encountered are discussed. The chapter concludes with a reflection on the limitations of reflection.

Chapter 5 by Héloïse Haliday and Lise Demailly, "Going Beyond a Conflict of Approaches in Psychiatric Care: The Perks of Interdisciplinary Research," presents and reflects on the process and findings of their qualitative study exploring the interactions between mental health care professionals and service-users in the French public psychiatry system. After describing the psychiatric care system in France to provide the research context, the authors outline their overarching research objectives. First, to reveal professional and organizational issues in mental health care and to understand the construction of professional cultures in terms of consistency, resistance to change, and their potential for evolution. Second, to detail their study methodology: an ethnographic framework in which qualitative data were collected via in-depth interviews and observations and were interpreted using multi-disciplinary thematic analysis. As well as presenting their findings that reveal the eclectic and heterogeneous nature of care practices, the authors discuss the extent to which research findings can be "enough," by reflecting on whether unsurprising results "matter," the methodological obstacles they faced, and the extent to which they were "worth the trouble."

Chapter 6 by Christina Monteiro, Joao Rosado, Pedro Teixeira, and Melissa Fernandes, "From Emergency to the community: Nursing care that promotes safe transition of the person whit increased vulnerability," presents the findings of an integrative literature review of nursing care promoting safe transitions between emergency departments and the community in Portugal. The authors place their work in the context of historic and projected demographic changes in Portugal, that are resulting in an ageing population with changing healthcare needs and likely subsequent pressures on emergency and community care. Their literature review seeks to identify risk factors for readmission to emergency departments and the nursing care practices that promote safe transitions between emergency departments and the community amongst elderly populations (defined in Portugal as those aged 65 and over). The methodology for selecting the articles for review is outlined (based on PRISMA recommendations) and the process of selecting the seven articles that were included from the 98 that were identified from publication databases is illustrated. The findings of these articles are summarised, compared and discussed.

Chapter 7 by David Loura, Ana Eva Arriscado, Afke Kerkstra, Carla Nascimento, Isa Félix, Mara Pereira Guerreiro, and Cristina Baixinho, "Interprofessional Competency Frameworks in Health to Inform Curricula Development: Integrative Review," seeks to answer the following question: "What are the competency frameworks that support learning outcomes-based curricula for interprofessional education in health?" The authors present the context for their integrative literature review, its methodology and the results. The review is part of a larger research study - the Train4Health project - surveying the landscape of interprofessional competency frameworks (ICFs) in health. The authors provide an introduction to this context before outlining the integrative review methodology conducted over a seven month period and which followed an established six phased protocol that they describe and illustrate.

They present the results of the review, highlighting that they identified only four ICFs that support the development of curricula in the specific area of competencies. They reflect on this finding both in terms of the limitations of their own work and in the context of the usefulness of competency frameworks.

Chapter 8 by Margarida Alves and Elisabete Pinto da Costa, "Framing Conflict Mediation in the Context of Teacher Training: A Scoping Review of the Literature Between 2000 and 2020," presents the methodology and findings of their scoping review that sought to answer the following question: "What can we learn from research on conflict mediation in schools in the context of initial teacher training published in EBSCOhost and Scopus databases?" The authors present an overview of the theoretical background to the review, outlining why the focus on conflict mediation in the context of teacher training is warranted. The review methodology is described, including its purpose, focus and research question, search and selection criteria, time-scale and five-stage analysis process. Seventy studies were initially identified and seven empirical studies were included in the review after exclusion criteria were applied. Descriptive results and thematic findings of the seven included studies are presented and discussed. The authors highlight key insufficiencies in how conflict mediation in schools and its impact on teacher training have been empirically researched over the past 20 years.

The chapters presented in this volume demonstrate the range and quality of research that scholars around the world have been undertaking despite the challenges presented by the global COVID-19 pandemic during the past year. Working in different contexts, with different methodological foci and using different analytic techniques, these chapters showcase their work and illustrate the standard of research presented at the 5th World Congress on Qualitative Research. They provide both insights and exemplars that will be useful to qualitative and mixed-methods researchers around the globe.

March 4th, 2021

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Introduction
In the Face of Uncertainty: Opportunities, Challenges, and Solutions for Qualitative Researchers

The ebook series, "New Trends in Qualitative Research: Practices and Challenges" began in July of 2020 with the release of its first volume. In the United States, this was a mere five months after the country began to encourage practices such as social distancing, shelter-in-place, and wearing masks due to the outbreak of COVID-19. In March 2020, the state of Georgia held its first (and at the time of this writing, only) lockdown to help stop the spread of the virus. In most European countries, restrictive measures have been adopted since January 2020, with lockdowns being somewhat frequent, according to the number of infections in each country at a given moment, and social distancing as a norm. Masks, alcohol gel, respiratory etiqueta, and walking on the right side of the streets are all now part of our lives. Now, with countries still being affected (some more than others), hope is in all our minds, due the development of several vaccines. At the same time, new variants of the virus have been discovered and uncertainty has become the new normal. Side by side with hope. And trust in science.

As we write this introduction to volume six of New Trends in Qualitative Research, we believe it is fundamental to refer to this current context. What else should be expected from the editors of a virtual space which gives voice to qualitative research? This international pandemic has changed the lives of many. Individuals are working from home, finding ways to share the burdens of their personal and family lives with partners and spouses so that they may continue to be productive in their professional pursuits. For those who cannot work from home, ways to embrace health safety, social distancing, and yet still continue to work remain major concerns.

Even without the complexity an international pandemic adds, the Academy is full of unique challenges related to teaching, scholarship, and service. For teaching, many institutions have converted face-to-face courses online or follow a model of dual modality offering both online and face-to-face learning options within a single course, as we (at the same time) try to understand the impact of these changes in the teaching – learning process (e.g., Arora & Srinivasan, 2020). For many faculty, the need to learn new teaching methods has imposed additional stressors in an increasingly stressful environment. Faculty already experienced in online learning are among the lucky, sharing their knowledge and skills by mentoring other faculty seeking to learn and rise to their new challenges.

Research and scholarship have also begun to move online. One such example is in the rise of virtual conferences. The World Conference on Qualitative Research (WCQR), from which we elicited manuscripts for this ebook, hosted an entirely online conference from January 20-22, 2021. Conferences for organizations such as the American Educational Research Association, the International Congress of Qualitative Inquiry, NVivo through QSR International, and The Qualitative Report have done the same. Even more encouraging to scholars enjoying the new trend of virtual conferences is the rise of permanently online conferences such as the Virtual Conference for Qualitative Inquiry. The field of qualitative research is not alone in this change of modality. There is a rise in published articles in a variety of disciplines that look at this advancement in the academy (e.g. Reinhard, 2021; Roos, 2020; Yu-Ju, 2021). While many will undoubtedly return to in-person formats with the end of COVID-19, it is possible that just as many will maintain an online component.

Of course there are differences regarding the accessibility of researchers from different places around the globe regarding technology (namely connections and hardware), but many researchers were able to attend several international conferences in the same year, with far less funding. And, by doing so, we could make our work known to researchers from other contexts, in what may translate a greater democracy in access to the dissemination of science. Human beings need human interaction and online conferences are very limited at this level. Nonetheless, this experience allowed many researchers to experience new benefits that should be considered as a way to overcome differences that researchers have in access to resources.

As Mills and Birks (2014) state "The first building block of a qualitative research study is writing a research question that works" (p. xv). Since COVID-19 entered our lives, it seems the question that emerged as inevitably (particularly) to qualitative researchers, was: How to conduct my research

without being with the people, in their contexts? Being faithful to the nature of qualitative research, qualitative researchers embraced the pandemic context as a focus of research. We could see this in several papers presented at WCQR 2021.

Consider, for example, the work conducted in Costa Rica by Patricia Estrada, Lady Mora and Estefanía Hidalgo (Estrada et al., 2021). While developing a project in a rural community, they were forced to look at their research design and adapt to the circumstances in a dynamic balance between the possible (e.g., technological resources available) and the desired. The same is seen in the work by Ana Gama, Patrícia Marques, Bernardo Vega Crespo, José Ortiz-Segarra and Sónia Dias (Gama et al., 2021). While conducting focus groups in the context of an international project about cervical cancer screening, the team was able to see the particularities of turning the method online. They mentioned the need to reduce the number of participants, the difficulty to access non verbal behaviors (and verbal behaviours in the physical events, due to masks), the low self expression of participants (for being at home with other family members) and the impact of technology (being or not proficiency, ease, etc.).

Returning to Mills and Birks (2014), we are confident to say that, albeit still living a crises that may take us a long time to overcome, given that its social and economic impact is just beginning, qualitative researchers of different fields have shown themselves to be up to the challenge in several ways. They have been able to look at themselves, and reflect on their own practices and experiences as researchers. This is happening for instance, through the work of Melanie Nind, Robert Meckin, and Andy Coverdale, from the National Centre for Research Methods, in the UK, who have been giving online Workshops (e.g., "Changing Research Practices for Covid-19") where researchers are called up to look at themselves and their practices as they are impacted by the present context. Qualitative researchers have also been able to innovate, as the Asian Qualitative Research Association (AQRA) has shown at WCQR 2021, with the Panel Discussion "Data Collection Methods Through Online Modalities", where David Lumowa, Arceli Rosario, Pavel Zubkov and Safary Wa-Mbaleka, presented and discussed how in-depth interviews, observation, and focus group may happen mediated by technology, but also arts-based research (Lumowa et al., 2021). This latter emerged, to some of us, as a tremendously powerful method to conduct research today, namely participatory research.

While the use of digital technologies in qualitative research is not a new topic (Deakin & Wakefield, 2013; Morgan & Symon, 2004; Selz, 2016), it seems that digital teaching, research, and scholarship is more paramount than ever before. In a social environment where academics work through screens with one another and face-to-face interactions are minimal, they find ways to use digital technologies to their advantage (Paulus & Lester, 2021). The process of editing this ebook embraced the use of these technologies from beginning to end. Working in the U.S., Portugal, and Spain, we (the editors) work within the midst of the necessity to move scholarship to an online platform. The challenge of working from home, with colleagues across the world, during an international pandemic, is unique to our time. Never before has such a pandemic impacted the world during the digital age.

As members of the Editorial Team, we have worked online since the beginning of the ebook series, so this was not new to us. As in the first ebook, this was an exciting and fun process. It allowed us to add another two editors, enriching our own international academic community. Along the way we managed the natural challenges of these processes, as we had the privilege to work with great reviewers and authors, in a collaborative process that allowed for immense learning. However, this time around, we had to work with our families at home, as each member of the household juggled different roles - being in a relationship or alone, being a parent, missing family, and mourning for loved ones. It is always a joy to see a new volume of NTQR, a project we embraced since its beginning. But this volume feels a bit different, as it is a product that we managed to produce in particularly difficult times.

We present here volume six of "New Trends in Qualitative Research: Practices and Challenges." Putting this ebook together was a process that was the epitome of the practice of using digital technologies in qualitative scholarship and the challenges that lie within. It has been a rewarding and difficult experience.

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LITERATURE REVIEW

Exploring CAQDAS - How to Support a Novice User of Computer Aided Qualitative Data Analysis Software

Jakub Niedbalski [1] and Izabela Ślęzak [1]

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Abstract: During our classes with students, doctoral students, or while taking part in methodological workshops, we often hear some repeated questions: "Is it worth using the computer-aided qualitative data analysis software and why?" and "Which program should I choose?" Having gathered sizable experience in the field, we can answer these questions by saying that the use of CAQDAS (Computer-Assisted Qualitative Data Analysis Software) makes the process of data analysis more systematic and transparent, and this "forces" to think about data and supports in-depth analysis. The use of CAQDAS requires a certain amount of effort and work due to the need to learn about the environment of a software, but also (or maybe first) to change the perspective, and often some habits concerning how a researcher's workshop is organized. The choice of appropriate software is highly individual and it requires a thorough consideration from its future user. Therefore, the primary objective we set as the authors of this paper is to present the perspective taken by qualitative researchers who use selected free CAQDAS applications. Our paper is intended mainly for novice CAQDAS users who we would like to advise on how to select appropriate software and familiarize them with the specifics of CAQDAS.

Keywords: CAQDAS, qualitative analysis, novice users, polish researchers.

1. Introduction

Our deliberations are primarily intended for those researchers who want to try their hand at implementing their own research projects using applications from the CAQDA family. In their case, it may be a good idea to use free software distributed under the GNU license (General Public License). Although these programs are usually not so rich when compared to the software versions (Richards, 1999; Saillard, 2011), as they do not have such extensive features or they offer a less user-friendly working environment (among others due to the graphic design of the program which differs from current trends), most of them pose a great alternative for those still relatively expensive and thus not so commonly available paid applications (Niedbalski, 2014; Niedbalski & Ślęzak, 2016; Niedbalski & Ślęzak, 2012).

Our intention was primarily to present free tools, commonly available through websites and fully functional, i.e., without any restrictions imposed by their publishers or authors. We have decided that this way a user receives a program that can be used in their research, without any further restrictions. Regardless of the amount of the materials they want to analyze with this application, they can do so for an unlimited time, and what is more - they do not need to bear any financial costs (Niedbalski, 2013). However, we are aware that it would be impossible to present all such programs, hence the need to select and choose some of them. The reasons these and no other programs are in our research are explained below. At the same time, we would like to emphasize that a methodological reflection presenting a relationship between the computer-aided data analysis and the qualitative research practice, in general, is not our intention. The primary focus of our paper is on technical aspects of the presented CAQDAS tools; we review them based on the available functionalities and utility assets.

2. Examples of Free Programs and Their Basic Functionalities

The programs described below offer a broad range of possibilities offered by CAQDA. We intended to present several tools, which will not feature an identical set of functions, but they will show the whole spectrum of applications in this type of software. In this paper, we put great emphasis on not only the programs which enable us to work with a text but also those that allow us to analyze some audio-visual materials and create a visual representation of the analysis. We hope that thanks to this the quality researchers representing various schools and using different methodologies will find the tools that are right for them.

When selecting particular programs, we are also guided by the utility values related to the specificity of the working environment and their functionality. Therefore, all tools we describe are characterized by a logical structure, transparent architecture, and intuitive arrangement of individual options (Fielding, 2002). Therefore, virtually anyone who has some basic competence in the use of common applications such as text processors, should not encounter any greater difficulties in their case (Niedbalski, 2019).

Our article is of a reviewing and explanatory nature. It is based on observations made during our workshops and classes, as well as our personal experience as CAQDAS users. In the methodological layer, it combines the ethnographic and self-ethnographic dimensions.

The choice we made is the sum of our personal experience in the practical use of CAQDAS, which we have enriched ourselves with in the last few years. At the same time, we realize that these are highly individual issues and we, therefore, understand that opinions on the usefulness of this software can be different and expectations of individual users vary (Niedbalski, 2018; Niedbalski & Ślęzak, 2016). This is the reason we do not want to force anyone to use these programs (or CAQDA software at all). We just want to stress their capabilities and show some "technical" facilitation of analytical work involving their use. To better illustrate the possibilities offered by the presented software, at the same time arranging it under particular categories of their usefulness, we divided the programs due to the basic range of their application in a researcher's work.

2.1 Programs for Working with a Text

Among an extremely large group of programs typically used for text analysis, we think it is worth noting such tools as OpenCode and WeftQDA. Both programs are extremely simple and intuitive, which makes them a friendly environment for the novice user. They enable various encoding, collating and comparing analytical categories, writing memos and in this respect, they are recommendable for potential users.

OpenCode is a tool for encoding qualitative data in a text form, such as interview transcriptions or observation notes. It was developed for the analysis conducted per the principles of the grounded theory methodology (Charmaz, 1994; Glaser, 1978; Glaser & Strauss, 1967). Furthermore, it may be successfully used as a tool for classification and sorting any kind of text information, the analysis of which is conducted following qualitative methods.

Among the available functions of the program, the following should be pointed out: the possibility of creating a database of text materials; text searches for specific words; assigning codes to specific text segments; creating and managing categories for grouping generated codes; browsing and searching through the created codes and categories; creating memos for short information or analytical thoughts of the researcher; browsing freely selected elements of the project (codes, categories, memo) and their preparation for the printed version.The program has several limitations. First of all, the way of presenting (displaying) the data imposes a specific and unmodifiable layout of text materials, automatically dividing the content of the document into lines. Moreover, the imposed division of text can be quite artificial in certain cases, which is especially visible during data coding. OpenCode also does not give the possibility to adjust the access to particular

functions according to the user's needs. The possibility to import documents only in a .txt format seems to be a significant limitation of the program which makes it impossible to work on material previously formatted in another text editing program. Furthermore, OpenCode does not allow to edit a text that has been imported.
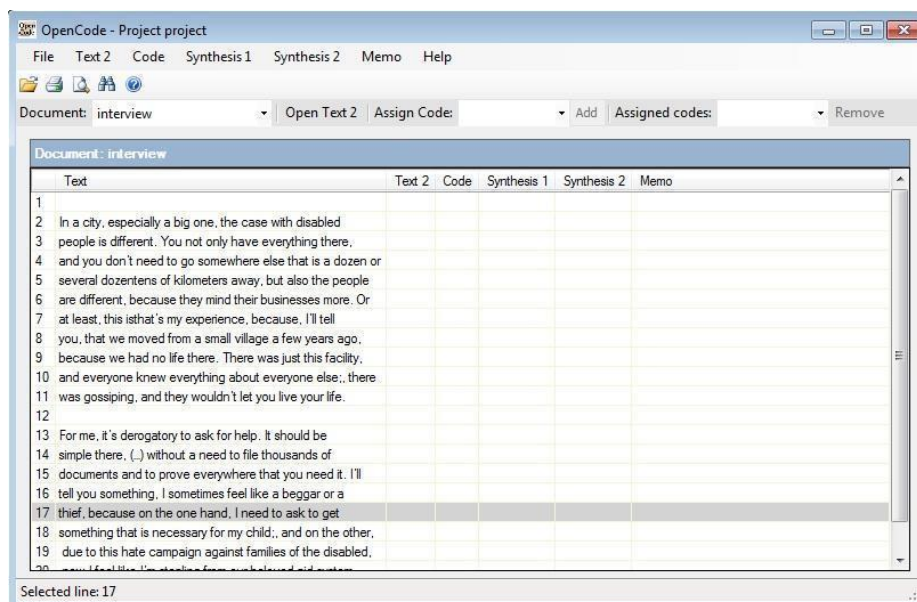

Fig. 1. OpenCode Window.

Similar to OpenCode, WeftQDA is software for analyzing text data such as transcriptions of interviews or field memos. The program offers a set of tools for work with text documents, intended for analyses carried out with qualitative methods with support from simple quantitative summaries. Among the reasons for choosing the WeftQDA program are completely free to access; ease and intuitiveness of use, which makes WeftQDA a program for practically every user; to use it, you only need the knowledge and skills at a level comparable to those required to use well-known office software; having the most important functions needed for analytical work, without unnecessary "overloading" with various options; in other words, the program has the features required to carry out a data analysis quickly and efficiently; the possibility to use the software in teams or a didactic process (Niedbalski, 2019).

It certainly is very useful for researchers who are willing to effectively organize their data and arrange new information arising from both the field and analytical work. Nevertheless, the WeftQDA program also has some limitations. First, it must be borne in mind that WeftQDA, similarly to OpenCode, only supports the .txt format, thus it is impossible to import documents without losing their formatting. It is also worth adding that every WeftQDA user should remember to make regular copies of the database because the program in its current version can be unstable, which can lead to the loss of the analyses conducted with it. Therefore, creating a backup (copy) version will protect us from possible software errors.
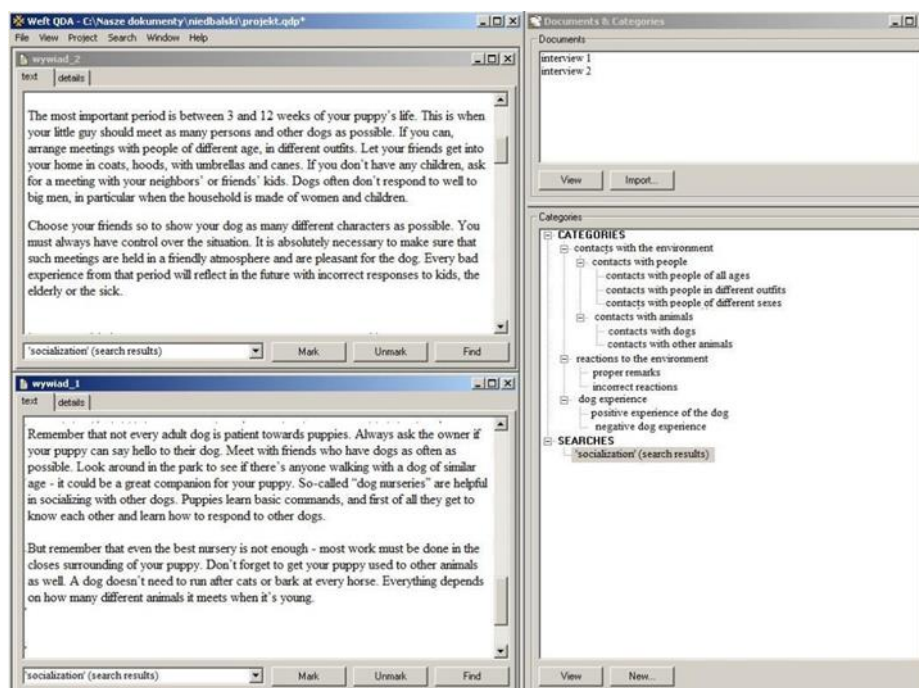
Fig. 2. WeftQDA Window.

Two other programs we would like to draw attention to are CATMA and CAT. Similar to OpenCode and WeftQDQ, also these programs are intended for the analysis of text data. What makes them stand out is that they are both on-line tools and allow the opportunity to work as a single researcher or cooperate in real-time within a team. CATMA allows collating documents in a corpus and creating their collection. Importantly, the information contained in the program can be shared with other people (on a read-only or fully editable basis). For everyday use, it is also important that the data can be saved in the XML format and therefore easily exported to other applications. At the same time, all data uploaded to the server is protected, and the developers ensure they make every effort to ensure data privacy and IP protection. The following program's features also deserve to be emphasized: almost every language of the text is supported, full integration of functions for description and analysis of data in a web browser, cooperation via the Internet enabling easy exchange of documents, annotations, and tags, freely definable or predefined tags, built-in visualization of search and analysis results, and analysis of complex text bodies.

Fig.3. CATAM Window.

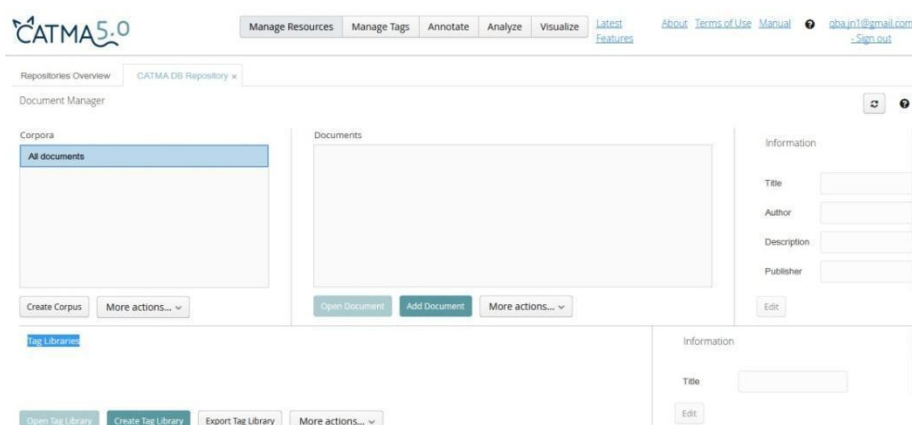The CAT (Coding Analysis Toolkit), on the other hand, enables efficient, transparent, reliable, and correct on-line cooperation on coding and text analysis. The program allows users to manage data, codes, and to analyze text materials. It also has an extensive reporting system allowing to generate information that comes from the conducted analytical work. The undoubted advantages of the program are its ease of use, intuitiveness, clear interface, and as a web-based system, it provides an opportunity to quickly and conveniently replicate and combine data, as well as to check the analyses performed by the team of researchers.
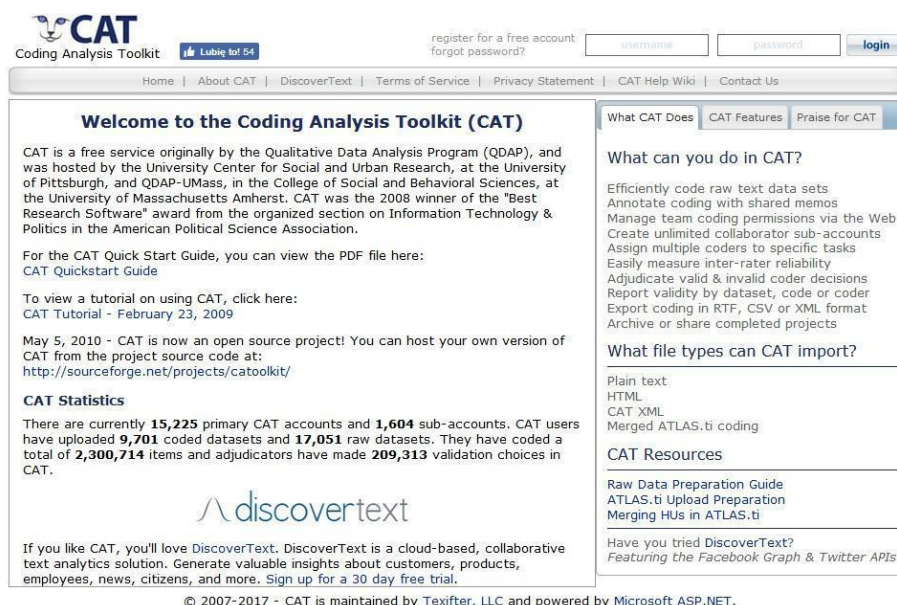

Fig. 4. CAT Window.

2.2 Tools for Working on Audio and Video Materials

In their work, qualitative researchers often use visual data, which are both auxiliary (supporting) material for the analysis of text data, the main source of information and the basis for the conducted analyses. This is also supported by the emergence of modern CAQDAS tools, which, thanks to the development of technology, have gained the opportunity to include visual materials and all materials they support. STORIES MATTER, ELAN or TRANSCRIBER can be mentioned among the ever-growing range of such programs. STORIES MATTER is a tool designed for archiving digital video and audio material. According to the concept of its creators, it is supposed to be an alternative to transcription, and thus enable the collection, but also sorting and ordering of audiovisual materials. The program allows users to edit the recordings based on the user criteria, and to create summaries with audio and video files, arranged according to specific research themes or problems. Thanks to the system of notes and descriptions, Stories Matter allows to enter additional information about the collected files and their content, and the system of searching and creating a tag cloud significantly improves the process of recognizing key topics and issues raised by the interviewees. The users can also export the results of their work in several different formats, which facilitates their use in presentations or website design.

The unquestionable advantage of the program is its intuitiveness and simplicity of use, which allows almost everyone, even an untrained researcher, to quickly familiarize themselves with the possibilities of the software and apply it without the need for a long process of learning how to operate it. A disadvantage may be the limited range of file formats that can be imported into the program, as well as the need to describe them

laboriously, especially when you want to enter all the data and information about each interviewee, or the specifics of the interview and its course.
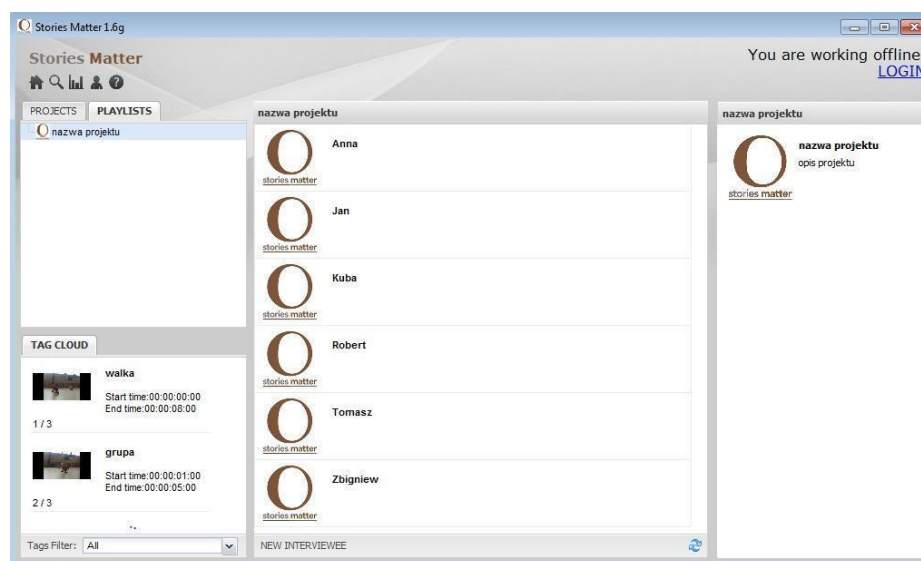
Fig. 5. Stories Matter Window.

ELAN is also a program created for people who want to analyze visual data using computer tools. ELAN allows users to create, edit, visualize and search annotations for video and audio data. It is a tool specifically designed for language analysis including sign language and gestures, but it is universal and can be successfully used by anyone who works with video and/or audio data. An unquestionable advantage of the program is its clear interface and user-friendly layout. However, the program requires a certain amount of skill, especially when it comes to the correct understanding of the terms used in this tool. After just a few attempts, you can get used to its specifics and intuitively perform various actions.

Fig. 6. Elan Window.

TRANSCRIBER, is a tool for comprehensive analysis of statements. Transcriber is a very handy tool supporting transcribing data and organizing it, as well as for placing annotations as labels assigned to selected fragments of file soundtracks. It is equipped with many functions that will certainly support the work of a qualitative researcher. First of all, the possibility of dividing and segmenting the fragments of a soundtrack, transcribing audio and video materials, and a whole range of tags allowing to reflect precisely all the nuances of the interviews and specificity of the recording must be mentioned here. The unquestionable advantage of the program is the ability to read plenty of file formats and the support for a different length of recordings. An additional advantage of Transcriber is the relatively modern design and friendly, intuitive interface, so using the program should not be too difficult. All the displayed elements, i.e., folders or files, have an icon in front of their name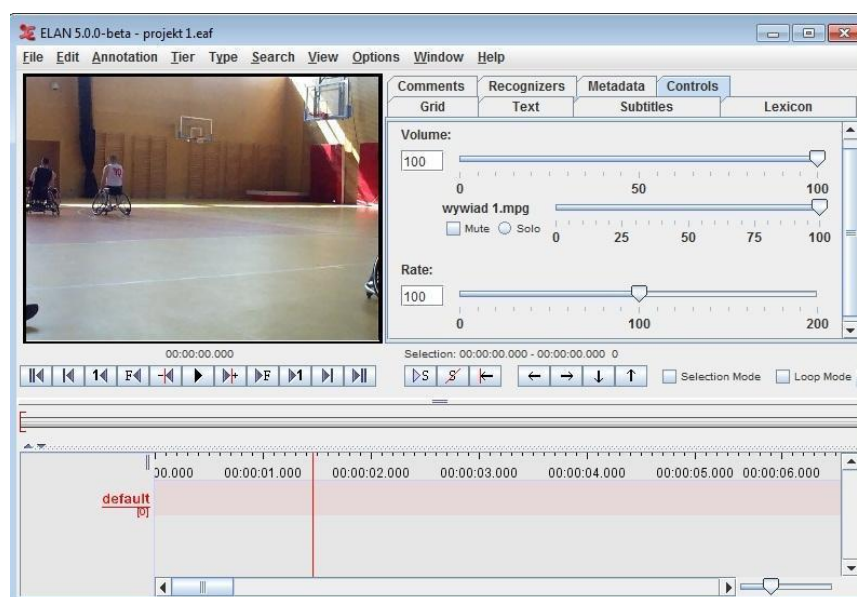, symbolizing the kind and type (e.g., a folder and a file, including among others audio, video file, etc.) which makes the work much easier and faster. A certain disadvantage in terms of the full functionality of Transcriber is the limited resources of built-in dictionaries, and therefore the inability to use the spell-check option. However, the Transcriber allows the introduction and process of data in the user's native language, which is why despite several functional limitations it can be fully used for the processing and analysis carried out in a native language.

Fig. 7. Transcriber Window.

2.3 Programs for Developing Concept Maps

Currently, qualitative researchers often use visual representations of their analytical inquiries in a form of mind maps, integrative diagrams, or various schemes. The programs described so far did not allow to visualize the results of data interpretation or did so to a limited extent. Fortunately, a researcher who would like to use this kind of tool in their analysis can refer to programs from the CAQDAS family. We can use CMAPTOOLS or MINDMASTER as examples here.

CMAPTOOLS is an application for developing conceptual maps and presenting data in a graphic form. Therefore, it is a program for those who need to visualize their analytical concepts or just improve the data interpretation process. CmapTools allows for the creation of complex and advanced models that allow users to integrate and organize codes, and to graphically reconstruct the analyzed processes. CmapTools is a tool that has many useful features that allow users to edit, modify and, above all, customize the program to the needs of the researcher-user. Thanks to numerous editing features, it is possible to introduce

various types of graphic files within the constructed models to complement and illustrate the presented concepts and visually enrich the concept map design. At the same time, the authors of the software aimed to create not only a tool, but also a support network, by consolidating the Cmap community and the possibilities of dissemination, sharing, and, above all, conducting discussions with other people using the program. This is how space is created for the exchange of thoughts, ideas, but also for consultation and suggestions that help to develop research and construct a model based on this research (Niedbalski, 2019).
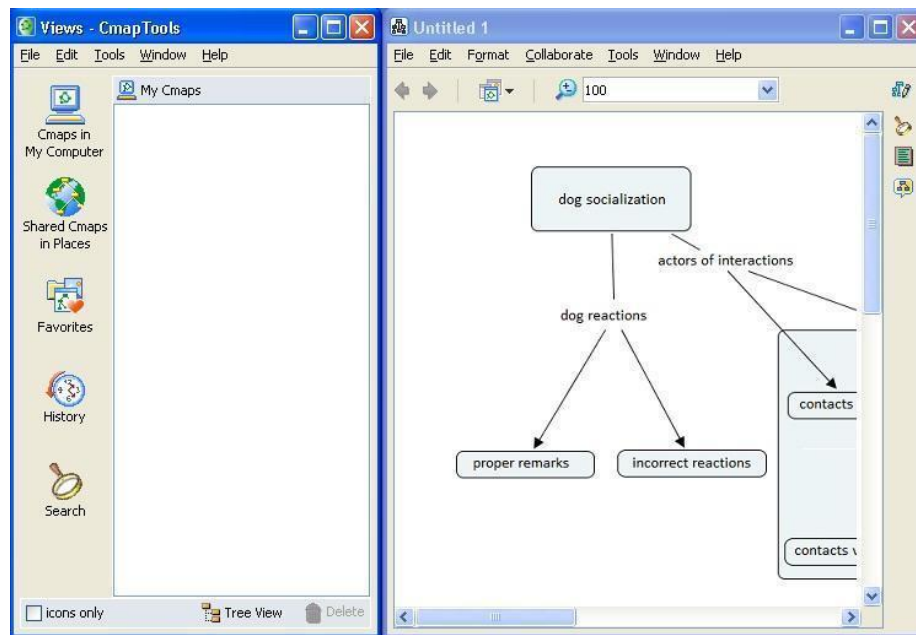

Fig. 8. CmapTools Window.

MindMaster has several important advantages as a tool helpful in a qualitative researcher's work. First, the program is designed to develop conceptual maps and interpret data with diagrams, arrange and integrate codes, and graphically reconstruct the analyzed processes. It will surely satisfy the expectations of even quite demanding users. Thanks to a wide range of options for transferring, exporting, and publishing data, the program can successfully support the work of an analyst, among others by using the support network of other researchers or simply by creating research teams. When you add a large number of options to edit and modify projects according to your preferences, you get a very functional and user-friendly tool for qualitative researchers.

MindMaster allows you to design a concept map consisting only of texts, but nothing stands in the way of enriching the project by placing even images or icons that will make it look much more attractive. It is worth adding that the program allows defining keyboard shortcuts. Using them will certainly speed up the creation of subsequent thought maps. Any concept map can be freely modified by adding or removing selected clouds, changing their content, size, or font color. Numerous graphic styles allow adjusting the look of a concept map to the user preferences. We will find here not only glamorous but also minimalistic templates. What is more, the designed thought map can be easily saved and sent to other people via email, for example.
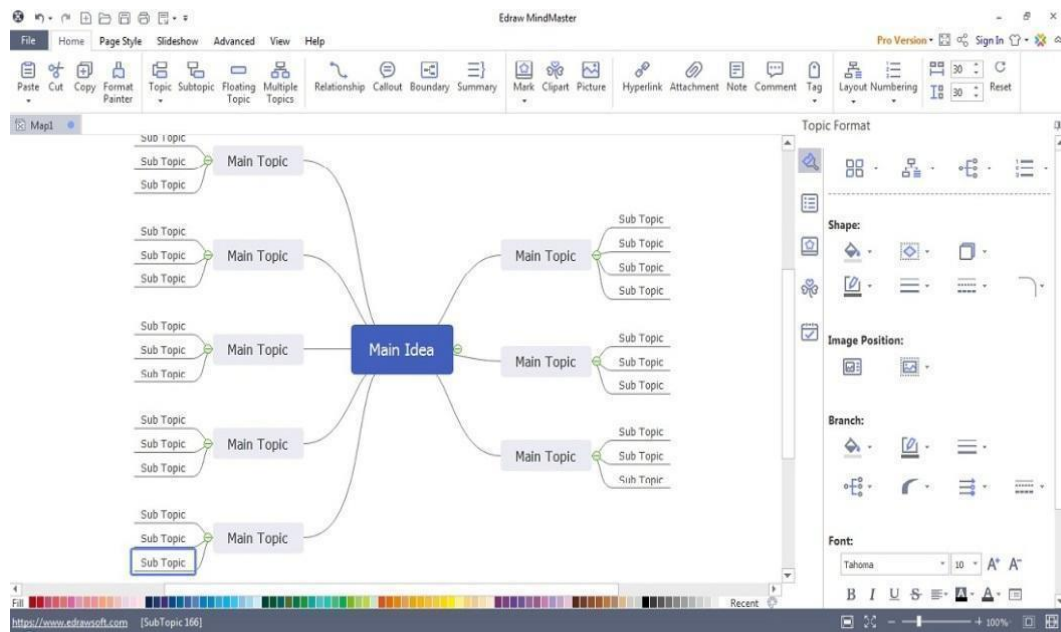
Fig. 9. MindMaster Window.

A certain disadvantage of those programs is both CmapTools and MindMaster have a limited number of built-in options to support the researcher's native language, which practically eliminates the possibility of using features such as a dictionary or spell check. It also seems that the number of options for visual modifications of the project may sometimes overwhelm the user, who will not always need e.g., several shades of a given background color or different line texture. Of course, this may be important for some people, so it is difficult to evaluate this multitude of editing options in a clear way. However, the above-mentioned remarks should not alienate the user, who can always create their support network and work on the project with a befriended group of researchers. To sum up, despite some limitations, CmapTools and MindMaster will certainly fulfill their tasks both as basic tools of the analyst's work and complementing other types of software (e.g., OpenCode or WeftQDA described earlier), which do not have data visualization and integration diagram creation functions.

3. How to Choose the Right Software

This brief review of CAQDAS software shows well that there are plenty of different programs that belong to the CAQDA software family. In this situation, a question of which one to choose may arise (Prein et al., 1995). This concerns particularly those researchers who have no experience with this kind of software and would like to use its possibilities in the research design. Therefore, we think that anyone who would like to use CAQDA should first answer a few key questions, while we divided these questions into two "blocks". The first, which we called the basic one, refers to the canonical issues of general computer literacy and evaluation of one's methodological workshop, and it includes the following questions:

- Do I understand the specifics of the chosen analytical approach and can I apply the procedures of a specific methodology in practice?
- Do I know exactly what I want to do with my computer software?
- Do I have the appropriate competence and computer skills?
- Am I ready to devote sufficient time to learning how to use the software?

The second block of questions is about how to position the preferences for CAQDAS and how to choose the program. In this case, four main criteria/aspects must be considered.

- Project type - will the project be of an individual or group character? This is key information because team projects are much more complex and require very careful organizational planning. Therefore, it is necessary to choose such a program that will have a well-developed feature to allow several researchers to cooperate. Also, on this occasion it is also worth considering whether the project will be a one-off or whether we will continue this project in the future (or maybe it will be divided into stages with a longer time horizon).
- Materials adopted - will they be of one type (e.g., text) or different types (e.g., transcripts, documents, audio-video files, etc.)? If we want to use different data, we should choose those CAQDA programs that support such data and allow us to manage, sort (by type), or integrate (in different ways, considering analytical issues). It is also important to note the degree of structuring the data, i.e., whether it will be, for example, unstructured or narrative free interviews, or free interviews with the desired list of information or questionnaire interviews (provided that we use open questions in their structure).
- Characteristics of data analysis - are we going to conduct qualitative analyses or are we going to use a mixed-mode? Although software packages are called "qualitative analysis tools", they can successfully carry out projects with mixed-mode methods. Since CAQDA programs are not used for statistical analysis of quantitative data, the data from e.g., answers to closed questions in the survey will have to be analyzed using software packages such as SPSS or Staistica. The quantitative and qualitative data can be integrated by importing quantitative data developed with statistical analysis software packages.
- Analytical approach (research method) - what specific method will we use? Nowadays, in the era of accelerating the development of CAQDA software packages, an increasing number of programs exist or are being improved, which are intended by their authors to serve the widest audience. This means that these programs must meet the specific expectations of different researchers coming from different theoretical schools and applying different research methods.

Only after going through the above "path" (checklists) of choice and answering the questions, can it be decided with much greater certainty, and above all, consciously, whether you want to use CAQDAS at all and which program to be able to effectively perform one's research tasks.

4. What We Should Know Before We Become CAQDAS Users - Possibilities and Limitations of Software

Therefore, as our previous deliberations suggest, using computer software requires the knowledge of the specifics of a particular program, its functions, and the principles of its use. A researcher who wants to use these programs must engage some effort and time to learn about the possibilities of the software (Bringer et al., 2006), its architecture, but also (and perhaps most importantly) apply some changes in the perspective and often drop some worn-out habits of organizing a researcher's workshop (Lofland et al., 2005). However, as has already been highlighted, using CAQDA causes the data analysis process to be more systematic and clearer. This somehow "forces" serious thinking about data and encourages the in-depth analysis. Furthermore, regarding the methodological paradigm, using CAQDA allows one to carry out a qualitative comparative analysis or research several hypotheses at once (Kelle, 2005). Among the advantages of software supporting the analysis of qualitative data, the possibility of mastering a considerable amount of materials is often cited, which can be easily processed, modified, sorted, and reorganized, as well as searched. This allows the researcher to have more control over the collected material. CAQDAS programs offer search options both within the text (or descriptions of audio-visual material) and within the created codes, memos, notes, and other products of the researcher's activity.

The researcher also can group different elements of the project according to their preferences (Wiltshier, 2011). This gives a possibility of the comprehensive ordering of

data, both the source material and any information that comes from the analysis carried out by the researcher (Seale, 2008). Hence, it is possible to make comparisons within the cases emerging in the research and to search for any differences and similarities among them. The architecture of CAQDA programs, in a way, forces the researcher to think constantly about the relationships between codes and categories, to compare and modify them. This allows avoiding the threat to qualitative researchers, which is associated with focusing only on data collection and omitting their in-depth analysis (Friese, 2019). CAQDA programs equip the researcher with the ability to write various types of memos and they smoothly intertwine data collection with analysis, thus moving from raw data towards theorizing at an increasingly higher analytical level. Also, CAQDA software gives a possibility for constant modification of all project elements as new data appear (Bringer et al., 2006). Undoubtedly, the use of CAQDA software has many advantages, and if it is used consciously, in a manner consistent with the principles of a specific research method, it may strengthen the researcher's desire to achieve positive effects of his work (Macmillan, 2005; MacMillan, & Koenig, 2004). It should be remembered that CAQDA programs also have some limitations (Glaser, 2003; Paulus et al., 2018).

During our courses and workshops, we often drew our attention to the influence of the so-called "internal architecture" of the software exerted on the analytical process, i.e., the need to subordinate the analysis to the solutions implemented by the authors of a program (Friese, 2011). This means that the structure of the program can impose particular ways of sorting, searching, or analyzing the collected materials (Glaser, 2003; Holton, 2007; Seale, 2008). However, this is more a matter of how the researcher uses the possibilities of a given program and not the software architecture itself. Some authors (e.g., Glaser, 2003; Holton, 2007) take the view that using the software can cause various paths of data interpretation to be overlooked (because they structure analysis too much). Our personal experience shows that some users - especially in the early stages of learning a program - feel a little overwhelmed by the wide range of applications and possibilities offered by some, especially the extended programs. Often, a long list of features far exceeds the needs of an average user, and the number of options available can be challenging for some, especially inexperienced researchers. However, the existence of many options does not mean that the researcher must use them all. On the contrary, they should reasonably use the possibilities offered by the software and choose those functions which are consistent with their methodology (Bringer et al., 2004).

The above possibilities and limitations of CAQDA software are not exhaustive, however, they give a general view of the range of possibilities offered by such tools and doubts that their use brings (Jackson et al., 2018; Paulus et al., 2018). Above all, however, as we always try to draw the attention of both readers and participants of our workshops, it is crucial to be fully aware of the supporting nature of the software used. For we must remember that no program, even the most sophisticated and technologically advanced one, can relieve a researcher of their work (Bringer et al., 2004; Dohan & Sanchez-Jankowski, 1998). It is the reflectiveness, knowledge, and experience of the researcher that will determine the results of their actions (Lonkila, 1995). In other words, the only one responsible for the level of analysis and quality of the work performed is the researcher (Bringer et al., 2006). Therefore, this type of software should not be treated as a specific remedy for conceptual problems or data interpretation difficulties, and the expected results can only be achieved by combining the two basic roles of a conscious researcher-analyst and a skillful user of a program (Miles & Huberman, 2000).

We would like to draw the attention of beginner quality researchers to the fact that their hard and often lengthy analytical work can become not only more effective but also simply more enjoyable with CAQDAS. This does not mean, however, that it will be simpler in the literal sense since the improvement of the analysis process itself is de facto technical, not strictly factual. Therefore, not even the most advanced and complex computer program will take the burden of analytical and interpretation work off the researcher. This will not be provided by any tool, either for processing qualitative data or for working with quantitative materials. It should also be noted here that software packages dedicated to qualitative research and those dedicated to quantitative methods are by no means the same and should not be seen as similar. However, we would like to point out that the logic and design

of the operation of SPSS or Statistica software on the one hand and CAQDAS software on the other is simply different. It all comes down to the specificity of the data and the methods used by the researcher. Hence, we should not compare them to each other and expect the same from them.

5. Summary

CAQDAS is currently represented by an unusually large group of programs that differ both in terms of the sophistication of functions and their purpose (Prein et al., 1995; Richards, 1999; Niedbalski & Ślęzak, 2016). Therefore, there are some significant differences in the CAQDA software family. In addition to tools as extensive as Atlas.ti, NVivo, MaxQDA, QDAMiner, and many others, which provide the researcher with the ability to encode data, create logical and contextual links between the generated categories, or verify the resulting hypotheses and then construct theories (Fielding, 2002; Kelle, 2005; Niedbalski, 2014; Niedbalski & Ślęzak, 2012), we have tools that are simpler in their construction, less technically advanced and usually poorer in the options implemented. However, this does not diminish their practical value and should not be a reason for a negative evaluation of such tools. Although free programs are usually not as extensive as the tools available for a fee, they are certainly sufficient for most beginner researchers, in particular, equipping them with the most important functions to assist in the process of qualitative data analysis. It is therefore a group of programs that has quite a wide range of applications, whereas this applies to a great extent to text data and is mostly limited to some basic but most important functions such as coding, sorting, and searching through data.

Nevertheless, as we have attempted to demonstrate in this paper, among free programs we can also find those that can be used to analyze visual data, including audio and video materials. There is no doubt that an interesting and noteworthy group is also free tools belonging to the CAQDAS family, which can be accessed via websites. With these programs, there is no need for a sometimes-troublesome installation process on one's computer, no need to worry about hardware compatibility or its parameters, and at the same time, all data are archived and stored on external servers. Thanks to this, we gain additional background for our data, which is a kind of backup usually extremely valuable and carefully collected materials for us.

We emphasize that we intended to present programs that support the work of a qualitative researcher representing different schools and using various analytical methods. However, it must be remembered that each program is a kind of "environment" in which the researcher works and performs certain activities according to the so-called "software architecture", i.e., the technical solutions used by its constructors (Saillard, 2011). However, developers of this type of software take care not to impose any methodological constraints. The matter of which of the programs we have discussed will ultimately find appreciation with the user is individual. Much depends on what the needs of a particular researcher are, and this depends on the methods they use on the issues they undertake and their personal preferences (Lonkila, 1995; Saillard, 2011).

In conclusion, we would like to stress that the programs we have described do not in any way exhaust the topic related to CAQDA software, but they can help to understand the variety of tools supporting the analysis of qualitative data and provide a kind of a guide to a rich list of such software. If we are not sure what exactly to choose, we should first think about what we really need, test the various programs and seriously consider which software functions we will use (Niedbalski, 2013; Niedbalski & Ślęzak, 2016).

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Listening Between the Lines: How a Theoretical Framework Prevents Superficial Analysis in Qualitative Research

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Abstract: As quantitative methods dominate the field of clinical psychology, qualitative inquiry struggles to live up to its full potential. The ubiquitous quantitative criteria and epistemology lead to a flawed idea of objectivity, pursued by many qualitative researchers in an attempt to be taken seriously. Therefore, they try to avoid any possible theoretical influence. This often creates a fear for really interpreting data. However, it seems that instead of leading to higher quality research, this rather leads to superficial analyses. In this chapter, I show, based on my own recent research regarding the experience of negative symptoms in psychosis, how theory-use led to more in-depth analyses. Our study consisted of an Interpretative Phenomenological Analysis of interviews with twelve patients with psychosis about their negative symptoms. During the earlier phases of research, we stayed close to the data and tried to bracket our theoretical assumptions as much as possible. However, when coming to our final analysis, we approached the data more through a theoretical lens. This way we were able to lift our analysis from what was rather a summary of what our participants told to a deeper understanding of the process of negative symptoms.

Keywords: theory use; interpretative phenomenological analysis; negative symptoms; psychosis

1. Introduction

As quantitative research still dominates the field of clinical psychology, qualitative researchers strive hard to be taken seriously within the field. However, while actively choosing a different way of conducting research, the quantitative stance still puts its stamp on many qualitative studies. As qualitative inquiry still carries the burden of being seen as biased and little objective, many researchers put big efforts in disproving these ideas. This results in a big focus on bracketing theoretical background and personal assumptions as much as possible. However, this fear of being theoretically biased often leads, in my opinion, to rather superficial analyses. In this chapter, I will argue how making use of a theoretical framework improves rather than limits the quality of qualitative research. I will use my own research regarding the subjective experience of negative symptoms in psychosis as an example.

2. Qualitative Methods in Clinical Psychology

In contrast with many other disciplines in the social sciences and despite being given a place within the American Psychological Association (Gergen et al. 2015), qualitative research is still struggling to be taken seriously within the field of clinical psychology. Indeed, the dominance of the quantitative paradigm poses difficulties for the qualitative approach to develop itself to its full potential. Two different, but highly related aspects play an important role herein: mirroring oneself on the principles of quantitative methods and unfamiliarity with qualitative epistemology. The following paragraphs give a further discussion about these aspects and their consequences.

A first struggle qualitative researchers are confronted with is that their methodology is often criticized for being biased and unscientific (Gergen et al., 2015). As a result, many qualitative researchers are trying very hard to prove they are as objective as possible. However, this seems to have rather adverse effects. Indeed, one way by which they hope to show their objectivity is by strictly avoiding to bring any form of theoretical knowledge into their data-analysis. As a result, they tend to summarize their data instead of really

interpreting them, leading to rather superficial enumerations of categories (instead of actual themes)[1] or a mere translation of the research or interview questions into themes (Timulak & Elliot, 2019). In these cases, the added value of a qualitative study compared to, for example, a questionnaire-based study seems to lie solely in being more lively as it is illustrated by quotes. So, whereas these studies make use of qualitative methodology, they fail to live up to the full potential of it. In the meantime, they do not adhere to the stringent criteria of quantitative studies, with respect to sample size and representativeness for example, causing quantitatively oriented researcher to be—understandable—rather skeptical regarding this kind of research.

In order to tackle this skepticism, to raise the overall quality of qualitative studies and to enhance the publication possibilities for qualitative studies, the APA recently developed reporting guidelines for qualitative research (Levitt et al., 2018). However, whereas important, good guidelines on how to conduct and evaluate qualitative studies alone are not enough. Above all, the field needs a shift in the overall way of looking at research. Indeed, along with a big focus on statistics in psychology education programs, a (post)positivistic stance with regard to research is passed on to students (Ponterotto, 2005). Within such a framework, letting theory and interpretation enter your analyses is seen as suspicious and no good science[2]. If we want better qualitative research, we thus not only need correct evaluation guidelines for this method, but we also need to become aware of our epistemological assumptions and their implications. Whereas several qualitative methods can be conducted from a positivist stance, most methods better fit with a post-positivist, constructivist or critical ideological epistemology—or something in between (Ponterotto, 2005). Nonetheless, regardless of the position you prefer, epistemology is something to think through, to make clear when describing your methodology and something you should handle according to during the whole research process. Whereas this might seem self-evident for an experienced qualitative researcher, it is not the case for researchers trained in a quantitative paradigm where epistemology often remains implicit.

A specific consequence of our epistemological stance is how we approach our data: do we see them as the reflection of the truth—(post) positivism—or more as a possible version of the truth—constructivism (Ponterotto, 2005)? As many qualitative studies aim at giving a voice to participants, we could assume this entails a belief in different truths—why would giving a voice to participants otherwise be of added value? This interpretation of the reports of participants as a possible version of the truth is reflected in phrases as "participants reported, said, mentioned…," in which it is shown that these reflect the viewpoint of the participants and not necessarily the viewpoint of the researcher or the only possible viewpoint. However, here again we see that many researchers have a rather naïve conception of what this epistemological position really entails. Indeed, giving voice to your participants' experiences and respecting their viewpoints does not mean you have to accept everything they tell at face value (Charmaz, 2014). Whereas what they tell is of course their version of the truth and thus deserves credit in its own right, a belief in multiple truths also opens up the question as to how these truths came into being. Therefore, paying attention to which elements are highlighted or omitted from a report, which are the underlying processes of how participants account for something and so on, make really interesting material to include in your analyses. However, many researchers seem afraid to take this step. Indeed, knowing your participants and knowing they can recognize themselves in what you write about them, can cause a reluctance to critically interpret their stories (Josselson, 2011), which is not involved in anonymous quantitative studies.

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[1] This would, for example, be the case when you research the mechanisms behind a specific psychological problem and end up with themes like 'stress' and 'interpersonal problems'. As these apply to more or less any psychological issue, such 'themes' can hardly be considered to be fruitful results (example borrowed from my colleague Juri Krivzov).

[2] Of course, theoretical assumptions and personal preferences play a role in each form of research, in for example the choice of measuring instruments, the deletion of outliers etc. However, it seems that this is not that much recognized in quantitative studies, as an argumentation for these choices is often lacking.

However, this critical look at your data is what can make the difference between a mere summary of results and a meaningful analysis.

Next, despite a widespread skepticism towards qualitative research, an oppositional tendency can also be noticed within the field. Indeed, there seems to be some kind of hype around conducting qualitative research, which can be found, for example, in the mushrooming of mixed-method studies (Gergen et al., 2015). However, it seems that in these cases qualitative methods are approached much in the same way as it were a new statistical analysis-technique to be implemented. As a result, we get a lot of researchers conducting qualitative studies, without having the proper training or mindset for doing so (Ponterotto, 2005). Whereas they have mostly carefully read a manual about how to conduct a specific qualitative method, you can clearly see their way of thinking is still mostly inspired by the classical (i.e., quantitative) way of doing research in the field. An example of this can be found in a master's dissertation I had to quote last year in which the student described his sample of eight persons in terms of percentages. Whereas such 'faults' are rather amusing, instead of really hampering the quality of the research, the unfamiliarity with this way of doing research also has important implications on the analysis process. Indeed, as Smith et al. (2009) point out, novice researchers are often too cautious when conducting qualitative studies, as such backing away from really interpreting their data, ending up with rather descriptive analyses.

Overall, we can say that many have good intentions when it comes to conducting qualitative research. However, it seems that different hurdles still need to be overcome to turn good intentions into good research. One of these hurdles, on which I will focus in the remainder of this chapter, is the fear of using theory when interpreting data or to interpret at all. Indeed, it seems that in mirroring oneself too much on the quantitative way of conducting research—be it in an attempt to be taken more seriously or because of a lack of familiarity with qualitative methods and its epistemology—the request for bracketing one's own assumptions when conducting qualitative research (e.g. Smith et al., 2009) is taken too far. Whereas methods differ in the amount of theoretical influence they see as acceptable, even methods with a strong focus on bracketing like Interpretative Phenomenological Analysis (IPA) and Grounded Theory are not opposed to making use of a theoretical framework as long as your analysis remains faithful to the principles of the method (Charmaz, 2014; Smith et al., 2009). Moreover, as Timulak and Elliott (2019) point out, what is often referred to as bracketing, might in reality imply that an interpretative framework is influencing data-analysis, without this being made specific (or the researcher being conscious about this), which might undermine the credibility of a study. Based on these concerns, I will, in the remainder of this chapter, explore the questions if and how the incorporation of a theoretical framework can enhance the quality of a qualitative study. Therefore, I will discuss how in our own recent study we at first avoided to take a theoretical stance, but later deliberately incorporated a theoretical lens and how this provided us with a deeper understanding of our data. In the following section, I will first shortly provide some background information regarding the study in question, whereafter I will discuss our research process.

3. Negative Symptoms and Qualitative Research

In my PhD-research, I study the first-person experience of negative symptoms in psychosis. Negative symptoms concern the capacities which get lost after a psychotic episode (Kirkpatrick et al., 2006) and are often compared to a zombie-like state. DSM-5 (APA, 2013) discerns five negative symptoms: diminished emotional expression, avolition, alogia, anhedonia and asociality. These are typically divided in two categories: primary negative symptoms, which are seen as the direct result of the illness, and secondary negative symptoms, which can be attributed to other factors, like for example medication side-effects, post-psychotic depression, stigma etc. (Kirschner et al., 2017). Negative symptoms are in the mainstream literature typically approached in terms of a loss (Kirkpatrick et al., 2006). However, phenomenological studies (e.g., Sass, 2003) and reports based on personal experiences (e.g., Longden 2012) contradict this assumption, pointing out that so-called negative symptoms are rather characterized by a shift in the normal way of being-

in-the-world. Qualitative methods can play an important role in shedding light on this discrepancy and in getting better insight in the subjective experience of these symptoms.

While qualitative studies are a minority in clinical psychology research, qualitative studies regarding psychosis are more or less 'rare birds' (Leader, 2011). Indeed, as people who experience(d) psychosis are considered lacking insight in their experiences, their stories are often considered as being of little relevance (Roe & Davidson, 2005)—so far for bracketing theoretical assumptions, right? When it comes to negative symptoms, qualitative studies are almost completely missing, with only twelve studies being published up until 2018, the majority of these only highlighting one of the negative symptoms instead of the whole syndrome (see our review study: Moernaut & Vanheule, 2020). As the qualitative understanding of subjective experiences of negative symptoms can be considered a rather unexplored domain, my research aims at filling this gap by interviewing people with psychosis about their personal experiences with regard to negative symptoms.

4. Methodology

The following parts of the chapter are based on my own recent work regarding the experience of negative symptoms. I will focus here on how we conducted the data-analysis, further details on the study can be found in Moernaut et al. (2021). For this study, I interviewed fourteen participants[3], who were being treated in a Belgian hospital for psychosis, about their experiences of negative symptoms. The interviews had a semi-structured nature and were analyzed based on Interpretative Phenomenological Analysis-guidelines (IPA; Smith et al., 2009). Our research team consisted of five persons, with all of us having a theoretical background in psychoanalysis (four Lacanian, one psychodynamic) and three of us also being substantially acquainted with phenomenological literature. Apart from that, I, myself, have considerable knowledge regarding the common theories on negative symptoms. Our epistemological position can be situated on the rather constructivist side, as we see people as meaning-making agents. Three of us participated in the whole data-analysis process, the other two functioned rather as auditors. The final data-analysis was conducted primary by me, but in close discussion with the other members of the research team. According to IPA-guidelines, we started with making case-by-case conceptualizations. In this part of the research, we tried to bracket our theoretical assumptions as much as possible: whereas we discussed elements that drew our attention from a theoretical point of view during our data-sessions; we formulated our case conceptualizations as much as possible in the words of the participants. When passing to the stage of bringing the cases together in an overall analysis, we also brought in some theoretical insights which fostered our understanding and helped us to come to a more in-depth analysis. Details on this process are discussed below.

5. To Theorize or not to Theorize

Already rather soon during the research process, when we were still collecting data and had not started the analysis yet, we noticed how many of our participants, especially at the start of the interviews, actively denied to have experienced primary negative symptoms. Whereas they all knew what I meant by negative symptoms, they ascribed those to other patients they knew, who they described as "wandering ghosts." However, they could not align such an image with the ideas they hold about themselves. Nonetheless, later on in the interviews, it became explicitly or implicitly clear that most participants did in fact (had) experience(d) negative symptoms. These negative symptoms seemed to be experienced as the sword of Damocles which should be avoided by any means, including when talking about their experiences. As such, we noticed that most participants only reported negative symptom experiences when they were not explicitly called that way. Most participants also

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[3] Two were excluded from further data-analysis as their reports lacked information about negative symptoms. Our final sample thus consisted of twelve participants.

talked mainly about what they saw as the causes for their feelings of emptiness and passivity, instead of about the experiences themselves. This observation intrigued us and, approached from our theoretical ideas on the matter, also made a lot of sense. Indeed, in Lacanian psychoanalytical terms, negative symptoms can be understood as the result of a confrontation with perplexing experiences, which cannot be accounted for by means of language. (Vanheule, 2018). Due to this linguistic impossibility, people might feel disconnected from their own experiences and the world, which in turn might lead to disinterest and passivity. In this perspective, it is not surprising that most persons do not succeed well in describing their negative symptoms. The whole interview context can even be seen as a re-realization of the difficulty people are confronted with when experiencing negative symptoms. However, as we tried to keep our theoretical preconceptions out of our data-analysis, these ideas did not really reverberate in our first attempt to come to an overall conceptualization, except for a theme called "negative symptoms as the sword of Damocles."

As the so-called secondary negative symptoms (for example, feeling empty and very tired due to medication) were most discussed by our participants, these tended to take a central place in our final analysis. However, a too big focus on these secondary elements felt as a too superficial finding of our research. Moreover, it would be of little added value to the field, as simply rehearsing the typical primary-secondary negative symptom distinction[4]. Despite feeling there was something amiss in such an approach—our analysis felt at that stage rather as a categorization instead of a real analysis—the prominence of all these different causes for negative symptoms made it hard to get our focus away from them. While pondering about this, I returned to one of the discussions we had over one of the interviews[5], in which one of my coworkers had made a comment, which relevance only struck me in retrospect: "it seems like this person is the only one who is really telling the story of his negative symptoms, while the others are rather telling their recovery story." Whilst we had been discussing how our participants presented themselves during the interviews before, we were not sure how to incorporate this in our analysis. However, my colleague's reference to the concept of the story made everything fall into place. Indeed, interpreting our data in terms of narratives made it possible to make the bridge between our rather abstract theoretical concepts and the concrete data. Inspired by the psychoanalytical idea of negative symptoms as the failure of language, we could reconceptualize negative symptoms as the moment the story comes to a halt which was of course present in the avoidance of many participants to talk about the pure experience of their negative symptoms, but was even quite literally stated by our participants when they described they had no words for their experiences. This led eventually to the main theme "When the narrative fails," which handles about the experiences of negative symptoms themselves and addresses how people felt disconnected from existing narratives, how they lacked the words for their experiences, how their usual narratives to understand the world seemed to make no longer sense and so on. In the meantime, participants did tell us a lot during the interviews, hereby, as mentioned before, focusing especially on what they thought caused their negative symptoms. Here again, our psychoanalytical theory helped us to make sense of this. Indeed, whereas most of our participants were able to tell us a rather coherent story about their experiences, they were only able to do so in retrospect, i.e., when they were no longer experiencing negative symptoms. So, whereas their grip of their experiences by means of language was lost when they were experiencing these symptoms, they could construct a narrative about these on a later moment (i.e., during the interview). This point was further highlighted by the rather chaotic discourse of the participants who were still suffering from negative symptoms at the moment of the

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[4] While writing this, I suddenly realize that this distinction is of course also a presupposition. However, as the quantitative studies conducted on this topic almost never discuss their theoretical background and as such present themselves (in line with the DSM; see Vanheule, 2017) as atheoretical, one would actually fall into the trap to think that there actually exists something as being atheoretical.

[5] Conducting this research during the covid-19-pandemic turned out to be beneficial in this case, as it made we held our discussions digital and made recordings of those, making it possible to listen back to our discussions.

interview. As such, our second main theme described the way people tried to make sense of their negative symptoms, by focusing on causes, but also by relying on metaphors, philosophical ideas and delusions and was designated as the construction of a meta-narrative regarding negative symptoms (For a further discussion of these themes see Moernaut et al. (2021)). Approaching our data in terms of narratives was an enormous help to bring the depth we were missing before into the analysis. On the one hand, it helped us to finetune our descriptions of the primary negative symptoms, which were in an earlier version of the analysis assigned to a rather undifferentiated category of "estrangement." On the other hand, it still gave us the opportunity to do right to all the different causes for negative symptoms discussed by our participants, without giving these a too dominant role in the final write-up. An illustration of how some of the original themes developed in the more theoretical inspired themes through the lens of a narrative-conceptualization can be found in Figure 1.
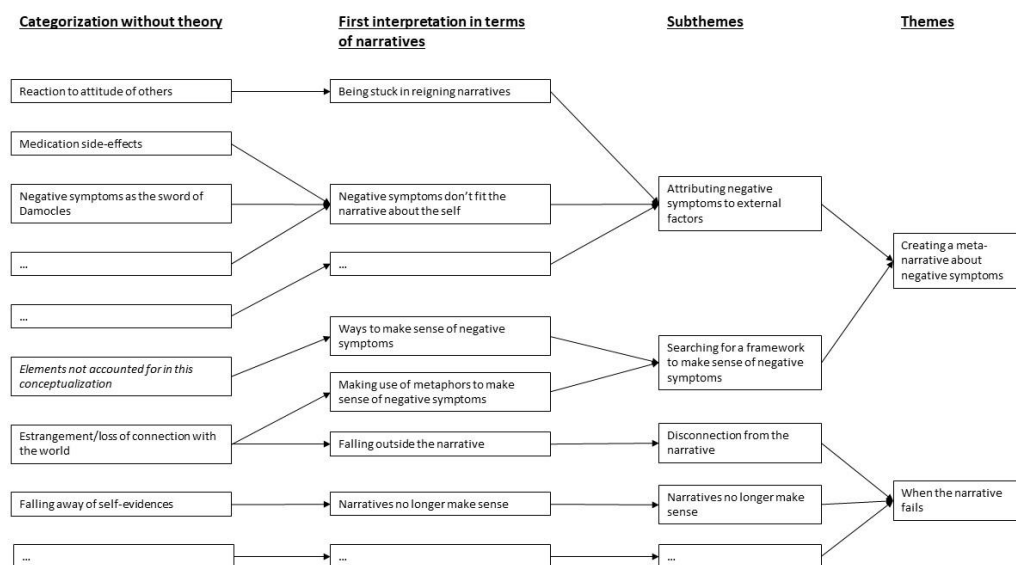

Fig. 1 Visualization of the Analysis Process

Note. The incorporation of the theoretical framework led as well to the aggregation of certain themes, as to the splitting of others and the incorporation of elements which were not accounted for in the first categorization. This visualization is of course a simplified version of the real process, as analysis never is a strictly linear process and our theoretical background probably already implicitly influenced which elements we noticed in the data. To keep the figure clear, some elements were omitted, as indicated by the boxes with the ellipsis.

Despite my enthusiasm when I first started to approach the data in the light of narrativity, I also doubted whether I was not imposing too much on the data, whether all elements could be grasped along this way, whether it was not a too theoretical interpretation and so on. In other words, I was afraid whether what I was doing was actually allowed within the framework of an IPA-study . However, the idea did not let go of me. Three important elements helped me to let go of these doubts. Most importantly of course was the enthusiasm of my co-authors who affirmed that this conceptualization matched our data. In the meantime, discussing this with them also helped to be critical of this interpretation and to bring the necessary nuances. Especially the more phenomenological approach from one of my co-authors was of major help herein. Next, I remembered a remark I made myself in my first publication about how the use of a theoretical framework helps to come to a deeper understanding of the data (Moernaut et al., 2018). Some advice I also always give to my own students and apparently now had to give to myself. At last, there was also my own frustration regarding many qualitative papers I read, but which did not feel as an added value to my understanding of psychosis due to their shallow analyses. Therefore, I was strongly motivated to do a better job myself. However, my first attempt for an overarching conceptualization (which was not yet inspired by theory) was not really succeeding in this

attempt, as it rather felt like a categorization of the data, without being a real analysis. The conceptualization based on narratives, however, did. So, despite needing to overcome a certain initial reluctance to let theory enter our analysis, I could not deny how this approach served as a major improvement to the depth of our analyses.

6. An Alternative Way of Bringing Theory in Qualitative Research

In our study, we made use of an existing theoretical framework to come to an-in-depth understanding of our data. However, there is also the possibility of going a step further. Indeed, qualitative research might also inspire theory building or the adaptation of existing theories. Qualitative research has the benefit of not averaging out atypical cases and as such has the opportunity to expose elements which tend to be overlooked in statistical hypothesis testing studies (Stiles, 2007). This unique view might thus lead to new insights within the field. The most common approach to theory building in qualitative research is of course Grounded Theory—albeit that many Grounded Theory studies do not go as far as to build theory (Charmaz, 2014). However, other approaches to come to theory based on qualitative research are also possible, see for example Stiles (2007).

7. Conclusions

In this chapter, I discussed how qualitative studies in psychology suffer from a fear to really interpret their data and proposed the incorporation of a theoretical framework as a possible way to overcome this issue. I illustrated this by means of our own study regarding the experience of negative symptoms. At first we tried to stay as close as possible to the data and as such backed away from incorporating our theoretical understanding of the phenomenon in our analysis. This way we wanted to avoid imposing anything on our data. However, in doing so, we felt frustrated as our analysis rather remained a categorization and was not able to reflect the richness of our data.

While we did not have the deliberate intention of using a theoretical framework to guide our analyses when starting our study, a rather casual remark about the story participants told, made the link with our psychoanalytic background suddenly very obvious. As our participants seemed to avoid to talk directly about their negative symptoms, but rather circled around them, this fitted very well with the psychoanalytic idea of negative symptoms as a failure of language, as a hole in the so-called Symbolic register (i.e., the domain of language which helps us to structure and make sense of our world and mental life; Vanheule, 2011). Whereas we had avoided this theoretical interpretation in an earlier phase, as it felt as a too big leap from our data, the notion of failure and construction of narratives helped us to make the bridge between our theoretical knowledge and the actual data. Thanks to this approach, we could both account for the big focus participants put themselves on the causes of their negative symptoms—given the theoretically assumed difficulty to bring the experiences themselves into words, this focus seemed rather logical—as for the underlying processes. Indeed, this conceptualization gave us the opportunity to make a theme of something which was actually largely lacking, namely the true discussion of negative symptoms in the majority of interviews. So, by making use of a theoretical framework—in our case Lacanian psychoanalysis—we moved from an analysis which was rather a categorization and just mimicked the typical primary-secondary negative symptom division, to an in-depth analysis, which went farther than what was literally said by our participants.

To avoid misunderstandings, I would like to remark that Lacanian psychoanalytic theory does not hold specific assumptions regarding negative symptoms. In the meantime, it did provide us with a framework to understand psychosis and how language functions and might fall short in psychosis. So, our theoretical framework rather served as a lens through which to look at our data instead of imposing specific assumptions on them. In conclusion, whereas I promote the use of a theoretical framework as a lens to look at data, I would also

like to warn for too specific theoretical assumptions as these might cause you to overlook those elements which are not in line with your assumptions. Therefore, a theoretical framework preferably offers you a way to look at the world, without holding too specific ideas about the topic under research—if you do hold specific assumptions you might question whether qualitative methods are the best approach.

Next, it is always interesting to have someone in your research team with a different theoretical background to prevent you from being blind for the elements which do not match your theoretical assumptions. Whereas all members of our team were trained in psychoanalysis, especially one of my co-authors is in the meantime really critical regarding psychoanalysis and tends to interpret things rather from a phenomenological background. His questioning of our ideas from a phenomenological point of view, helped us to further finetune them and prevented us from jumping to conclusions. Overall, dare to interpret when conducting qualitative research. Listen to your participants, but go further than what they literally say: what are the things they do not say? How do they say things? In short, listen between the lines.

Acknowledgments

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Qualitative Experiments for Social Sciences

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Abstract: This paper presents the qualitative experiment as an alternative methodological solution that combines an open qualitative approach, and a structured and controlled experiment. Using three studies, including both a qualitative experiment and a traditional in-depth interviews approach, we compare the findings of both approaches to identify the benefits and risks of qualitative experiments. Our findings contribute by presenting a methodological framework and technical recommendations based on three validity criteria (internal, external, and interpretivist validity). The results thereby contribute methodologically by empirically investigating the usefulness of qualitative experiments based on a combination of quantitative and qualitative validity criteria identified in the literature.

Keywords: qualitative experiments, validity criteria, methodology, qualitative research

1. Introduction

While qualitative and quantitative techniques are often considered separate approaches, the combination of different research designs and collection processes have been recommended to discover differentiated results. According to previous authors, this is beneficial to the holistic investigation of complex studies (Decuir-Gunby & Schutz, 2017). In line with previous authors' recommendation to continue exploring mixed research approaches (Ramirez-Montoya & Lugo-Ocando, 2020), this paper presents the qualitative experiment as an alternative methodological solution that combines an open qualitative approach, and a structured and controlled experiment (Robinson & Mendelson, 2012).

More precisely, according to quantitative research, a true experimental design is one that has at least two independent, parallel groups; randomly assigns subjects to the groups; and assesses treatments prospectively (Slack & Draugalis, 2001). Applied to qualitative research, the investigation and analysis is supported by an open and interpretivist approach (Robinson & Mendelson, 2012). The combination of a qualitative and experimental approach seems especially useful in the investigation of processes and behaviors in social sciences (Kleining & Witt, 2000; Wagoner, 2015).

Consequently, this research paper presents a methodological framework for conducting qualitative experiments, including recommendations and techniques to address internal, external and interpretivist validity. Based on three studies that apply the three types of validity and compare the insights gained from the qualitative experiments with those from the traditional in-depth interview approach, the findings also identify the benefits and risks of qualitative experiments for interpretivist research. This paper is structured as follows. After reviewing the literature on qualitative experiments, validity criteria commonly used in qualitative and experimental (quantitative) research are examined to develop a methodological framework that is applied to the three studies of this research. Finally, the systematic methodology is presented before discussing the findings of this research.

2. Theoretical background

The qualitative experiment is the intervention in a social/psychological situation for exploratory purposes. When compared with experiments, qualitative experiments are exploratory and heuristic (Kleining, 1986). They are based on the inter-related strategies of "experiments" and "observation" that improve learning and understanding (Kolb, Boyatzis & Mainemelis, 2002; Kleining, 1991). They differ from systematic observations in that the analysis remains discovery-based and introspective (Kleining & Witt, 2000), and

differ from traditional qualitative methods in that they allow a controlled and systematic study of patterns (Robinson & Mendelson, 2012). They are especially suitable to discover qualitative relations such as structures, processes or structural changes (Kleining & Witt, 2000; Wagoner, 2015). For example, Bartlett classified participants based on a priori characteristics using qualitative experiments (Bartlett, 1995).

While the term has been coined by three main authors before (Bartlett, 1953, 1995; Kleining, 1986; Robinson & Mendelson, 2012), we argue that qualitative experiments can benefit from validity criteria and techniques used in quantitative research to increase the results' relevancy of qualitative experiments. Kleining and Witt (2000) identified four rules for the implementation of qualitative experiments:

- Researchers' openness regarding their preconceptions if the data are not in agreement with them;
- Changing research questions during the research process;
- Rich and varied data based on a variation in sample and method to avoid one-sided representations;
- Analysis oriented towards the discovery of similarities.

3. Qualitative and Quantitative Validity Criteria and Techniques

Quantitative research has long used validity criteria to evaluate the relevance of statistical findings. While quantitative research mostly used internal and external validity criteria, qualitative researchers adapted validity criteria and presented different norms and techniques to achieve it. Table 1 summarizes the main validity criteria in quantitative and qualitative research, and the techniques used to increase each type of validity as described below. On the one hand, in quantitative research, internal validity refers to the degree to which a study establishes the cause-and-effect relationship between the treatment and the observed outcome. In other words, it refers to the process of ruling out alternative causes (Slack & Draugalis, 2001). Internal validity, as defined by Campbell and Stanley, is a logical rather than statistical issue. Researchers are encouraged to assess internal validity based on the research design and operational procedures. External validity is addressed by delineating inclusion and exclusion criteria to characterize participants and assess generalizability of the results (Slack & Draugalis, 2001; Lynch, 1983).

On the other hand, in qualitative research, validity is characterized by a tension between rigor and creative discovery (Whittemore, Chase, & Mandle, 2001). Primary validity criteria are based on credibility, authenticity, integrity and critique, while secondary validity criteria focus on congruence, creativity, vividness, explicitness, and thoroughness (Whittemore, Chase, & Mandle, 2001). Credibility and authenticity refer to the descriptive and interpretive validity evaluation of qualitative research (Maxwell, 1996). Lincoln (1995) describes credible findings as those reflecting the relativistic nature of truth claims in the interpretivist tradition (Lincoln, 1995). Researchers should make sure that the findings reflect the experience of participants or the context in a believable way (Lincoln, 1995). The findings should also be authentic in their representation and reflect the meanings and experiences that are perceived and lived by the participants of the study (Sandelowski, 1986).

To assess these different types of validity, researchers recommend a series of techniques that contribute to valid research findings. Qualitative and quantitative research both claim that validity is mainly assessed through the choice of research design (Whittemore, Chase, & Mandle, 2001). Qualitative research insists also on triangulating methods or validity checking (member or experts checks) (Whittemore, Chase, & Mandle, 2001). Qualitative research thus cannot be assessed through a single test or step in the research process, but should rather follow the rules of a processual validity that depends on decisions made at every step of the research process (Hayashi, Abib, and Hoppen, 2019). An attempt to remain true to the phenomenon under study is essential in qualitative research (Hammersley, 1992), which suggests the integration of principles commonly used in quantitative research for the qualitative study of processes, patterns and behaviours.

Quantitative, namely experimental research, insists on sample-related decisions to address external validity (Leviton, 2017). Experimental research recommends including random or systematic sampling across two or more study conditions, to capture the most relevant variation (Leviton, 2017). More precisely, a true experimental design is one that has at least two independent, parallel groups; randomly assigns subjects to the groups; and assesses treatments prospectively (Robinson & Mendelson, 2012; Seltman, 2018; Slack & Draugalis, 2001). In within-subjects experiments the randomization of treatments is recommended (Dülmer, 2015). Moreover, external validity requires that researchers encourage heterogeneity of study settings or populations to compare the outcomes across study contexts (Leviton, 2017). Beyond surface variables such as demographics, researchers should also consider other features (e.g., privacy concern) to study individuals, as they may interact and alter consumers' perception or behaviours (Leviton, 2017; Seltman, 2018).

Lynch (1982) argues that for external validity to increase, there should be statistical generalizability that can be induced through appropriate use of sampling procedures (Ferber, 1977); conceptual replicability or robustness when using particular subjects or settings (Cook and Campbell 1979); and realism of tasks, stimuli and settings (Berkowitz and Donnerstein 1982). As external validity is hard to assess, even in quantitative research, reweighting the sample to match the population has been used as a solution to increase external validity (Andrews & Oster, 2018). The latter design elements also contribute to greater internal validity. Controlling for potentially confounding variables minimizes the potential for an alternative explanation for treatment effects and provides more confidence that effects are due to the independent variable (Slack & Draugalis, 2001).

Regarding the analysis of qualitative experiments sampling is determinant for validity. In particular, new variations of data and perspectives should not bring new results but confirm the existing ones (saturation principle). Findings are reliable if all data can be imputed to the same categories (Kleining, 1986). Reviewing validity criteria in qualitative and experimental quantitative research helped to identify the potential criteria that need to be considered when conducting scientifically sound qualitative experiments. Table 1 synthesizes validity criteria in both approaches, as well as related recommendations to address them. These criteria and techniques set a methodological framework for conducting qualitative experiments, which we will apply to three studies with the goal of identifying the benefits and risks of using qualitative experiments.

Table 1. Validity criteria in qualitative and experimental quantitative research

	Qualitative research	Quantitative (experimental) research
Research design and analysis	Interpretivist validity • Open questions • Open coding/grounded analysis	Internal validity • Adherence to a study protocol • Between-subjects (vs. within-subjects design) • Reducing the impact of extraneous factors
Sampling	Interpretivist validity • Sampling diversity • Saturation principle	External validity • Systematic sampling procedure / randomization • Realism of tasks, stimuli and setting (heterogeneity of settings)

4. Goals and Methods

This paper aims to examine the benefits and risks of qualitative experiments, and provide methodological recommendations based on qualitative and experimental validity criteria. Based on a quantitative and qualitative literature review, three types of validity criteria have been identified (interpretivist, internal and external), which can be addressed through nine methodological techniques (see Table 1). Qualitative experiments have shown to be useful for examining processes and behaviours (Kleining, 1986). Therefore, we decided to compare the usefulness of qualitative experiments to investigate major processes and behaviours in consumer research (information search & learning, and decision-making), as these research streams are particularly and increasingly interested in investigating consumer and firm co-created activities and behaviours (Cho, Fu & Wu, 2017). To compare between- and within subjects experiments (Dülmer, 2015; Slack & Draugalis, 2001), we studied decision-making using one between- and one within-subjects experiment, leading to three parallel qualitative studies (see Table 2).

Each of the three qualitative experiments (N1=16; N2= 15; N3= 15) used a traditional qualitative approach (in-depth interviews) preceded by a qualitative experiment. First, we used a thematic analysis (open and axial coding) for the analysis of each approach independently. Next, we compared the findings from the in-depth interviews and the qualitative experiment to derive the benefits and risks of each approach. Study 1 aimed to understand consumers' information and learning behaviours online when having to learn the usage of a new product. Therefore, three situations have been imagined, in which consumers had to learn and carry out a task they had never done before (installing wooden parquet flooring, using a SodaStream maker, or editing photos on Photoshop). These situations were chosen to ensure setting diversity and realism (Leviton, 2017), and thus internal validity as described in the literature. To address internal validity even more, participants conducted one of the three tasks (between-subjects; Robinson & Mendelson, 2012), in the same artificially decorated study lab (reducing the impact of extraneous factors), and based on a study protocol in which they had one hour to conduct the task while being filmed and observed. External validity was increased by providing consumers with all informational material that they could have found at home as well (not only a computer, even though the study goal was to investigate online learning). We provided them with real tasks and situations (increasing realism, Berkowitz and Donnerstein 1982). Furthermore, we systematically assigned them to one or the other task based on the only criteria of having not used the product before ("systematic" sampling, Leviton, 2017). Finally, interpretivist validity was ensured by recruiting a diverse study sample based on the saturation principle, providing few initial instructions on how to behave during the experiment, and openly discuss this and similar experiences in follow up semi-structured interviews (Lincoln, 1995).

Study 2 and 3 investigated consumers' purchase decision-making after watching influencer videos. Study 2 invited participants in one of two situations using both similar videos, but from influencers with varying community size (control for alternative explanations, increasing internal validity; Seltman, 2018). Study 2 aimed the same research objective, but showed each participant the three videos with similar content, but different community sizes (within-subjects experiment; Dülmer, 2015). After watching the videos, consumers were asked to shop online for the necessary material using the "think-aloud" technique, but without providing any further instructions to ensure an open research approach, and thus interpretivist validity (Maxwell, 1996). To further increase interpretivist validity, both studies conducted complementary in-depth interviews on this and similar experiences.

5. Analysis and Results

In order to derive the risks and benefits of experiments for qualitative research, we coded and analyzed the results of each approach (qualitative experiment vs. in-depth interviews separately). In particular, the researcher transcribed video and audio material and coded decision-making and behaviors according to the research objective(s) using a thematic analysis. Next, we compared the findings and identified similarities and differences (see Table 2).

The results from study 1 identified how individuals learn online in consumption-related contexts. During in-depth discussions, participants explained their information search in a seemingly well-thought processing order using dominant preferences for learning tools and sources. Some participants were also unable to explain their process and preferences. However, the experimental conditions revealed an iterative search behavior using a variety of information sources. Comparing the three scenarios, we further observed similarities of searching behaviors across scenarios (e.g., scant reading, jumping video sections), as well as divergences of searching behaviors within scenarios (e.g., searching order). To sum up, we observe that qualitative experiments helped us to identify processes and behaviors, which participants were unable to express. Furthermore, it helped

to explore two main learning processes (driven by a learnability or a usability goal) by identifying similarities and differences across the three study conditions.

Study 2 and 3 investigated consumers' decision-making process in social media purchases (influencer videos) using a between-subjects (study 2) or within-subjects (study 3) qualitative experiment. Given the realistic setting of the experiment, we observed that participants in study 2 "freely" searched for and evaluated products on the web-based on (or not) the influencer videos. None of them followed the recommendations from the video, but rather searched for products on web shops they were used to. However, in the in-depth discussions, a part of the consumers mentioned that the products recommended in the video seemed interesting and participants even considered buying them. Furthermore, we observed similarities and differences between the conditions. For example, a longer decision-making process in the qualitative experiments, which, as expressed by participants, seemed shorter when explained. The same benefits of qualitative experiments observed in study 1 can be concluded in study 2. However, we observed several risks and inconveniences in study 3, which used a within-subjects design. Here, we observed that presenting different videos with slightly changing settings encouraged participants to focus their attention and discussion on these elements, thereby reducing the overall openness of the qualitative approach (reduction of the interpretivist validity). Detailed observations and findings are summarized in Table 2.

Table 2. Study overview and comparative results

Study 1		Study 2		Study 3	
Consumer e-learning Between-subjects (3 conditions) N1=16 Topic of investigation: behaviors/processes		Recommendation-based decision-making Between-subjects (2 stimuli) N2= 15 Topic of investigation: decision-making process		Video content marketing Within-subjects (3 stimuli: nano-, macro-influencer, brand) N3= 15 Topic of investigation: decision-making process	
Experimentation /Observation	In-depth discussion	Experimentation /Observation	In-depth discussion	Experimentation /Observation	In-depth discussion
Iterative searching behavior; Variety of information sources used; Similarities of searching behaviors across scenarios (e.g., scant reading, jumping video sections); Divergences of searching behaviors within scenarios (e.g., searching order)	Chronological explanation of searching behavior; Dominant preference or do not remember the source; Inability to explain search behaviors into depth	Immediate searching for alternatives; Longer decision-making process ("real-time")	Conscious evaluation of positive/negative arguments regarding the recommendation; Artificially shortened decision-making process (shortcut towards recommended product)	Comparison between stimuli (e.g. less professional); Only criteria based on visible stimuli are discussed	Comparison with previous experience; Open and spontaneous discussion on criteria of importance

Based on these findings, we present a methodological framework for conducting qualitative experiments, including recommendations and techniques to address internal, external and interpretivist validity (see Figure 1). We also highlight the benefits and risk for interpretivist research.
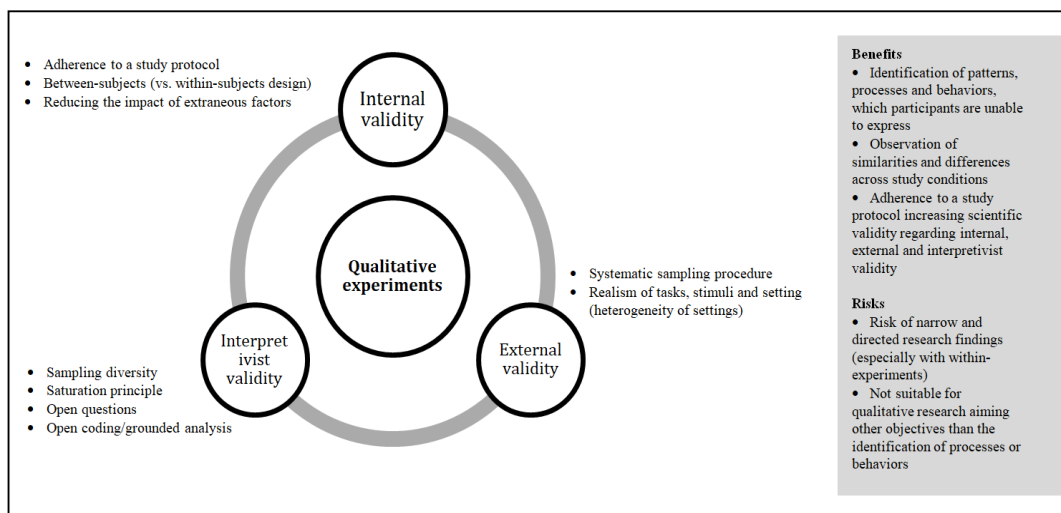

Fig.1. Methodological framework for conducting qualitative experiments

Based on the findings of our investigation, we observe that qualitative experiments are a recommended research approach for qualitative research aiming to explore and identify patterns, processes or behaviors. As participants are sometimes unable to express, or even wrongly describe, their decision-making process, qualitative experiments not only help to observe participants' real behaviors in controlled study settings but also compare their behaviors in different settings while controlling for alternative explanations. However, given the imposed study context, researchers should be aware of directing behaviors, especially in within-subjects experiments, which become therefore less recommended for qualitative research given the reduction of interpretivist validity. More generally, we therefore recommend qualitative experiments only for the exploration of patterns, processes and behaviors, since other research topics commonly investigated in qualitative research require a more grounded and interpretivist approach to uncover feelings, motivations, etc. When designing qualitative experiments, our findings recommend addressing internal, external and interpretivist validity using the variety of techniques identified in the literature and empirically tested across our three studies (see Table 2).

6. Conclusions

This research offers a primer view of modern qualitative experiments combining qualitative and quantitative methods to assess validity criteria in both methodological research streams. More precisely, this paper suggests an alternative technique to explore patterns using an open but controlled research environment. The findings of this research contribute methodologically to the works of previous authors who first introduced qualitative experiments in the scientific literature (Bartlett, 1953, 1995; Kleining, 1986; Robinson & Mendelson, 2012). In particular, our findings contribute by offering a methodological framework and recommendations based on three validity criteria. While previous research either focused on quantitative validity criteria (e.g., Slack & Draugalis, 2001) or qualitative validity criteria (e.g., Whittemore, Chase, & Mandle, 2001), we highlight the importance of integrating validity criteria from both research approaches to suggest a valid study protocol and thus more reliable results. In particular, the literature review led us to present and test three types of validity criteria: internal, external and interpretivist criteria. The

methodological framework connects design- and sampling-related methods and techniques to address each type of validity.

Furthermore, the findings empirically identify the risks and benefits of qualitative experiments for qualitative research. In contrast with traditional methods such as in-depth interviews or focus groups, qualitative experiments offer a complementary data collection method that helps in identifying patterns or processes that participants might be unable to express. They also enable the observation of similarities and differences across different study contexts, thanks to a rigorous study protocol. This paper thereby supports previous works' recommendation through empirical evidence (e.g., Kleining & Witt, 2000; Wagoner, 2015).

The findings are thus of interest for qualitative researchers who seek to investigate patterns or behaviors in social sciences. When using qualitative experiments, we recommend preparing a well-thought study protocol to increase internal validity, and using real tasks with a diversified sample to increase external validity. Moreover, this research insists on an open study approach regarding data collection and analysis to uncover processes and behaviors in an exploratory fashion. This increasing interpretivist validity helps identify credible and authentic insights as recommended in the literature (Whittemore, Chase, & Mandle, 2001).

Finally, this research presents some limitations. Given the heterogeneous nature of qualitative research topics in social sciences, all methodological recommendations may not be applicable to specific research topics that could not be explored in this paper. Moreover, the use of qualitative experiments requires a minimum of scientific understanding about the study topic to prepare a relevant research design. The use of qualitative experiments becomes thus difficult in nascent research streams.

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It Doesn't Rain it Pours—Reflections on Fieldwork in The Academic Year 2019/20

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Abstract: The crucial component to any research being successful is fieldwork and gaining access to research participants; which in the academic year 2019-2020 in England became a challenging endeavour, with regards, a) industrial action across the higher education sector, in December 2019 and again in February 2020; b) regional rail network industrial strike action across the year, and c) the pandemic (Coronavirus). This perfect storm restricted and challenged qualitative data collection for a study on 'Teaching Innovation in 21st century UK Higher Education'. Writing from a postgraduate researcher position and perspective who was caught in university halls of residence; this paper reflects a meaningful mental activity and an approach to telling stories. Through my reflections, three themes of experience are significant. 1) Connection and access to participants, Implications of mass media reporting; workloads and screen time. 2) The use of visual method selection is difficult to achieve over a series of digital platforms regarding network failures, functionality, visual descriptions, and feelings of incompetence in understanding the impaired spoken drawing, and 3) the emotional toll on the researcher.

Keywords: reflection, lived experience, fieldwork, constraints, and challenges, covid-19.

1. Introduction

There is a phrase that bad things happen in threes, a theme that during this inquiry has undoubtedly come to fruition, especially this academic year. The idea behind this phrase is that 'bad' things happen, after which good things follow, seemingly? I cannot share the latter part of the statement as I sit in my magnolia asylum (halls of residence) at the start of the third lockdown regarding the new British variant of the virus. The paper will draw on experiences in the academic year 2019/20 in England, as a postgraduate researcher conducting qualitative research focusing on the views of innovative university instructors in two English research-intensive universities.

The research question (RQ) for this article how the pandemic affected my qualitative inquiry and the emotions this postgraduate researcher has faced? The article will use reflection, an under-used qualitative method, which "allows the reader to explore more freely" (Healey, Matthews, & Cook-Sather, 2020, p. 194), and as the vehicle to understand the hurdles, challenges, constraints, and directional change that occurred in this period. Boud and colleagues define reflection as "a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to a new understanding and appreciation" (Boud, Keogh, & Walker, 2013, p. 19). The paper embraces Donald Schön's 'reflection-in-action', whereby, the researcher "consciously thinks about what they are doing while they are doing it" (Edwards, 2007, p. 30) in other words thinking on your feet, which was the order of the day back in the initial lockdown. The purpose and aim of this paper are to underpin and embrace problems that are encountered during the fieldwork component, thereby helping others who find themselves in a difficult, unprecedented position. The article contributes to using the rarely used reflective method in bringing about awareness of postgraduate research experiences.

2. Context

The context of this paper is aligned with the fieldwork component of my postgraduate research inquiry. Ethics approval was obtained for the main study from the ethics research committee before the main study commenced. The reflections are taken from across my fieldwork notes. My inquiry focuses on exploring the views of innovative university

instructors in two English research-intensive universities. The research design adopted a draw-talk-talk-draw method of interviewing, which underpins the lived reality of teaching academics, producing an artefact with all its hidden depths of experience. Through mark-making (drawing), one recalls the process of its becoming through the act of mark-making. "When we do not have the words to say something, drawing can define both the real and unreal in visual terms" (Kovats, 2007, p. 8). Pictures, after all, are said to paint a thousand words.

Since commencing research, I have been confronted and challenged by several elements restricting the study's progress. Severe weather in the form of floods and industrial action across the rail network hindered transportation to educational libraries, interviews, and network meetings, making it challenging to recruit volunteers across the study. Academic, industrial action in England fed into the data collection period leading to re-scheduling and participants having to drop out due to other pressing commitments and workloads. However, these few interruptions are a mere nothingness compared to the pandemic of Covid-19 that sent countries and nations into confinement, resulting in an educational crisis never seen before. The fabric of nations across the globe changed, resulting in a new symbolism.

The national symbolism of England has changed over these last few months. The Union flag has been replaced by a spectrum of colour, a blanket of rainbows adorning nearly every window and doorway, chalked on pavements and roads, and even projected on private and national buildings. The national personification has become the gowned, masked health and care workers instead of Britannia. The coat of arms is the NHS, and Care badges and the motto 'Stay at home, Protect the NHS, and Save Lives' has become embedded in our daily lives. The national anthem has been replaced by the clatter of clapping hands and banging of pans, instead of ceremonial drums and trumpets. All of which has symbolised not just our support for health and social work staff on the frontline but also a symbol of solidarity, togetherness, and connection through the difficult times.

Before undertaking the second English research-intensive university in January, I had already completed twenty-five interviews with the first English research-intensive university. This first set of interviews ran exceptionally well with regards to participation and data retrieval. I was able to make appointments and interview on a face-to-face basis, which led to building a better rapport regarding interaction and a deeper participation with the mark-making, or drawings. My original design involved face-to-face interviews with A3 drawing paper and a selection of colored pens; supplied by myself. The interviews were recorded using an encrypted Dictaphone, therefore, catching participants' verbal interpretations of their drawings, hence the term draw-talk-talk-draw. However, the second university did not share the quality that I had got from the first university. However, the second university proved more difficult, in the sense of interview format at the start of the national lockdown. I had to adapt, find a new direction to collecting data, data that would still be usable, encompass some visual theme, or be as near as possible. At that time, I was frustrated, thinking that I would have to lose the data's visual aspect, especially when the images I had already were data-rich, with hidden symbols. Nevertheless, as Celia Brackenridge's (2001) discloses through her fieldwork diaries, there are many "stumbling blocks, changes of direction and breakthroughs" (p. 148) that so often can make a mess of the research process. This paper highlights my stumbling blocks during the lockdown period of early 2020.

3. Methodology

This reflective study follows an interpretivist epistemology; an interpretive search and understanding of oneself during a pandemic while undertaking fieldwork, therefore embracing the researcher as part of the research. It is the researchers' reflection and interpretations that are influential (Brown, 2015), after all, I have actively constructed interpretations of my experiences undertaking fieldwork (Primeau, 2003). Qualitative research is viewed as both "transformative and interactive" regarding pursuing understandings of the lived experiences through interpretations of those experiences

(Sword, 2016, p. 270). This iterative process can be "messy and unpredictable" (Aspers & Corte, 2019; Healey et al., 2020, p. 194). The paper uses reflection as the instrument to understand the informal, first-person accounts of undertaking qualitative research in a period of unprecedented interruption during the Coronavirus pandemic. In using reflection, the paper emphasizes the lived experience that portrays the practicalities of researching, both positive and negative. The perspective-taking that reflection offers highlights the researcher's identity and situates the reader in the shoes of another. Perspective-taking centralizes identity and emotions, thereby connecting with feelings (Healey et al., 2020).

Reflection is a practice suspended somewhere around the notion of learning and thinking (Moon, 2004, p. 80), a practice that is both "methods and techniques that help individuals and groups reflect on their experiences and actions" (Plowman, 2015). Reflection is a subjective qualitative research device (Primeau, 2003). A device that in the words of Jenny Moon (2013) implies learning, "reflect in order to learn something, or we learn as a result of reflection" (p. 80). It is through reflection that we "tell our stories" (Yancey, 1998, p. 53). Mills and colleagues, define storytelling as the "ability to shape life events into experience in a web of stories" (Mills, Durepos, & Wiebe, 2010, p. 2). Other commentators such as Frederick Steier have referred to it as "bending back on itself" (Steier, 1991, p. 2), indicating a process of capturing the lived experience (Healey et al., 2020). The lived experience being "multi-layered and multi-sensorial" (Reavey, 2020, p. 27). The notion of understanding ourselves and our interactions with others (Boodt & Mos, 1993) in the "lifeworld" (Alfred Schütz's notion of the social world as ordinary individuals live it) (in Harrington, 2006, p. 341).

Reflective practices shape our cognitive processes; it is a significant mental activity, mental activity in the form of "making oneself the object of inquiry" (Mortari, 2015, p. 1). The practice of reflection is self-identification, an awakening of self-consciousness (Cai, 2013), a philosophical stance that frequently refers to reflection as "turning to oneself and examining one's own mental states or acts" (Cai, 2013, p. 341). However, as Moon argues, reflection is a representation, not a "mirror in the head" (Moon, 2004, p. 80).

Reflection is no different to any other methodology it raises ethical concerns regarding confidentiality and anonymity of the issues under reflection. As Vikki Pollard (2008) suggests, "experience is not personally owned but rather a conversation between the self and that which is not-yet known" (p. 399). Within reflection there is a high degree of "emotionality" (Ghaye, 2007) whereby oneself can be subjected to one's own feelings. As Tony Ghaye posits, reflecion should "come with a health warning" (Ghaye, 2007, p. 153). Ethically I have used my own "inner compass and emotional indicator about what might make us feel good or bad", and that great care is taken in understanding the "potential to affect both the writer and the audience is taken into account" Einhorn (2006) in (Ghaye, 2007, p. 155).

4. Reflection (January 2020-May 2020)

My study, like any research study, relied on gaining access to innovative instructors. Access, according to Cunliffe and Alcadipani (2016), which is both "problematic and involves working in complex social situations" (p. 535). Gaining access at the best of times can be fraught with difficulties, and I had experienced many, as I call them 'silent sleeping emails', those emails which have zero response and lead to moments of frustration and deep fear that no one wants to know. It makes you feel like you are inquiring about the wrong thing, and whether you are doing something wrong. Therefore, in the midst of a pandemic, it became even more problematic. Problematic because of the need to be "sensitive to what was, is going on around us" (Ann L Cunliffe, 2011, p. 667). I recall the news items and the sharp increase in infected people and families who have been torn apart after losing relatives and friends. The emotional toll on myself as the researcher became apparent when composing emails and staring at the send button, knowing that I could be emailing individuals who have experienced loss. That is not to say that even before the pandemic that the element of loss was not present, it is just that it was exacerbated by what was unfolding in front of my eyes. I remember thinking is this worth

it, especially when media outlets were reporting the impending doom of higher education. You also compartmentalize, prioritizing one's life through events, such as that of the pandemic, trying to capture that tiniest ounce of directional drive, the resilience to re-engage. To recognize the "concreteness of everyday being-in-the-world" (Barnacle, 2004, p. 66). The soul searching that goes on when you are in what I would call a 'static alternative dimension', which underpins this tearing of the fabric of your lifeworld, resulting in stopping you in your tracks seems to play heavily upon the mind. Therefore, I had to place things in perspective, yes things are terrible, but, and I capitalize but for a reason. It is not forever, the work you are doing will hopefully help change someone's outlook on teaching, and most of all, the need for oneself to thrive and become successful, need to drive your thoughts. The initial quote in the introduction 'bad' things do happen, but they are only a short, small part of your overall story.

4.1 Method Adoption

With lockdown firmly in place and time ticking away regarding fieldwork, I needed to diversify concerning the collection of data for my central inquiry. I found myself searching for new ways to undertake the interviews. Well, new to me because I had never used digital means to undertake interviews before, even though such applications, "digital devices and data have offered new possibilities for social research" (Gangneux, 2019, p. 1249; Lo Iacono, Symonds, & Brown, 2016) for some time. I knew I would lose some of the productive interactions of the visual lived experience (drawings), and in some cases, this was true. I had to turn to the visual description. Participants described their images to me, resulting in a verbalized visual artefact, which worked insofar to visualize a kind of image but found it challenging to explore the hidden visual symbols. However, I had data I could work with, which would embrace the research questions, albeit not visually in-depth. In times like this, one has to adopt the position that any data that is useable in your inquiry is better than none.

Alternatives to face-to-face interviews were easily identified, especially nowadays, where mobile hand-held smart devices and computer terminals now have standard audio and video capabilities (Hooley, Wellens, & Marriott, 2012). Sullivan (2012) proposes that "the potential for video conferencing as a research tool is almost unlimited" (p. 60). There were positives to moving my interviews online and connect collaboratively; firstly, it alleviates some of the conventional face-to-face interview challenges, such as, 'overcoming time zones and monetary constraints, geographical dispersion, and physical mobility boundaries' (Janghorban, Roudsari, & Taghipour, 2014, p. 1).

Many platforms now exist (Google Hangouts, Apple FaceTime, Skype, Zoom, Webex, Goto, Microsoft Teams and Houseparty (Null, 2020), to name but a few. Interestingly, many of the key players in social media have now developed real-time audio-visual collaboration, or groupware, where collaborations can be undertaken irrespective of distance. There seems to have been and still is a race to produce the ultimate functionality among a prominent group of developers. A race that seems to have been started by Zoom, an application that soon characterised universities with the wordplay of 'zoomiversity'.

I needed to offer as much flexibility as I could in-order that participants had a choice in platform. The platforms or applications I chose involved email, telephone, Zoom, Skype. At this point, I had settled for verbal visual descriptions because I wanted to complete my data collection and because I had not realized the functionality of the platforms and was not a competent social media or videoconference person. Thinking back now, one could have asked them to use any spare paper they had and screenshotted them after completion or using drawing tools on the screen. So where is my advice here, well, I am not sure whether there is? I could have learnt more and practiced more with colleagues about the platforms' workings. I could have researched more about the platforms, but time and the pandemic, followed with isolation, seemed to hasten a quick resolve. In other words, get the data. The platforms all had their unique characteristics and challenges, which we will turn to next.

4.2   Email Images

The use of emails as an instrument for data collection was not very successful, especially using images as a driver into the world of experience. This method meant that I had to send the questions via an attachment, similar to sending a questionnaire. Two participants utilised the method. The method did have some descriptions, and the replies had usable data. However, the image was lost with this method. Through this method, I found that the researcher has no control, and by control, I mean being able to probe. The email method takes away any interaction between both researcher and researched. I have looked back at the use of emails as a method, and I believe emails would not produce the probing that goes on when discussing images. The searching for the hidden is too far away, and distance when using images is, as I have found, disappointing.

4.3   Telephone Images

I offered telephone calls because this would be easier. After all, most people now own a mobile phone. The telephone conversations worked well, and I was able to gain a spoken image. Four participants used the method because it was more convenient. I asked the participants the questions, and at the same time, I also drew the conversations. This meant returning to the image I was drawing to check and clarify that this is what they would have drawn. Yes, the perspective was not their own, and yes, the image was drawn by me, but the participants' visual image of the question was ever present. A problem with this method I found was that the interviews were extended with regards time. All interviews were one-hour long, but the telephone ones sometimes ran over that, this was something that I had prepared for and mentioned in my introductory emails to participants. So, what is the take-home from using mobile telecommunications for interviews with images? Firstly, factor in time, make sure you are in a quiet place regarding Dictaphone recording of the conversations and have enough desktop space top draw. Above all, tell the participants the drawing materials you are using, size, colored pens, etc. Participants need to choose the color, orientation, and where to start, clarify the drawing, and be mindful of time.

4.4   Videoconference applications

The reflections below focus on the videoconferencing applications, Skype and Zoom, which I employed during the specific period. I chose Skype because it was free and because I was familiar with its functions; most people have also used Skype because it has been around for several years (Janghorban et al., 2014). Zoom, on the other hand, was founded in 2011 by Zoom Video Communications and has become the latest and perhaps the most used videoconferencing platform, with "seven in ten people making video calls at least once a week during the lockdown, with millions turning to Zoom for the first time" (BBC News, 2020). However, Zoom has had several teething issues regarding some severe security flaws (now fixed). The Guardian reported in April 2020 that Zoom had a '535% rise in daily traffic' and that security experts had relayed their concerns that Zoom was a 'privacy disaster' and 'fundamentally corrupt' (Paul, 2020a, 2020b). Cases of video hijacking or Zoom-bombing were on the increase, which meant that other people could hack into your meeting. End to end encryption had not been adopted. Nevertheless, Zoom did address the security issues (Paul, 2020b).

The use of Zoom as a videoconferencing tool did not sit well with me during the early part of this year due to the security issues, as mentioned above, and although the rest of the country, or as it seemed to me was championing the platform, irrespective of its malware tag ("any software intentionally designed to cause damage to a computer, server, client, or computer network") (Microsoft, 2009). I was unsure whether to use the platform because of ethical issues, unsecured data collection. To be honest, I did not add the platform to the email invitation until I had spoken to Information Technology (IT) experts and researched further into Zoom's solution to its security problems, even though the UK Government were using it for their cabinet meetings. My change of mind came when I had read that Zoom

had fixed the end-to-end encryption problem (Paul, 2020b) and that I had further researched the platform's functionality, making me confident with making all meetings' private meetings' (Zoom, 2020).

4.5   Problems Encountered

Qualitative interviews generate elaborate portrayals of individuals' lives and authentic lived reality. They record real persons in their context or life-worlds revealing meanings. The researcher and researched construct a relationship and establish a rapport through combined verbal and nonverbal narrative and experiences (Weiss, 2010). Both Skype and Zoom both offer some of those experiences like face-to-face interviewing if connections are not fractured. One of the main problems during the lockdown has been maintaining a stable network connection; something reverberated through the mass media (Wakefield, 2020). With millions of people working remotely at home during the lockdown, the network has experienced troughs and peaks, especially at the researcher's location. This has led to frequent drops in connection, which of course is out of one's control.

Some issues that audio-video conferencing applications have are their susceptibility to weak online connections, especially across continents which I have found (Deakin & Wakefield, 2014). Although the interview can be undertaken in ones, own personal environment and at one's convenience and comfort (Deakin and Wakefield, 2014), there still needs to be a stable connection. Some conference platform calls are synonymous with unforeseen disconnection or unintended pauses that can be extremely embarrassing when your synthetic portrait is distorted. This can lead to either the participant or the researcher missing large parts of conversations. A standard account in of this study has involved participants saying, "where did we get to," "I just kept talking because I thought you could hear me," or "I wondered where you had gone, I was talking to myself," leading to some frustration but an understanding of the platform. Another issue was the sound quality, which hindered the interviews and the transcription of the interviews.

Sound quality varies immensely, like that of the visual video image; it all depends on the hardware's quality in which you have inbuilt into one's computer or smart device. Webcams and sound cards are vital to having a productive high-quality online interview experience, both of which the researcher has. However, like the disconnection and pauses above, sound can be just as unstable. In some interviews, I experienced background interference (household noise, external traffic), participant, and researcher movement, which in some cases triggered a muting of the microphones. The video feed glitches meant that the sound became synthesized and challenging to understand, recalling some thoughts of Dr Who's Daleks.

5. Conclusions

This paper has used the underused used methodology of reflection, or as I would like to call it, a conversation with oneself. The RQ for this article was how the pandemic affected my qualitative inquiry and the emotions one postgraduate researcher has faced? This article aimed to shine a light on some of the difficulties encountered as I undertook my fieldwork using a draw-talk-talk-draw method style of interviewing during the Coronavirus pandemic, a method that emphasises participation, interaction.

Reflection is an essential element in research; it allows individuals the chance to pause, to engage in meaningful, thoughtful connections with the lifeworld they reside. Reflection highlights the need to 'dig out' (Mortari, 2015) and gain awareness of our experience; therefore, learning from experiences. My encounters with reflection have given me a greater understanding of the complexity of reflection. Reflection has demonstrated in this paper the need to learn from unfolding developments, with regards the pandemic.

In summary, it is very easy to take for granted the simplest of tasks. The pandemic highlighted the importance of interaction; after all, we are all social beings and the stress and tensions one experiences due to uncertainty and an unwillingness to adopt new

approaches. For me, like others in the educational sector, the pandemic has lifted the lid on how much we actually enjoy each other's physical presence. The numbers of teachers I know and that have broadcast their views on the present situation have emphasised the human aspect of education over the digital synthetic aspect of education. This research uncovered three themes.

The connection and access to participants only became difficult because of the mass media reporting. The pandemic made you think more deeply about your role as a researcher and the ethical consideration that are paramount in research. The media coverage altered one's perceptions of what was essential, and the directional travel I was going in. Would there be any jobs at the end of this, especially when you are on the wrong side of 50, will higher education change out of all recognition. The second theme concluded that visual method selection is difficult to achieve over a series of digital platforms regarding functionality, visual descriptions, and feelings of incompetence in understanding the impaired spoken drawing with regards to technological malfunctions. However, as implied above, when you are thinking on your feet, you can make mistakes and one's own competence regarding technology functionality can be extremely distant. The third and final theme was possibly the most difficult, the emotional toll on the researcher. My only conclusion to this theme is that the period has been a roller coaster, with more deep plunges than climbs. Emotionally isolation and motivation are not the best two concepts to be working in while undertaking postgraduate research.

6. Limitations of Reflection

Reflection as a method has limitations. This article which is not exhaustive with regards to my fieldwork experiences only captures fragments of the experiences. Therefore, obscuring relevant occurrences related to the situation and rejecting the entirety (Mortari, 2015). Reflection is limited to informal, first-person accounts because it embraces the individual and their specific lens and therefore is subjective. Healey and colleagues suggest "that reflection neither marshals evidence to prove something nor strives to convince anyone of anything in particular" (p. 198).

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Going Beyond a Conflict of Approaches in Psychiatric Care: The Perks of Interdisciplinary Research

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Abstract: Our research studied the interactions between mental health care (MHC) professionals and users in French public psychiatry, focusing on the "tools" which professionals use in their interactions with users. We draw a typology of four main "therapeutic styles" in relation to tool use: 1- Absence of identifiable tools. Interaction is personalized and improvised. 2- Use of rituals and habits. 3- Use of methods that have otherwise been written and formalized. 4- Use of tools, be they written or computerized, protocols guiding the interactions, or strictly standardized tools. The psychologist involved in the research (HH) intends to show how the practice of interdisciplinary fieldwork, which implied the "trouble of having a psychologist sharing fieldwork", enabled both researchers to transform a classical methodology into a series of questions concerning the focus of data gathering and data analysis, the position and stance of both researchers, and the possibility to provide not only valid descriptions of day-to-day care practices but also correct interpretations of the unconscious feelings at stake in MHC.

Keywords: psychiatry; sociology; clinical psychology; interdisciplinary fieldwork; care practices.

1. Introduction

Currently, interdisciplinarity is an inevitable framework for most researchers conducting qualitative research. However, with the need to propose interdisciplinary projects to get grants and funds comes the question of the relevance of such arranged marriages: how can they best bring their full value to research? We will argue, in this paper, that some specific areas of qualitative research, and most specifically some fields, require interdisciplinary fieldwork and data analysis to deepen the understanding of the dynamics involved in fast-changing human environments.

Psychiatric care is one of those, especially in France. For the last twenty years, French mental healthcare (MHC) professionals have been torn between two conflicting approaches: the first one, based on psychodynamic theories, pleads for a "relational" or "artisanal" (Sassolas, 2019; Venet, 2020) psychiatric practice, refusing standardized protocols and evaluation on the basis that they erase professionals' subjectivity at work. The second one, which relies on neurosciences and an evidence-based approach (Leboyer & Llorca, 2018), argues professionals only progress and achieve best practices through the standardization of their therapeutic interactions with patients, either using scales or e-mental health tools. Both approaches have seen their therapeutic efficacy being scientifically validated (Hofmann & Asnaani, 2012; Leichsenring & Steinert, 2019). Several questions remain unanswered: do care practices only balance between psychodynamic psychotherapies and evidence-based rehabilitation sessions? Why is the conflict of approaches so acute, and the protagonists so deeply involved? How can we, as researchers, answer those questions and produce interdisciplinary scientific knowledge on the matter? And finally: what can interdisciplinarity bring to qualitative researchers studying psychiatric care?

The research we present has intended to understand MHC professionals/users' interactions in French public psychiatry through an interdisciplinary lens combining a "sociology of activity" (Bidet, 2006; Ughetto, 2018) and the psychodynamic stance. We will tell the story of why we combined the two, and how the fully interdisciplinary character of

the research—from data gathering to data analysis and scientific writing—led us to our results, but also to a hypothesis inspired by systems psychodynamics (Fraher, 2004; Petriglieri & Petriglieri, 2020) and psychoanalytic theory regarding the acuteness of the therapeutic battle we mentioned. Though both researchers were active all along, which is why we co-author this paper, the following developments will be written from the point of view of the psychologist. I'll use the pronoun "we" when detailing our results, then switch to the "I" to tell the story of our qualitative research process.

After describing the methodology we chose and the results we obtained, I will deal with the main methodological issue of our research: "having a psychologist sharing fieldwork" (Dasen, 2019) means a certain amount of trouble, which manifests itself in unavoidable tensions regarding four key points of any qualitative research: the positioning of researchers regarding the field itself, data gathering, data analysis, and the researchers' stance. Such "trouble", defined as the need to call apparently obvious methodological points into question, might however create interesting discussions between researchers and make the key points in any qualitative research particularly visible.

I will discuss all four elements mentioned, then try to show how my presence in the research process enabled my colleague and I to go beyond a descriptive typology of "therapeutic styles" (which was useful as a first result to disprove the simple dichotomy between psychodynamic and scientific approaches) to offer a clinical interpretation of this currently undergoing conflict in psychiatric care, based on the role and place of guilt.

2. Research Methodology

Our research aimed at describing clinical practice by focusing on its material aspects: we looked at work as a practical accomplishment, an activity within a specific temporality, requiring technical, epistemic, ideological, decision-making and even physical coherence, as it requires a certain use of the MHC professional's own body. Trying to describe the clinical practice of care in psychiatry however implies a series of epistemological, methodological and ethical problems (Brossard, 2013; Johansson & Eklund, 2003; Muusse et al., 2020). Although healthcare personnel, i.e., all the members, including doctors, of multidisciplinary teams in charge of caring for individuals, readily comment on certain aspects of their practice (relations with other caregivers, use of time and space), they frequently lacked the words to describe their interactions with patients. It is therefore through the direct observation and studying of micro-situations that we've deemed it possible to reveal the professional and organizational issues in MHC, and to understand the construction of professional cultures, their consistency, their resistance to change or their potential for evolution. We hence used an ethnographic fieldwork framework designed to help us investigate both the social reality of care, and the psychological phenomena involved (Tanggaard, 2014).

Our data gathering was partly funded by the Fédération Régionale de Recherche en santé mentale des Hauts-de-France (F2RSM, 2019-2020), and was completed by the data I collected during my own doctoral research (Haliday, 2019). We chose seven services in the Lille metropolitan area and in the Ile-de-France region, according to their theoretical and clinical care orientations, in order to constitute a relevant sample of the different practices in contemporary psychiatric care. The researcher who led the field inquiry in a given service (the fields were distributed among the two researchers according to geographical and ease of transportation parameters) was always formally introduced in a service meeting, and pre-observation interviews were scheduled with the head nurse and psychiatrist to prepare for our arrival. In each of those services, we carried ten to fifteen full days of observation, during which we conducted over 120 semi-directed interviews with professionals and users alike.

Among them, 20 were recorded and fully transcribed; the others led to extensive note-taking (recording was sometimes impossible due to material constraints, or deemed unethical). Oral consent was always obtained before recording. Signed consent forms were not used because some recordings were made directly in the field during observations.

Though our data gathering was done before the spread of Covid-19 —which means we would probably observe many variations of our results in case we went back to the same MH services we visited —a mere evolution of the therapeutic styles we observed would not call into question the relevance of our typology.

In order to describe the interactions between caregivers and patients and to explain what, for professionals, takes care of them, we conducted a qualitative study based on interdisciplinary data gathering and analysis in five psychiatric sectors. The two researchers involved, a sociologist and a clinical psychologist, shared a single ethnographic methodology consisting of field observations, note-taking and semi-directed interviews with mental healthcare workers (psychologists, psychiatrists, nurses, nursing assistants…) (Beaud & Weber, 2017). Our interviews were always conducted *after* observing professionals: first because people do not always do what they say they do (Wassmann & Dasen, 1993), and second because observation and shared experiences with interviewees help dealing with "muddy" interviews (Lippke & Tanggaard, 2014).he interviewee's thoughts and personal positions are more precise and more in depth. Secondly, in situ observation prior to the interview with a professional creates a shared reality of reference which facilitates discussion between MHC professionals and researchers.

While thematic analysis is an essential part of most qualitative research projects, and though both researchers have used microsociological or clinical thematic analysis (Paillé, 2011) in previous works, in this research there has not been any coding process per se. Thematic analysis is indeed most useful when studying social representations (Flick et al., 2015) or when dealing with clinical research interviews led by psychologists (Castarède, 2013). When studying practices, however, a choice must initially be made: will the researchers focus on what professionals think, believe, or say is happening, or will they rather investigate what is happening and ask for elicitations? In this research, we used interview excerpts as illustrations or confirmation material: first came the observations, then the interviews, which were designed to complete and deepen our understanding of "social facts" (Durkheim, 2009) as seen in the "social drama" (Hughes, 1976) that is psychiatric care work. The typology presented therefore, proceeds from a typical ethnographic iterative process, starting with observations, and followed by a gathering of explanations given by professionals themselves to verify the researchers' understanding of the scenes they observed.

In our research, focused on material frameworks, objects, tools, in other words, the "materialities" (tools, machines, technologies, spaces, etc.) that are at the heart of the very concrete individual and collective issues facing caregivers, and that engage the body and mind of each person. This choice was guided by two observations: first, that professionals needed something to help them anchor their discourse in the reality of their practice – otherwise, most of them talk about what should ideally be done instead of what they currently do, only to note the latter is by no means conform to the former. When it comes to describing their day-to-day tasks, interviews with healthcare professionals can easily deviate from care itself to quality of working life issues. Asking about the tools they used to improve their therapeutic relationships with users was thus seen as a good interview starter. Second, the notion of "materiality" refers to the paradoxically invisible aspect of care work itself, in a discipline where the relationship is given pride of place, namely its inscription in concrete coordinates that partly determine the outcome. The COVID-19 epidemic provided an opportunity to grasp the importance of physical constraints in MHC work as it is done social or physical distancing, cancelling therapeutic activities and mask wearing all change care practices. In our research, we mostly focused on MHC interactions and the regulation of the professional/user interactions by the said tools: training, interview guides, e-mental health software, interaction rituals... as well as on what they do, from the point of view of the professionals, to their clinical practice.

In this context, we call a "tool" any material, symbolic or digital object that is a third party, a mediator in the care/care relationship, and whose use, as long as the tool is not standardized, leaves room for the creativity of the person who uses it. We will speak of a "protocol" to designate an explicitly formalized framework —often in stages —intended to

guide the professional/user relationship and the interprofessional cooperation around the same patient. The formal semi-directive interviews conducted for this research were recorded with the consent of the professionals, transcribed and anonymized.

3. Research Results

The results of this study showed us how eclectic and heterogeneous care practices are, despite services displaying a unique, official approach. When it came to professional/user interactions, we found professionals worked with distinctive "therapeutic styles". A therapeutic style is a set of characteristics of a care interaction, be they discursive or not, oriented by a concern for therapeutic, educational and accompaniment effectiveness. Therapeutic styles are highly correlated to the absence or presence of tools, and to the nature of these tools. A service's philosophy of care is often influenced by said service's relationship to tool use (for instance, when professionals refuse using care protocols). Four styles can be distinguished, depending on the degree of formalization, by the professionals, of their interactions in MHC, and on the degree of technicality and inflexibility of the tools. These styles are not exclusive categories: they are rather complementary, for they can be seen in action in the same service at different times and places.

1. No identifiable tooling. The regulation of interaction is only of an ethical and professional nature and is based on the skills, training, professional jurisdictions or just the common sense and personality of the professionals involved. Interaction is both personalized and improvised. The practices may give rise afterwards to an exchange and collective regulation or collective reflection, but which is not formalized in methods or instructions.

2. Use of rituals. A ritual is the usual method by which a professional comes into contact with a patient. They may be specific to a particular caregiver or a group of caregivers, and can also be called routines.

3. Use of methods that have been otherwise written and formalized. These are the psychotherapeutic methods, to which some service professionals are trained: analytical psychotherapy, cognitive-behavioral therapy (CBT), psychodrama, systemic therapy, etc.

4. Use of:

    a. tools (written or computerized) that encourage patient expression or self-care (Eladeb cards, various computer kits, etc.).

    b. protocols guiding the interaction (possibly locally produced and revisable): interview guides, exercises created by professionals, patient assessment protocols, etc.

    c. standardized tools: evaluation protocols, manuals, etc.

Relying on external tools still lets practices vary greatly, at least in cases 4-1 and 4-2, where they cannot solely be defined by the tools in use during the interaction.

It turns out that when comparing MHC practices; the researcher faces a continuum from the most improvised to the most standardized interaction, in other words to the maximum externalization of the interaction competence. In the explicit rejection of "protocolization", there is a concern that the caregiving interaction is an encounter, and it is on this condition that the interaction is considered having its own effectiveness and therapeutic value. However, in everyday care practices, the absolute protocolization of the care relationship is an unsustainable position: our results show how eclectic the practices are and how the formalization of these practices can reveal, each time, something of the caregiver's

creativity and the subjectivity of the person being treated, in other words, a movement that is always at work "overcoming automatisms" (Stiegler, 2015) in relational work. An inventive and flexible formalization, inasmuch as it makes the tools of a team shareable with others, would be the opposite of both absolute improvisation and total standardization. It could be understood as a way for pluri professional teams to stay creative in their interactions with patients while building shared mental models (Mathieu et al.,2000) of care, and therefore be a fruitful alternative between improvisation and standardization.

4. Discussion

Though professionals sometimes expressed radical positions when interviewed, clinical reality always seemed more complex. The general heterogeneity of care practices in France does not exclude, though, the possibility to build a typology of therapeutic styles.

Each of the styles listed above embodies a specific vision of professionalism, a vision of organization, and a vision of what constitutes good care. In styles where formalization is strong, there is a certain distrust of the subjectivity of the caregivers (diagnostic procedures must be formalized to make them safer) and a certain distrust of training inequalities (the tool ensures a constant average quality of services). However, pendulum movements can be seen in a same service over time: after having formalized care procedures, sometimes to the point of standardization, professionals might feel the need to customize and make their tools more flexible (Morin et al. 2015). These pendulum movements certainly draw from the conscious will to attain a high quality of care, but social scientists and psychologists alike need to go beyond this sole explanation.

4.1 Are the Research Results... enough?

Furthermore, one could wonder, while reading, why these results matter, for they seem unsurprising: the eclecticism we observed and the consequent gap between the theoretical part of the conflict and the reality of care practices might have been predictable. What we want to stress on, in this paper, is therefore not the set of results itself, but the methodological obstacles we had to overcome to get them and the hypothesis we formulated to go deeper into the analysis of the real issue at stake, i.e., the reasons behind the acuteness of the theoretical therapeutic battle. We will try to show, in this sense, why "having a psychologist sharing fieldwork" was indeed worth the trouble.

Though researchers have already written about their "clinical perspective" on fieldwork (Schein, 1987), or stressed on the psychological aspects of being on the field, especially when dealing with the emotions arising from these experiences (Davies & Spencer, 2010), few of them, apart from Pierre Dasen (2019), have told of the many apparently obvious aspects of research which become problematic as soon as a social scientist has to bear the "trouble of having a psychologist sharing fieldwork". Lise and I felt an inevitable tension between our disciplines regarding four key points of any qualitative research:

- the positioning of researchers regarding the field itself
- data gathering
- data analysis
- the researchers' stance

These aspects were lacking from Dasen's account of interdisciplinary fieldwork. We intend to complete the point he was making by telling the story of our research process.

4.2 Research Positioning: In, On, or Out of the Field?

We needed to start by our positioning in the field of MHC: I, as a psychologist, was already involved in the conflict of approaches I meant to study (on the psychodynamic side). I

however had to conduct fieldwork the way a sociologist would, i.e., as void as possible of any preconceptions. Lise thought it was feasible because she had a specific position in the mental health field... for she had a private practice of psychoanalysis. We both agreed regarding the need to juggle between our identity-on-the-field and our identity-as-researchers. This meant we both had to deal with preconceptions: we were already involved and therefore needed the same methodology to be sure our data gathering was as objective as could be. Though we shared the same interest in psychoanalysis, and because this shared interest excluded a fully objective stance, we both had to control the influence of our preconceptions about mental health care to offer the same type of reflexive space to every professional we met. We relied on our field diaries to note our observations while in the field, but also and most importantly to record our feelings and thoughts when we got home, in a form of immediate distancing with what we had seen and heard. We also agreed several interviews had to be conducted when on the field with different professionals bearing different point of views. We decided on the questions which had to be asked to gather relevant data, to avoid biases, as much as possible, in our data collection process.

4.3 Data Gathering: Seeing or Hearing?

Even though we had agreed on every aspect of our data gathering method, the process itself revealed an interesting tension between observation and interviewing. Lise and I did not conduct fieldwork at the same time. The interdisciplinarity of the research —in all its richness and difficulty—was only obvious when we compared the data we gathered. We managed to bring together an intrinsically interdisciplinary material, consisting in both sociological observation and clinical psychosocial interviews.

While our research methodology was the same, our data gathering styles were slightly different. Lise expected to see things while I wanted to hear them. Lise regularly reminded me of Durkheim's perspective, saying that we should study social facts as "things" (Durkheim, 1894). She focused on observing mental health professionals—and indeed, previous researchers in sociology had demonstrated professionals, or more broadly research subjects as a whole, did not really do what they said they did (Wassmann & Dasen, 1993). As a clinical psychologist with a psychodynamic approach, knowing people do not really do what they say just points out how important psychic life is, and how powerful "psychic reality" can be. I am more interested in what happens in the minds of individuals than by what happens in the world, for I believe what we call reality is co-constructed by individuals in relation to each other. In the constructivist perspective I work with, reality arises from a collective agreement, a shared interpretation of what happens (Audoux & Gillet, 2011).

While Lise wanted to observe as much as she could —for the validity of the research came, in her opinion, from what she saw —I, on the contrary, rather to focus on professional discourses, and use interviews a lot more. The classical psychoanalytic stance argues listening must prevail on sight. While a sociologist considers speech to verify his or her interpretation of what was observed, I mostly wanted to understand what was inside the professionals' minds as they worked and cared for their patients, seeking to uncover the unconscious motives behind their actions. The difference was therefore obvious in the way we treated our data. While Lise rested on her field diaries, which were full of observations and written-down bits of informal interviews, I first turned to my interview transcriptions to find meaningful excerpts. While I felt compelled to transcribe every interview as a whole, Lise transcribed just the bits she was interested in for completing her observations.

4.4 Research Stance: Between Prescription and Description

Our research approaches also had different goals. While Lise intended to describe reality, I intended to find ways to improve it. In this third type of difference between her stance and mine, it is around the writing of papers that we actively discussed our findings.

In the conclusion of one of our articles, I was tempted to see formalization as a path between the total absence of formalization, the nonexistence of guidelines to help professionals navigate patient professional relationships, and the absolute standardization. Lise refused to put it that way: instead of prescribing formalization as a way to transmit and share practices in a discipline which still heavily relies on oral transmission rather than written; she saw formalization, more descriptively, as a new research result, not necessarily a way of getting rid of the conflict between care approaches.

We viewed the results of our research slightly differently. Lise saw creative formalization as our main research result, the most important thing our research had taught us: professionals were active and creative, and it turned out they still had practical margins to do their jobs the way they intended to, sometimes despite their services' official approach. I viewed creative formalization of practices as a way to appease the conflict between psychodynamic approaches, which rarely lead professionals to be in favor of formalizing because formalization is viewed as taking away the patients and the professionals' subjectivities, and biomedical or cognitive approaches, which rather see formalization as a necessary prerequisite to a real scientific thinking and to evidence-based therapeutic practices.

4.5   A Clinical Stance on Data Analysis: The Use of Interpretation

The last point I want to make refers to what Lise and I extracted from our data. While she focused on organizing the typology, I detailed earlier in this paper; I was keener on finding correct interpretations to understand the phenomena and discourses we observed and heard of the field. We had different ways of treating the core question of our research: why was it that so many professionals were involved in such a violent and cleaving conflict between psychodynamic and cognitive-behaviorists approaches of MHC? Observing the professionals closely indeed enabled a distinction between several types of tool usage, but the main problem, which was also the reason we had started the project, was still a mystery to solve.

I started thinking maybe both sides of the conflict were fighting a single complex which they shared as a common but hidden (because unconscious) ground. The professionals I observed and interviewed always seemed to be fighting a deep feeling of powerlessness. I argue this was triggered by their patients who did not seem to get better despite all their therapeutic efforts. This powerlessness, I believe, and the correlated feeling of castration, understood as a conscious knowing of their professional limitations, created a great sense of guilt. While guilt has been studied in families of mental healthcare users (Carpentier, 2001), few research works have concentrated on the specific guilt felt by professionals (Robertson, 1994). Moreover, most new trends in mental healthcare, concentrate on transferring power from mental health professionals to users. Though this shift is needed to go towards a global recovery movement, it contributes to the repression (in the psychoanalytic sense) of guilt in mental healthcare professionals. Melanie Klein (1975) theorized guilt as the product of our hatred for the surrounding objects: feeling an urge to destroy and fearing the object's destruction altogether lead to guilt. Fundamentally, guilt is what pushes us to repair the broken, attacked, destroyed objects, and "the drive to make reparation can keep at bay the despair arising out of feelings of guilt, and then hope will prevail" (p. 342). A successful reparation process appeases the guilt; when reparation however becomes impossible—as is the case in some acute psychiatric disorders —, the guilt increases and one desperately looks for reasons to hope.

The intensity of the conflict was therefore not so much related to the personal and professional convictions that one method was really better than the other, but to the overwhelming feeling of guilt, and the correlative impossibility to tolerate frustration (i.e., therapeutic failure). It is because I heard so many professionals confess their feeling of powerlessness in front of the hospital administration, in front of the users' distress, that I could hear the conflict between psychodynamic and cognitivist approaches as being a conflict between people who could not bear—and as a psychologist, I could deeply relate to their difficulty —not having found the best way to treat their patients. They had chosen

their side in relation to this specific clinical dilemma, and the solution to the conflict therefore did not seem to lie in choosing the right approach, but in the listening and taking care of MHC professionals' own mental health, in relation to the specificities of their clinical job and their relationships to patients.

5. Conclusion: The Perks of Interdisciplinary Research

Doing interdisciplinary research, in the form of ethnographic inquiry combining field observations and semi-directed interviews led by a sociologist and a psychologist, proves useful for assessing and understanding psychiatric care practices. The situation in France seemed rather absurd and symptomatic: two conflicting but equally effective approaches theoretically battling against each other to take the ascendancy. To evaluate whether psychiatric care practices were really down to two different sets of techniques, we conducted a seven-services field inquiry and drew a typology of 4 "therapeutic styles". After observing and talking to MHC professionals, the dichotomy we knew and heard about seemed altogether less rigid and less clinically valid than what we saw as a growing eclecticism/heterogeneity of MHC tools and techniques. Absolute standardization was nowhere to be observed, which made us advocate for a little "formalization" as a way of building shared mental models of care and passing professionals' know-how along.

Concluding with these results was, however, unsatisfying, both because of methodological and theoretical issues. There is a certain "trouble" of having a psychologist sharing fieldwork which should be brought to light before starting any social science research in a psychiatric setting. One's capacity to objectively and benevolently observe care practices about which one already holds several preconceptions should be discussed. The difference of focus in the data gathering process (i.e., the relative importance of seeing and hearing) can lead to an enrichment of the research or apparently incompatible data. The analysis is also a key working point: what do the researchers want to gain from data gathering, and are a psychologist's potential interpretations welcome? And, last but not least, can a social scientist working with a descriptive paradigm tolerate a psychologist's prescriptions about what should be improved in the scenes they observed and the practices they learnt about?

Furthermore, not only had it been difficult to conduct interdisciplinary fieldwork: we were still stuck with the unanswered question of the intensity of the conflict of approaches. We thus interpreted the theoretical conflict between "relational" and "scientific" approaches, i.e., between non-formalization and standardization of relations and exchanges, as a symptom of deeper emotional movements in MHC teams. The conflict which prompted us to start our research in the first place had to be seen as based on an underlying accusation from both sides: that the "others", those who chose the wrong method, were passively maintaining the patient in an institutional inertia which strongly reminds the researcher in psychiatry of the 1960s debate, in the US, about "institutionalism" (Wing, 1962). The professionals who see psychiatric care as an art of the therapeutic relationship believe standardization will suppress its very heart and soul; defenders of a more evidence-based psychiatry deem that psychodynamic approaches rely on outdated beliefs and practices and therefore contribute to therapeutic stagnation. The question of relational tools in psychiatry could thus be interpreted as a battle against what famous French psychiatrists like Jean Oury (2001), Lucien Bonnafé (1991) and so many others called alienation — which is what MHC workers call "apragmatism" today, the negative symptoms associated with psychotic disorders. The result is a feeling of guilt when facing clinical inertia, which pushes every professional to choose a single "one-best-way", even if it means entrenching themselves in antagonistic positions that ignore their common therapeutic goal.

Though having to conduct fieldwork was a psychologist and for the sociologist who worked with me, quite a lot of trouble, it turns out I probably would not have formulated this specific interpretation had I not been previously observing professionals in the field. The best way for me, as a psychologist, to respect and listen to all professionals despite my own preconceptions about MCH and therapeutic practices, was indeed to get as close as possible to the reality of day-to-day psychiatric care. Saying psychiatry is so specific a field that interdisciplinary projects unavoidably need a researcher who knows the field from the

inside surely would go too far. But as the interest in action research methodologies grow, and the need for clinical interventions to help and support mental healthcare teams, it seems the space for clinical fieldwork methodologies is growing. Researchers in psychology and their colleagues from other social sciences disciplines might thus have to bear a little longer—and for the better—the trouble of having to share their fieldwork experiences.

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From Emergency to the Community: Nursing Care That Promotes Safe Transition of the Person with Increased Vulnerability

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Abstract: Readmission to the emergency service after discharge is high, nursing interventions are needed in order to ensure continuity of care after discharge from this service to avoid this phenomenon. Objective: To identify the risk factors for readmissions and describe the interventions that guarantee continuity of care after discharge from the Emergency Department. Methodology: Integrative literature review, following the protocol. The bibliographic sample comprises 7 articles. Results: It is necessary to identify risk factors, personal history, polymedication, the current life situation, age, level of dependence, risk of falling and cognitive function. In nursing, the interventions that stand out the most are the follow-up telephone calls and the existence of an expert nurse in transitional care. Conclusion: The evidence recommends that the existence of structured interventions and an effective articulation of care between the Emergency Department and the Community are good practices to implement and bring health gains to the population studied, however there is a need to further research at this level.

Keywords: elderly; nursing care, continuity of care, transitional care, emergency.

1. Introduction

Over time, from 1996 to 2019, it has been verified that the Portuguese population has undergone a demographic aging resulting from multiple variables in the reality of this society. According to the demographic data contemplated by the National Statistics Institute (2017), it is predicted that between 2015 and 2080 the number of elderly people in Portugal will increase from 2.1 to 2.8 million and that, since this fact is accompanied with a decrease in the younger population, the aging rate will double, from 147 to 317 elderly people for every 100 young people, in 2080. And when compared, the population that uses the adult Emergency Room (ER) in Portugal, it is observed that the number of people aged 65 or over is higher than the number of people in other age groups, as indicated by Azeredo (2014). These data are important since, according to the definition of the World Health Organization (WHO, 2015), in developed countries the elderly is every person aged 65 or over. Associated with this aging, there is still a fragility consequent of the anatomical-physiological changes that occur in the human organism. According to Azevedo (2015), the aging process intervenes in several dimensions, such as biological, psychological and social, where changes are identified at the organic level, at the behavioral level (such as changes in memory, motivation and intelligence) and an increase in the social isolation, which can lead to marginalization.

As indicated by Azeredo (2014) and Brazão, Nóbrega, Bebiano and Carvalho (2016), the ER (Emergency Room) are the first line of contact between the person and the other health services, and that the elderly population, increasingly fragile and where isolation can also be seen as a reality, uses the ES more for these reasons. According to the Portugal's Directorate-General for Health (Direção-Geral da Saúde, 2017) there is a need to provide differentiated care in an emergency situation in the ER since these situations directly contribute to a state of danger in the absence of care.

In this context, according to Brazão, Nóbrega, Bebiano and Carvalho (2016), health care has become increasingly expensive in Portugal, and the overcrowding of the ER remains a current problem. The various interventions at the political level that have occurred in an attempt to reduce "indiscriminate and inappropriate" (Brazão et al., 2016, p.14) access to the ER, have not been effective, and it is necessary to go further, considering important good access to primary healthcare in the community. For this reason, it is essential to identify what are the risk factors for readmissions to the ER, after a first occurrence / admission and what are the strategies and interventions to be implemented that guarantee continuity of care after the discharge from the ER.

2. Methodology

An integrative literature review was carried out that "includes the analysis of relevant research that supports decision making and the improvement of clinical practice, enabling the synthesis of the state of knowledge of a given subject" (Mendes, Campos Pereira Silveira, & Galvão, 2008, p. 759). The PICo mnemonic was used - where the (P) population, the (I) intervention and the (Co) context (The Joanna Briggs Institute, 2011) are considered to carry out the research question. The population we're studying are the elderly (≥ 65 years), the intervention is the nursing care that promotes the safe transition, and the context is the Emergency Room and the Community. Thus, the following research question is obtained: "What nursing care promotes a safe transition between the Emergency Department and the Community?"

As an object of study, we intend to identify the risk factors for readmissions to the ER, after the first occurrence and which nursing care promotes a safe transition between the ER and the community, in the elderly. The inclusion criteria defined for the choice of studies are the dates of publications between 2014 and 2019, Portuguese or English, and the descriptors that were used. The exclusion criteria used, during the research, includes the exclusion of studies whose text is not available in full and studies in which the studied population includes children, adolescents or adults.

The data collection was carried out in several databases provided by ESEL (Escola Superior de Enfermagem de Lisboa), in order to achieve the objectives mentioned in the previous point. The search was then carried out in the following databases: MEDLINE Complete, CINAHL Complete, EBSCO Discovery Service Lisbon Nursing School. Other types of resources were also used, using the ESEL Library (Pole Calouste Gulbenkian) to search for articles from magazines, newspapers, other research works and information from institutional websites. The search was carried out by two researchers, independently. The descriptors used for the respective database search are: (P) elderly (aged, frail elderly), (I) Nursing care (nursing care, prevention, interventions), (I) transition of care (continuity of care, transitional care), (Co) Emergency services, (Co) readmissions (patient readmission, patient discharge, outcome assessment).

In the research process, the descriptors were related to the Boolean as follows: S1 ("aged" or "frail elderly") and S2 ("nursing care" or "prevention" or "interventions") and S3 ("continuity of care "Or" transitional care ") and S4 (" emergencies "or" emergency service ") and S5 (" patient readmission "or" outcome assessment "or" patient discharge "). After searching the database, 98 articles were obtained, with 45 articles being excluded because they were duplicated, leaving 53 articles. After reading the title, 16 articles were excluded, and of the remaining articles, the abstract of each one was analyzed. After reading the abstract, 16 articles were excluded, considering the inclusion and exclusion criteria defined for the research (Figure 1). Thus, the number of articles was reduced to 21 articles for full reading, resulting in 5 articles, these being the articles selected for the Monograph. Two researchers carried out the codification and the other researchers assessed it to increase the reliability of the present study. Through other types of resources, such as the search through Google Academics, another 2 articles were selected, which makes a total of 7 articles. Of these 7 selected articles, their analysis and synthesis were performed (Figure 1).

3. Results

In Figure 1, information about the authors and type of studies found is outlined, as well as the main results evidenced in each study.
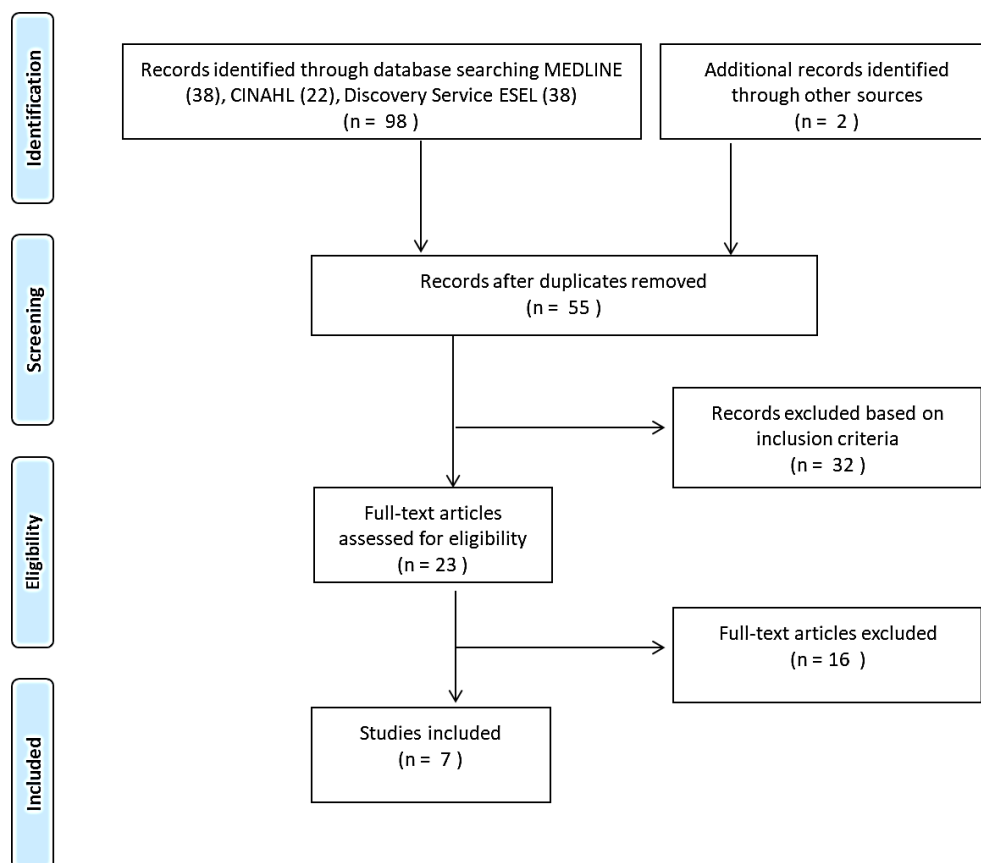

Fig 1. Flowchart for the selection of articles for the integrative review, prepared based on the PRISMA recommendations. Lisbon.

Table 1. Bibliographic sample of RIL, Lisbon, 2019.

Code	Author, year	Type of study	Participants	Objectives	Main results
E1	Biese, K. J., Busby-Whitehead, J., Cai, J., Stearn S.C., Roberts, E., Mihas, P., … Kizer, J.S. (2018)	Randomized controlled trial	Population aged 65 or over with discharge from the Emergency Department	Determine whether a telephone intervention scheduled by a nurse will decrease readmissions to the ER after 30 days of discharge	The scheduled telephone intervention does not seem to have been enough to decrease readmissions to the US; however, it looks like individuals who answer the phone call are more willing to follow the recommendations, decreasing the likelihood of returning to the ER.

Code	Author, year	Type of study	Participants	Objectives	Main results
E2	Cossette, S., Frasure-Smith, N., Vadeboncoeur, A., McCusker, J. & Guertin, M.-C. (2015)	Randomized trial with control group	Population aged 65 years and over, who used the ER of a hospital	Evaluate the effectiveness of nursing interventions in the ER, in reducing readmissions; Determine patients' perception of continuity of care and understanding of disease	The chosen intervention was a nursing consultation before discharge from the ER and two phone calls as follow up in 10 days after discharge. The intervention had no impact on the primary outcome of readmissions to the ER, but demonstrated a positive impact on patients' perception of continuity of care and adherence to medication after discharge
E3	Deschodt, M., Devriendt, E., Sabbe, M., Knockaert, D., Deboutte, P., Boonen, S., … Milisen, K. (2015)	Prospective cohort study	Population aged 75 or over who resorted to the Emergency Department	Compare the characteristics of the population in question that is admitted and discharged from the US;	A poor assessment of the elderly person and a non-follow-up after discharge, increase the risk of readmission, after one to three months. This suggests that problems at a psychosocial, cognitive and pathological level are not taken into account during the emergency episode. The introduction of a model of care based on a holistic perspective that includes a comprehensive geriatric assessment (CGA), is an effective strategy to avoid unnecessary readmissions to the SU. This model allows the evaluation of the medical history, the psychosocial context and the functional capacities of the elderly person, in order to develop an individualized plan that will predictably decrease the number of readmissions.

Code	Author, year	Type of study	Participants	Objectives	Main results
E4	Hwang, U., Dresden, S. M., Rosenberg, M. S., et al. (2018)	Prospective observational cohort study	Population aged 65 or over	Examine the effect of transitional nursing care during an emergency episode, in order to understand the risk of hospitalization or risk of readmission to the ER after discharge	The nursing intervention consisted of an evaluation, through the application of scales in order to understand the evolution of functional and cognitive deficits, physical fragility and medical complexities common in the elderly in order to avoid readmissions in the SU. This resulted in a significant decrease in possible hospitalizations, and in readmissions to the ER at the end of 72 hours and 30 days after the initial emergency episode
E5	Legramante, J. M., Morciano, L., Lucaroni, F., Gilardi, F., Caredda, E., Pesaresi, A., ... Palombi, L. (2016)	Retrospective study	People aged 65 (or over) and with 4 or more admissions in a year to the emergency department	Evaluate and characterize the admissions of people aged 65 and over to the ER in order to identify clinical and social characteristics related to frequent elderly patients.	The study identified as risk factors for readmission to the ER: the advanced age of the population, the lack of primary care health units, and socioeconomic status. The lack of continuity of care may explain the high rate of readmissions to the ER, as after discharge, this population tends to be readmitted.
E6	Robinson, T. E., Zhou, L., Kerse, N., Scott, J. D. R., Christiansen, J. P., Holland, K., ... Bramley, D. (2015)	Observational study without a control group.	People aged 65 and over with emergency service admissions	Determine which interventions allow reducing the readmissions of elderly people in the ER at the end of 28 days after the first episode; as well as understanding how to reduce readmissions by applying the ITC (Integrated Transition of Care) program	People at high risk of readmission were identified, according to several risk factors. A telephone follow-up program with associated interventions (ITC) was applied in order to provide continuity of care, concluding that just follow-up through telephone follow-up was not enough to reduce readmissions after 28 days.

Code	Author, year	Type of study	Participants	Objectives	Main results
E7	Yao, J-L., Fang, J., Lou, Q-Q., & Anderson, R. (2015)	Systematic literature review of prospective and retrospective studies	Based on studies carried out with people aged 65 and over with admissions to the emergency department in Canada, Belgium, Italy, the Netherlands, Switzerland, the United Kingdom and Germany	Evaluate the "Identification Tool for Elderly at Risk (ISAR)" in identifying the elderly people at risk of adverse results after admission to the ER.	ISAR has questions about functional dependence, recent hospitalizations, impaired memory and vision and polymedication. It is useful to identify high-risk elderly people admitted to the ER, but it is not enough to predict the adverse health outcomes of after discharge, in order to prevent readmission. ISAR should be modified according to each country and the health conditions specific to each country where the instrument is used. It is advisable to use ISAR when making a decision, in order to facilitate the transition of care.

4. Risk Factors of the Elderly for Readmissions to the Emergency Room

Considering the typology of the population concerned, it is expected that the elderly population is more vulnerable than the younger population, due to the aging process itself. Thus, there is a need to identify the risk factors of the elderly person, which lead to readmissions to the ER, after a first occurrence for the same or for another reason. This identification of risk factors becomes important, as it is from there that strategies are implemented to ensure continuity of care after discharge from the ER. According to Legramante et al. (2016), the frequent use of the ER by the elderly population and overpopulation in these services, lead to early discharge and a lack of follow-up care by this same population. This causes an increase in health spending and a decrease in the quality of care.

Robinson et al. (2015) indicates the use of a risk assessment model when the elderly person is admitted to the ER. This model has the sole objective of identifying people at high risk of being readmitted to the ER after discharge. The use of this model applies several variables that include: the person's demographic information (gender, age, location), health history (personal history), as well as chronic diseases (chronic obstructive pulmonary disease, heart failure, cancer) and medication (multidrug and risk medication).

Deschodt et al. (2015) also apply what they call a comprehensive geriatric assessment, based on a holistic perspective of the elderly, to establish the characteristics of the elderly population that uses the ER. This assessment goes through a multidimensional process that determines the medical history of the elderly person, the psychosocial context, and their functional capacities. This assessment adds variables, in addition to those mentioned by Robinson et al (2015), such as the person's life situation (home, home with caregiver,

homes), dependence on activities of their daily life (use of the Katz scale), the existence of a previous follow-up of home nursing, physical therapy, dependence on instrumental activities of their daily living (if there is provision of daily meals at home, domestic help at home, such as cleaning, shopping and finances), the person's mobility, pain, nutritional status, cognitive function, risk of falling, treatment priority in the ER, using the Emergency Service Index (ESI), an index with five levels (5 - less urgent, 1 - very urgent), which is a screening algorithm used in the ER.

Both Hwang et al. (2018) and Yao et al. (2015) identify the risk factors of the elderly population for readmissions to the SU using the ISAR (Identification of Seniors At Risk) tool. This tool includes six items, with "yes" or "no" answers, related to functional dependence, recent hospitalizations, impaired memory and vision and the use of polymedication. The total score varies between 0 and 6. This tool proves to be useful in identifying elderly people at high risk of being readmitted to the ER.

In summary, according to the bibliographic research, several risk factors of the elderly person for readmissions in the ER are identified, the main factors being identified: the person's life history, such as the situation of life and housing, their personal history and their level of dependence, their usual medication (particularly in polymedicated people), their cognitive function and the risk of falling. It should also be noted that in the various studies analyzed, to determine the risk of readmission, it is common to use several scales, including the Katz scale, ESI and ISAR.

5. Strategies to be Implemented: Nursing Care that Promotes a Safe Transition

Once the problem is understood, the risk factors inherent to the study population, it is pertinent to understand what are the strategies and nursing care that promote a safe transition, which are complemented by the scientific evidence found during the research process. In the study by Biese et al. (2018), the effect of a follow-up phone call from one to three days after the individual's episode with the ER was studied. This call was made by a trained nurse who used an existing questionnaire, in order to identify possible obstacles to a safe transition for the community, such as the acquisition and reconciliation of medication, post discharge indications and access to medical monitoring, also giving assistance in making appointments. After 30 days, an interview was conducted to see if the participants had felt the need to return to the ER, to primary health care, or to any specialist or if they had any problems related to their medication regimen. The authors concluded that the studied intervention did not reduce readmissions to the ER in this study population, with 15.8% of the study group and 14.4% of the control group aged between 65 and 74 years returning to the ER, were hospitalized, or died within 30 days and the same happened to 14.9% of the study group and 16.6% of the control group aged 75 or over. Despite the results, the study still indicates as a hypothesis, that it is possible that individuals who answer the phone call are more willing to follow the recommendations, with a lesser probability of returning to the ER.

Cossette et al (2015) developed a short-term intervention that contained three moments of contact with the individual. The first contact would be at the time of discharge and then two phone calls would be made: the first two to four days after discharge and the second seven to ten days after discharge. These interventions were performed by a nurse who assessed the individuals' coping capacity to deal with concerns and their readiness or lack of readiness, for returning home; disease and symptom management; treatment management; activities of daily living (ADL) and instrumental activities of daily living (IADL); emotions and cognition; resources; and the health system. Through this tool, patients were considered to be without risk, with present risk but with coping strategies, with risk, or not assessed. If an individual was considered at risk in any of the previous items, they were submitted to nursing interventions, individualized to each patient, which included: teaching, normalizing, listening, comforting, confronting, advising, recommending, warning, giving positive feedback, referencing and reinforce the use of other external resources. If necessary, individuals could contact the nurse to ask any questions or concerns. For a

better individualization of interventions, nurses had access to the patient's process, namely, medical diagnosis, procedures performed, treatment, medication, and discharge planning. According to the study, the interventions had no effect at the level of primary objectives, that is, in reducing readmissions to the ER. However, the present study demonstrated that the interventions had a positive effect on individuals, who acquired a greater understanding of continuity of care, their self-care capabilities, in controlling anxiety and depressive symptoms, together with a better perception of what it's like to be sick.

Deschodt et al. (2015), as in other studies, also suggest a telephone follow-up after discharge from the ER, after one month and after three months. After defining the risk factors for readmission to the ER, the authors suggest that the comprehensive geriatric assessment they apply is important in identifying the people at greatest risk of readmission, which will facilitate the follow-up given in the community.

According to the study by Hwang et al. (2018), a program was implemented with a nurse who is an expert in transitional care. The program by the name of GEDI WISE (Geriatric Emergency Department Innovations in Care through Workforce, Informatics, and Structural Enhancements) was applied in three hospitals. The nurse has the function of assessing the functional and cognitive deficit, the physical weaknesses, and the complexities of the medical forum, of the elderly person over 75 years old who resorted to the ER. In this way, the needs of each elderly person were identified and the resources available in hospitals and in the community, in order to respond to these needs. The nurse applied tests / scales to assess cognitive function, delirium, functional status (Katz scale), risk of falling, transition of care (Care Transitions Measure scale - 3) and caregiver fatigue. After this assessment, a multidisciplinary intervention was initiated, with the resources available in the hospital concerned or in the community, which best fit the person's needs. In hospitals where GEDI WISE was used, the transitional care nurse evaluated about 10% of the individuals who resorted to the ER and was able to reduce the risk of readmission of these individuals by five to 16%.

In the study by Robinson et al. (2015) individuals who were identified as having a high risk of readmission in the ER had automatically raised interventions, even during the emergency episode. These interventions were related to nutrition, the review of the person's health care, medication reconciliation and education through a pharmacist. After discharge, individuals returning to their home received two telephone contacts on the first and third day after discharge. These contacts were made by a team of experienced community nurses and were intended to identify problems that had not been resolved during discharge planning, as well as to help with the person's self-management and to ensure social and health support. These results were later forwarded to primary health care. After these interventions, it was found that a quarter of the individuals were readmitted to the hospital and a third resorted to ER up to 28 days after discharge. 65% of the individuals had access to the telephone follow-up and, of the individuals contacted, 68% received a telephone call, 24% two and 8% three or more calls. Through the calls, needs were identified in terms of medication, personal or functional management and physical or mental health. Only 16% of these contacted individuals asked for referral to another health service.

In summary, according to the bibliographic research, the strategies and care that promote a safe transition to be implemented undergo an appropriate follow-up, either by telephone calls by expert teams in care transition or by the resources available in the community that interconnect with the ER. This follow-up has as main objective to understand what happens to the individual after having used the ER, if there is a need for readmission or readmission in the ER or if the follow-up by primary health care is having the intended effect. The different studies, explained above, also identify that a good assessment, in a holistic way, where the assessment of the different aspects of the person is verified (functional status, cognitive function, medication, risk of falling, among others), which allows for more individualized interventions for each person. In these interventions, teaching the individual and / or caregiver, positive feedback, referral to other health services and encouraging self-management are distinguished. Although the interventions implemented did not reduce the number of readmissions or visits to the ER, there are several gains for individuals, such as

being able to recognize the disease itself and to follow the recommendations given by nurses.

6. Discussion

Deschodt et al. (2015), Legramante et al. (2016) and Yao et al. (2015), reinforce that a holistic assessment of the elderly, including their various personal backgrounds, polymedication, the level of dependence, cognitive function, among others, allows the identification of risk factors for readmission to the ER. In this way, resources on the part of the community will be able to intervene at a more individualized level, using the various means available. For this to be possible, it is essential that the nurse takes on this person's assessment intervention in order to understand all the person's variables, because an incomplete assessment can lead to inadequate follow-up, which will occur, in most cases, in a readmission to the ER. In the analyzed literature, several tools are described that help to carry out this evaluation, such as the ISAR, ESI, Katz scales, among others. The correct identification of the risk factors will allow us to identify the focus of action that needs more vigilance, by maintaining a nursing monitoring according to the risk factors of each individual, in the long run, they will decrease readmissions to the ER. Thus, according to the analysis of the studies, the assessment of the elderly patient in an emergency situation must consider the following factors: age, their current life situation, personal history, and chronic diseases (chronic obstructive pulmonary disease, heart failure heart disease, cancer, also type 2 diabetes mellitus and chronic renal failure, medication, cognitive function and risk of falling.

Deschodt et al. (2015), Hwang et al. (2018), and Robinson et al. (2015) refer that the identification of risk factors for readmissions to the ER is essential for implementing strategies that guarantee the continuity of care in the community. Thus, Direção-Geral da Saúde (2017) recommends that the health care transition is a moment that cannot be undervalued, since it is considered a situation that adds some vulnerability to the person. The care transition must be carried out strictly, since it "concerns the maintenance of effective communication between health professionals" (Direção-Geral da Saúde 2017, p. 5), thus allowing a safe and effective continuity of care.

The literature recognizes interventions with different levels of effectiveness, and it is up to the nurse to choose the ones that best suit the care recipient. Cossette et al. (2015) apply an intervention that involves telephone calls directed to the promotion of coping skills, the management of the disease and symptoms, and the general assessment of the person. That said, nurses' interventions must include teaching, counseling, listening, referencing, and reinforcing the use of other community resources. Like Biese et al. (2018) and Deschodt et al. (2015), these also suggest a telephone follow-up after discharge from the ER. It can be concluded that the use of new technologies is increasingly valued in health care, depending on the person which facilitates the monitoring and allows the nurse to realize the person's current state and understand whether the interventions are or not effective. Thus, an increase in the person's trust in the nurse is observed, as the nurse can demonstrate a trust that is visible to the person.

Robinson et al. (2015) and Hwang et al. (2018) show the existence of a nurse or a nursing team who are experts in the transition of care, who carry out a holistic assessment of the person, plan discharge and mobilize the most appropriate community resources. It is noted here that these nurses assume a role of liaison between the ER and the community and that they have a significant impact in reducing readmissions.

7. Conclusions

As for the risk factors predisposing to increase the likelihood of a person using the ER, the importance of rigorously assessing personal history, polymedication, current life situation, age, level of dependence, risk of falling is emphasized, the cognitive function, and the evidence mentions several tools that help to carry out this evaluation, such as the ISAR,

ESI, Katz scales, among others. As for the nursing interventions contemplated in the research results, an intervention that involves follow-up phone calls is highlighted, where subjects such as the promotion of coping capacity, the management of the disease and symptoms and a general assessment of the person are addressed, and nursing interventions include teaching, counseling, listening, referencing and reinforcement in the use of community resources and the existence of a nurse or a nursing team who are experts in the transition of care, who perform functions exclusively at the level of health assessment of the person, discharge planning and referral to community resources, this being the intervention that had the most significant impact in terms of the decrease in readmissions to the ER.

As for the adversities found during the elaboration of the RIL, the group highlights the scarcity of information found that answers the PICo question, namely regarding the population group on which the question is concerned. It is suggested that the search be extended to more databases. As a recommendation for future research and given the scarcity of information found on the subject, it is recognized that this theme needs further investigation, and investment in research sensitive to this theme is suggested, carrying out more extensive studies and with a better level of evidence, - to continue the production of knowledge in relation to this topic, so that eventually we can reach more solid conclusions, which will certainly impact better nursing care.

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Interprofessional Competency Frameworks in Health to Inform Curricula Development: Integrative Review

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Abstract: The paradigm of collaborative health care delivery drove the development of interprofessional competency frameworks (ICFs). The Train4Health project, funded by the Erasmus+ program, aims to improve healthcare students' competencies in behaviour change support to optimize self-care in chronic diseases. As part of this project, we surveyed the landscape of ICFs in health. Our aim was to characterize ICFs in health and its translation into learning outcomes embedded in academic curricula. An integrative review was conducted between March and September 2020 based on a predefined protocol. The search was performed in EBSCO, B-On, Scopus, Web of Science and Joanna Briggs Institute databases. Four articles were eligible, describing ICFs in different domains in health, such as digital healthcare environment, simulation and genetic healthcare. Generally, ICFs were planned and developed by a committee. Students were involved in all four ICFs. These frameworks supported the development of learning outcomes-based curricula, organized in a tiered or straightforward structure, with different learning outcomes depending on their complexity and specialization level. Despite the overlap in some areas across health professions, we found only four ICFs that can guide collaborative education and are linked to learning outcomes. Pursuing this integrated approach, ideally resorting to structured scientific methods, may facilitate competencies attainment and merits further attention.

Keywords: Interprofessional Education, health, learning outcomes, competency framework, curricula.

1. Introduction

Substantial changes in health care since the late 20th century forced the system to shift into a collaborative environment of practice. Demographic and epidemiological reasons determined these changes, as an increasing range of health professionals provides care to patients, families, or the community, whether in chronic or acute conditions (Little et al., 2012; Olson, & Brosnan, 2017; Reeves et al., 2013). This demographic change was accompanied by an increase in the complexity of health-disease transitions, challenging the way healthcare is provided and stating that uni-professional interventions were not enough to solve these problems. Effective healthcare delivery is a collaborative task, as it demands health professionals to work with each other productively, using the knowledge obtained through their education and adapting it to each context.

The insurgence of multi-professional health care teams put Interprofessional Education (IPE) on the agenda, and the need of its adoption by higher education institutions, to achieve effective interprofessional work and the delivery of safe and efficient health care

(Kent et al., 2018). IPE represents a 'departure' from traditional health professions education (Olson & Brosnon, 2017), where each profession is responsible for the education of their own students and, later on, for the development of professional competencies or standards (Carrol et al., 2014; Illingworth, & Chelvanayagam, 2017; Kent et al., 2018).

IPE has been addressed by professional organizations and authors. For the World Health Organization (WHO), "IPE occurs when students from two or more professions learn about from and with each other to enable effective collaboration and improve health outcomes" (WHO, 2010, p. 7); WHO's perspective is also supported by the Centre for the Advancement of Interprofessional Education (Illingworth, & Chelvanayagam, 2017).

Authors like Freeth, Hammick, Reeves, Koppel, and Barr (2005) define IPE as the practice of students from different health professions learning 'from, with and about each other' in preparation for interprofessional work as a health care practitioner (Freeth et al., 2005; Olson & Brosnon, 2017). Other authors regard IPE from a sociological perspective, in which the relationship between knowledge, identity and professional power can be explored (Olson & Brosnon, 2017). Despite minor differences, there is a common notion among all authors and organizations - IPE aims to increase understanding and respect about different professional roles, as well as to improve collaboration and patient outcomes.

Despite policy advances, it is recognized that students are still educated in silos, which makes them reluctant to overcome challenges when working with other health care professionals, causing patient safety concerns and dissatisfaction towards interprofessional cooperation (Stadick, 2020; Verapen & Purkis, 2019). IPE intends to break professional barriers and create cohesion in the multidisciplinary team, in a person-centered paradigm. Competency frameworks (CF) are regarded as a set of statements reflecting what graduates should be able to do in the health service, and not simply in their training. These frameworks can serve as a guide to inform learning outcomes and curricula development and have been advocated in IPE as a form of improving interprofessional collaboration and patient care (WHO, 2010).

Defining the appropriate competencies and learning outcomes (LO) to each professional and educational context, allowing an alignment between their development and implementation (WHO, 2010), is challenging. Competencies are often broad and hardly applicable to the specificity of learning outcomes (Little, et al., 2012; Olson, & Brosnan, 2017), which formulate and address how competencies should be acquired. Therefore, even though learning outcomes are often less understood than underlying components, they effectively measure competencies achievement, assessing the results of the educational process. To create a solid competency framework, it is required reflection on how competencies and learning outcomes can be optimized and engaged (Thistlethwaite & Moran, 2010).

The Train4Health project, funded by the Erasmus+ program, aims to improve healthcare students' competencies for behaviour change to support self-care in chronic diseases. As part of this project, we surveyed the landscape of interprofessional competency frameworks (ICFs) in health to inform our work on the development of learning outcomes-based curricula from an ICF on behaviour change support. Therefore, this review aims to identify interprofessional competency frameworks in health associated with a learning outcomes-based curricula.

2. Methodology

An integrative review was chosen, as it allows the authors to contact with heterogeneous findings from different scientific points of view, to synthesize knowledge and to incorporate its results in practice (Sousa et al., 2017). The review was conducted between March and September 2020, following a six-phase protocol based on Mendes, Silveira and Galvão (2008): (1) identification of the theme and selection of the hypothesis or research question; (2) establishment of eligibility criteria for inclusion and exclusion of studies; (3) definition of the information to be extracted; (4) critical appraisal of the included studies; (5) data analysis and interpretation; and (6) presentation of the review / synthesis of knowledge.

The researchers observed all ethical principles when performing this secondary study. Accuracy in the methodological procedures was ensured to guarantee the quality and validity of the study. Data extraction and analysis from the bibliographic sample was developed with profound respect for the authors and its research.

This review was guided by the following research question, elaborated using the acronym PICo (population; intervention and context): "What are the competency frameworks that support learning outcomes-based curricula for interprofessional education in health?" This methodological orientation made it possible to define the eligibility criteria for studies, facilitating the comparison of works, interpretation of data and increasing the accuracy of results. The eligibility criteria were defined as follows:

Table 1. Study eligibility criteria. Lisbon; Portugal. 2020

	Inclusion Criteria	Exclusion Criteria
Studies	Primary studies (quantitative or qualitative or mixed) with clear definition of objectives and methods, published between 2010 and 2020, written in Portuguese, Spanish or English	Reviews, opinion articles, editorials
Participants	Participants from two or more health-related different professions	Participants from an only health-related profession
Interest phenomena	Development of a learning outcomes-based curricula through the definition of an interprofessional competency framework	Interprofessional competency frameworks without association to curricula development
Context	Interprofessional education in health	Non-health-related education

The descriptors used were: Competency Framework, Curriculum, Interprofessional Education, and Health and these descriptors were also used in Portuguese and Spanish and in associations (AND and OR). The research was carried out in the databases available on EBSCO, B-On, SCOPUS, ISI and JBI platforms. The search was restricted to the years 2010 to 2020. To optimize the article selection, the process was developed by three researchers, who summarized it into a flowchart, as it is presented:
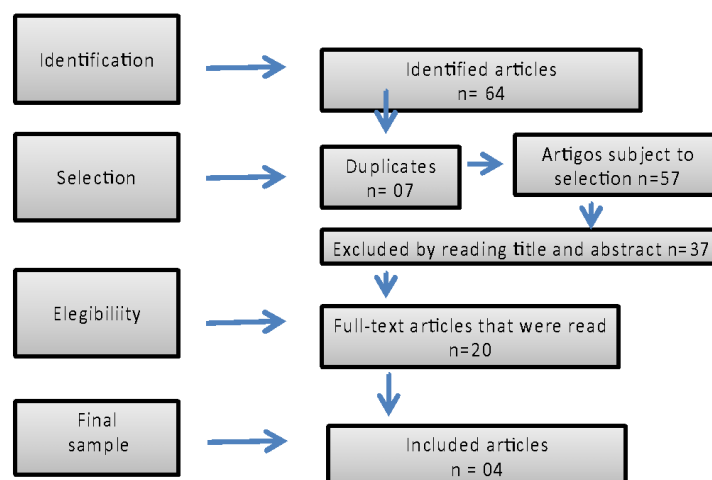

Fig. 1. Flowchart for selecting articles from the bibliographic sample. Lisbon; Portugal. 2020.

The potential sample comprised 64 studies. Seven (07) articles were duplicated. Thirty-seven (37) articles were rejected by title and abstract. The reading and analysis of the study summary conditioned the selection to twenty (20) and the analysis of the full text to four (04). The 16 studies read in their entirety that were excluded had competency frameworks: two referred to teacher competencies, one to medical competencies and one to nurses competencies. The remaining 12, despite presenting interprofessional CFs, had no associated curricula. After the identification of the final sample, the authors developed a table to optimize data collection, which included the main findings of each study and its contribution to our review, in alignment with our aim. This table is presented in its short version in the next chapter.

3. Results

Over a 10-year length period of search (2010-2020), we identified only four interprofessional CFs that support the development of curricula in the specific area of the competencies, which they report (table 2). One was published in 2010 (Skirton et al., 2010), one in 2013 (Greidanus et al., 2013), one in 2017 (Karugutia et al., 2017) and another in 2019 (Pontefract & Wilson, 2019) (Table 1). Two took place in the UK (Skirton et al., 2010; Pontefract & Wilson, 2019), one in Canada (Greidanus et al., 2013) and another in South Africa (Karugutia et al., 2017).

Table 2. Articles included in the Integrative Review. Lisbon; Portugal. 2020.

Authors (year) Country	Professionals	Aims	Results
Skirton, Lewis, Kent, Coviello, and Members of Eurogentest Unit 6 and ESHG Education Committee (2010) UK	Medical doctors / Physicians, Nurses and Midwives, Dentists Laboratory professionals, divided into three clinical fields of practice: Generalists professionals; Specialized health professionals; Specialists in Genetics.	To produce a set of competencies that could be applied across Europe to the range of health professionals involved in provision of genetic health care.	Competency framework development by a working group LO uniprofessional and interprofessional - cognitive + affective + psychomotor Connection with professional competencies. Competencies and LO organized into tiers of specialization.
Greidanus, King, LoVerso and Ansell (2013) Canada	Practical nursing (2-year diploma program at a community college). Bachelor of nursing (4-year degree). Medicine Respiratory therapy	To suggest one process for revising learning objectives based on review of the simulation, the debriefing, and the student feedback on reported learning. Implications for curriculum integration are discussed.	LO associated to the Canadian Interprofessional Health Collaborative Competencies. LO interprofessional/generic - cognitive + affective + psychomotor Student involvement conceiving the competency framework

Authors (year) Country	Professionals	Aims	Results
Karugutia, Phillips and Barrb (2017) South Africa	Physiotherapy, Occupational therapy, Psychology, Nursing, Natural medicine and exercise Sports science	Analyses the curriculum content of the Faculty of Community and Health Sciences da University of Western Cape' program about interprofessional education, determining its cognitive accuracy.	Competency framework development by a working group inside the university. The University of the Western Cape in South Africa incorporated an Interprofessional Core Courses Curriculum for all undergraduate students enrolled in the health sciences faculty LO are essentially of a cognitive domain.
Pontefract and Wilson (2019) UK	Medicine, Pharmacy, Nursing and midwifery	To develop and define domains of competency and associated learning outcomes needed by healthcare graduates to commence working in a digital healthcare environment.	CF has 6 domains of competencies. Involvement from several institutions and organizations in one round, medical experts in another. The six domains of competency are associated to LO. Each domain has its own learning outcomes - interprofessional/generic - cognitive + affective + psychomotor

It is clear from the articles' own objectives that they were constructed in different paradigms: from the development of CF and the curricula (Karugutia et al., 2017; Pontefract & Wilson, 2019; Skirton et al., 2010) to the evaluation of the curricula itself (Greidanus et al., 2013). In the study of Greidanus et al. (2013) the CF is not presented because the objective was to evaluate revising learning objectives based on review of the simulation, the debriefing, and the student feedback on reported learning to discuss the curriculum that is aligned with the Canadian Interprofessional Health Collaborative Competencies.

4. Discussion

The articles included in this integrative review describe interprofessional CFs in different domains in health. Although most of the studies show a major focus on their scientific theme, we considered that the details of the CF contributes to our work and answers the research question initially defined. However, the number of studies that resulted from this review appear to be substantially few gives the amplitude of the topic in analysis. This fact opens the door to the lack of literature concerning this matter, recognizing the importance of effective implementation of the interprofessional paradigm in health.

Through the present review, we discovered that IPE and collaboration is a concern to universities and stakeholders. Indeed, the WHO (2010) has been making recommendations since 2010, referring that IPE is key to guarantee that health students of today work as collaborative health professionals tomorrow, moving health systems from

fragmentation to a strengthened position through sharing case management and providing better services to the community. This positive interaction is identified in the literature as interprofessional collaborative practice, where multiple health care workers, each one with different professional backgrounds, work together with patients to deliver the finest quality of care (Interprofessional Education Collaborative Expert Panel, 2011; Stadick, 2020). Several systematic reviews corroborate this perspective, describing positive outcomes in collaboration, team behaviour, mortality rates, error rates, patient length of stay, among others (Kent et al., 2018; Reeves et al., 2013; Reeves et al., 2016). Another important recommendation is the involvement of students in research (Loura et al., 2020).

As to promote the development of collaborative teams of health professionals, the "how", "when" and "where" of IPE are issues that need to be addressed (Kent et al., 2018). Thinking about how to operationalize IPE, the first word that arises from the evidence is 'challenge', also named as 'barriers'. Fundamentally, there are a number of reasons that expose the difficulty of getting IPE to the field: geographical (e.g. distance between schools or universities), cultural (e.g. organizational culture that affects the way professionals relate to each other), logistic (e.g. the need for larger classrooms and difficulties with scheduling) and evaluation (e.g. accuracy, assessment of team skills and impact on practice and patient outcomes) issues have to be overcome to make IPE possible (Carroll et al., 2014; Guraya & Barr, 2018; Illingworth & Chelvanayagam, 2017; Lapkin et al., 2013; Mitchell et al., 2020; Neocleous, 2014; Thistlethwaite, 2015).

Considering these conditions and difficulties, competency frameworks aligned with learning outcomes-based curricula might be an answer to ensure proper appropriation of knowledge and implementation of IPE in practice. The competency-based education (CBE) provides a useful alternative to time-based models for preparing health professionals and constructing educational programs because it implies a curriculum framework, in which learners and educators are more accountable, the program is flexible and adapts to learner progress, and learners take responsibility for their own learning and development (Weller, Naik, & Ryan, 2020). This perspective is aligned with our findings, in particular with the study of Greidanus et al. (2013), where students were involved at an early stage, conceiving the competency framework itself inside a larger group.

Hawkins et al. (2015) advocate that this approach has advantages that includes: a focus on the outcomes and in what the learner need to achieve; requirements for multifaceted assessment that embraces formative and summative approaches; support of a flexible, time-independent trajectory through the curriculum; and improves the information and articulation to stakeholders with a shared set of expectations and a common language for education, assessment and regulation. All the studies included in our sample present CFs embedded in this ideology, describing the use of documents defining professional competencies as a basis for its creation (Skirton et al., 2010; Greidanus et al., 2013), as well as the importance of working groups to raise consensus on CFs content (in some cases, with the contribution of stakeholders and experts). Also, the structure of these CF and associated curriculas were different depending on the theme's size and latitude: Skirton et al. (2010) described the tiered composition of a curricula, as opposed to a more straightforward infrastructure adopted by the other authors.

Teaching sitting on an IPE program is complex and requires flexibility and understanding of the diverse backgrounds within the combination of professional groups present (Olson & Brosnan, 2017). This issue raises questions about the origin of the learning outcomes, which can be strictly multi-professional or different for each of the professional groups, even if the theme is interprofessional. Our review was able to identify one study in which learning outcomes were two-sided: a specific curriculum based on each profession or area was added to the generic one (Skirton et al., 2010). In the other studies, learning outcomes were generic and independent.

Furthermore, the agreement on the methods the institutions will use to help students develop key interprofessional competencies for collaborative practice has to be reached (Banister et al., 2020). Teaching and learning approaches vary from multi-professional dynamics, where students from different professions learn along with each other, to short activities where students have the opportunity to work together on a more specific subject,

and even to training wards, with effective cooperation caring for a real patient in a clinical context (Oandasan & Reeves, 2005; Olson & Brosnan, 2017; Olson & Bialocerkowski, 2014). These distinct methodologies raise issues about how to conceive and adapt learning outcomes to the activities that are actually taken, going from a more cognitive approach to a substantial affective or psychomotor dynamic, considering Bloom's Taxonomy (Cedefop, 2017). In our findings, learning outcomes associated with CFs were mostly multiple (cognitive, psychomotor and affective), excluding the work of Karugutia et al. (2017), in which learning outcomes were only cognitive. However, all studies presented a cognitive domain majority in learning outcomes.

Besides the relevance of our findings, it is our obligation to point out that a major limitation of our study is the dimension of the sample and the low-range of the structural issues described. The existence of a better detailed study design would be important to understand deeper how to conceive interprofessional CF and align them with learning outcomes in a complex health and education system.

5. Final Considerations

Interprofessional education has been appointed as an effective solution to promote collaboration between healthcare professionals, develop and enhance clinical practice and foster relevant outcomes for people. However, and despite the overlap in some areas across health professions, we found only four interprofessional CFs that can guide collaborative education and are linked to learning outcomes.

Competency frameworks can be useful guiding the definition and development of learning outcomes-based curricula, supporting students' involvement and accountability on their learning, knowledge acquisition and competency development. Although our sample includes only four articles, in which the competency areas are different, we were able to identify that cognitive learning outcomes assume a main position concerning the implementation of IPE in curricula.

IPE needs to be implemented in health and education settings to thrive and show its importance. While educators need to be passionate about IPE to make it effective, students need to feel that it is relevant for their clinical practice. In addition, schools, universities, and clinical institutions need to encourage and support this kind of practice, debating, at least internally, its importance and considering when is the best timing to incorporate IPE in academic curricula. A greater and still unknown future seems to be ahead of the scientific community regarding IPE and its inclusion in CFs linked to learning outcomes. Articulation between clinical and academic contexts, where a model of competencies can be useful in generating a standardized evaluation of specific program objectives, measuring outcomes and providing future direction, is needed, as well as resorted or structured scientific methods that may facilitate competencies attainment.

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Framing Conflict Mediation in the Context of Teacher Training: A Scoping Review of the Literature Between 2000 and 2020

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Abstract: A scoping review from 2000 to 2020, in a qualitative approach, were analyzed in order to provide a synthesis of the empirical issues concerning conflict mediation in schools in the context of teacher education, and to investigate the extent to which empirical research has provided evidence on key elements that are crucial to develop conflict mediation skills among teachers. A scoping review, on Scopus and B-on online databases, was made using nine inclusive criteria. The results showed that the number of publications is stable throughout the years. Seven journals published studies about this subject. Two continents are represented in the reviewed studies. They were mostly on-site and qualitative research and focus the mediation as a method of conflict resolution, and as a tool to introduce initial learning-to-teach experiences. There are a few empirical studies in which conflict mediation and its impact on teacher education is sufficiently explored. A thematic overview of reported outcomes suggested that although mediation is perceived as positive and encourages emotional, cognitive, and moral learning, stimulating pre-service teachers' reflective thinking, teachers identify a deficiency when it comes to their training.

Keywords: scoping review, school mediation, teacher education.

1. Theoretical Background

Since the 90's, the interest in school mediation has increased given that school has

the aim to educate students based on diversity, civic rights, culture, and solidarity.

Despite the importance of the conflict mediation during initial teacher education, pre-service teachers appear unprepared to deal with its complex reality and initial teacher education institutes appear to favour the development of cognitive aspects of professional identity over the social and emotional aspects (Romanova et al., 2019). While previous conflict mediation reviews allow us to understand the concept of conflict mediation, there has been a lack of focus on how teachers deal with conflicts. Concerning this matter,

"we are still faced with few scientific studies with regard to the continuous training of teachers in conflict mediation and on the teacher's role as mediator, as well as on the contribution of conflict mediation in the acquisition of socio-educational skills" (Costa, 2020, p. 3).

Conflict mediation is a popular research topic, often related to peace education, post-war contexts, diversity, global education, and restorative justice. Given that school is inherently a space of coexistence, and that schools have been facing and adapting to different and evolving social challenges (Costa & Sá, 2019), it is expected to arise some conflicts when teachers are not well prepared to deal with historical, cultural, context and economic diversity. Mediation can be described as "a win-win process, with a focus on disputants who design their mutually satisfactory conflict resolution" (DeVoogd et al., 2016, p. 279). In school context, mediation by focusing on interpersonal relations, has shown a great pedagogical potential, especially through prevention (Costa et al., 2018).

Although positive findings have been reported concerning conflict mediation strategies, little has been written concerning how preservice teachers should address conflict and moreover, how they have been trained to deal with such pressing matters. Several authors

claimed that initial teacher education curricula is often focus solely on content and cognitive knowledge and has proven to be insufficiently prepared to teach preservice teachers how to deal with diversity and challenging school contexts (Kharlanova et al., 2020; Morueta & Vélez; 2015; Jovanovic et al., 2014). As the concept of conflict is often identified as negative, it is important to understand that a conflict is also an opportunity to learn and to develop new levels of empathy, that conflicts will naturally exist in school contexts and that conflicts are not, in nature, nor constructive or destructive events, it depends on the negotiation process and the final outcome (Caputo et al., 2019).

When asked about which essential skills a teacher needs to develop, pre-service teachers identified conflict mediation strategies as a requirement, and specially, they claim they are not familiarized with which theoretical framework they should follow when dealing with conflicts (Kharlanova et al., 2019; Basqueira & Azzi, 2014; Horsley & Bauer, 2010). Lastly, it is important to uncover how mediation has been used in school contexts (Costa et al., 2018).

2. Methodology

This study pursues the following research question: What can we learn from research on conflict mediation in schools in the context of initial teacher training published in EBSCOhost and Scopus databases? The purpose of this scoping review, which reported the use of qualitative methods to a comprehensive synthesis of literature (Munn et al., 2018), is to provide a synthesis of the empirical issues concerning conflict mediation in schools in initial teacher training and investigate the extent to which empirical research has provided evidence on key elements that are crucial to develop conflict mediation skills among teachers.

The scoping review presented in this study focused on related publications from January 2000 to May 2020. In doing so, the aim is to update the reported process of conflict mediation in schools in teacher training. By providing clear information about the methodology used, our intention is to time frame the literature. The intention is also to delve into each study, beyond summarizing the literature, to identify reported similarities and differences of the conflict mediation in schools during teacher education. This will potentially aid those responsible for teacher education (i.e., teacher educators and cooperating teachers in schools) to effectively support and facilitate conflict mediation skills among future teachers since school is a space for socialization.

Scoping reviews are more than non-systematic reviews. They entail conceptual mapping to assess potential size and scope of existing research literature and aim to identify the nature and extent of research evidence to address complex and exploratory research questions (Anderson et al., 2008; Grant & Booth, 2009). A scoping review entails five different and subsequent stages:

- identifying the research question,
- identifying relevant studies,
- study selection,
- charting the data, and
- collating, summarizing and reporting the results (Arksey & O'Malley, 2005).

The SCOPUS and B-ON online databases were searched using the following keywords:

- school mediation
- conflict mediation
- teacher training
- teacher education
- school placement
- practicum

The fields of research used were Abstract, Subject and Title. The inclusion criteria were:

- studies published in peer-reviewed scientific journals,
- studies published between January 2000 and May 2020,
- empirical studies,
- availability of full-text,
- written in English,
- written in Portuguese,
- written in Spanish, and
- focusing on conflict/school mediation in teacher training.

Search controllers were set to ensure that the search retrieved only full-text peer-reviewed empirical studies published in English, Portuguese, and Spanish. The initial search was independently conducted by one individual and resulted in the identification of 70 studies. After removing five duplicates using the EndNote X9 software, the title, abstract and subject of the remaining 65 studies were screened to assess their relevance using the inclusion criteria, resulting in the exclusion of 40 studies. Search parameters were strictly applied to the remaining 25 full-text studies. Studies that did not explore conflict mediation in school context in-depth and did not contain any outcomes related to teacher education, were excluded. The final sample constituted seven empirical research studies that were thoroughly reviewed. A PRISMA flowchart (Moher et al., 2009) is used to demonstrate the review process.

A descriptive information (author, year, journal, country) concerning each study was provided to map the empirical studies included in the scoping review. The in-depth analysis was based on a synthesis of the definition of mediation or, where a definition was not provided, an authors' point of view concerning mediation was delivered, main data collection tools, and remarkable outcomes. Study categorization into themes was double checked.
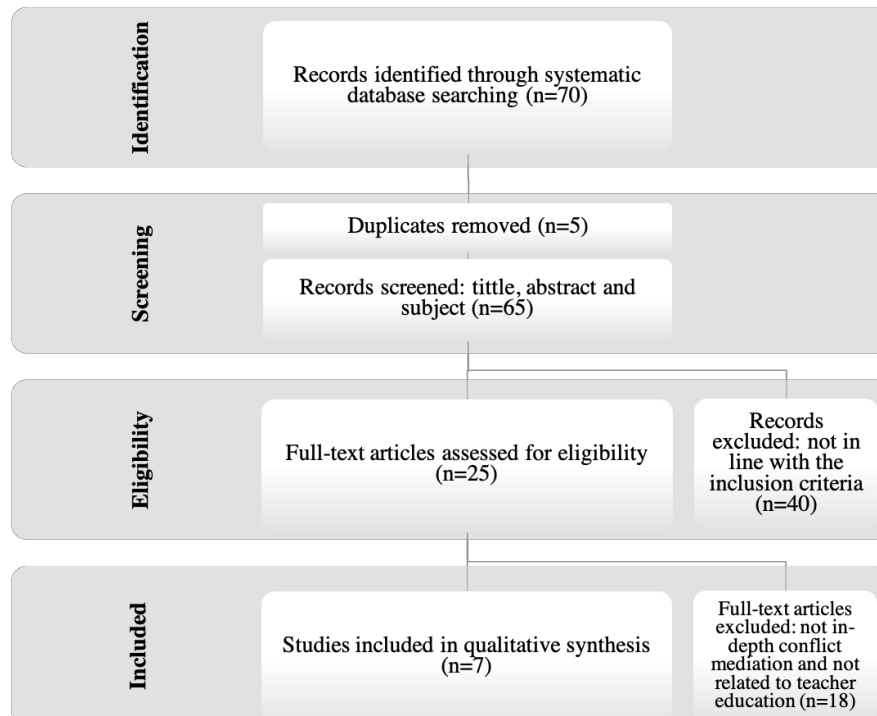

Fig. 1. Scoping review PRISMA flowchart.

3.   Results

Results from eligible articles will be qualitatively synthesized using the framework synthesis approach. First, general information on the number of publications per year (2000-2020), per teaching area, per journal and per country is shared. The study then focuses on the two recurring themes: 1) mediation as a method of conflict negotiation, and 2) mediation as a tool to introduce initial learning-to-teach experiences to pre-service teachers.

3.1   Descriptive Results

The number of publications is very stable throughout the years, with only one publication in the most part of the years. Interestingly, there is a 5-year gap of publications between 2005 and 2010. With a small rise in publications in 2016, there was a decrease again in 2020, likely to be affected by the search for studies included in this study ending in May of this year. It remains to be seen if any other papers will be published this year. Seven journals published studies on conflict mediation during teacher education. It is noticeable that the majority of journals had only published one conflict mediation related study between 2000 and 2020. During that timeframe there were no special issues concerning conflict mediation in the school context in the analyzed journals. Only two continents (America and Europe) are represented when considering where the data for the studies were gathered. Again, it is interesting to note that a critical mass of such publications is evident mainly in one country, USA (the other countries were Brazil, Spain and Ukraine).

3.2   Mediation as a Method of Conflict Resolution

Mediation as a method of conflict resolution was acknowledged in three of the seven research studies. The data of these three studies was gathered on two different continents, America and Europe. One study was qualitative, the second, quantitative, and the third study did not define the main data collection tools. Here, qualitative methods entailed students' narratives, and quantitative methods entailed the application of a survey. Data were collected mostly in a single country. While there appeared to be differences between the studies in terms of the type of methods used, no obvious distinction was found between the general findings as a result of the methods used. Similar and complementary characteristics of conflict mediation and outcomes for teacher education were observed across the studies in the same category, regardless of the chosen methods and number of participants.

Table 1. Chronological overview of the studies concerning mediation as a method of conflict resolution.

Author, year and context	Mediation definition/seen as…	Main data collection tools	Remarkable outcomes
Yssel, Beilke, Church and Zimmerman (2001) USA	Mediation is a method of conflict resolution that utilizes a third-party mediator in order to settle a dispute between two parties. Elements of school mediation programs include the use of problem-solving skills that can lead to a win-win situation rather than a compromise in which one person feels that he or she has lost.	NA	Preservice teachers should participate in experiential learning opportunities, developing mediation skills, and designing and implementing proactive strategies. The CoRE (conflict resolution in education) model offers teachers conflict resolution/per mediation skills in a four-level approach: foundational knowledge, integration, contextual, and

			implementation. For preservice teachers to become skilled in mediation, the following key components should be addressed: self-exploration, theory, principles, and information, skill building, the mediation process, and simulated practice.
Lane-Garon, Ybarra-Merlo, Zajac and Vierra (2005) USA	Mediation itself contributes to adaptive human development in that it provides a model for considering another's diverging shared problem and experiencing satisfaction with a mutually designed solution (Lane-Garon & Richerdson, 2003).	Analysis of pre-to-post changes standardized test scores Survey	Mediation program participation by a preservice teacher, led her to state that through mediation, students understand that she cared about them, taught her to listen and students saw her as a role model.
Koshmanova and Ravchyna (2010) Ukraine	Mediation as a process of negotiation promoted by a third, neutral side (or mediator) in which participants look for solutions for conflicts that arise among them.	Students' narratives 40 prospective teachers	All the students valued the significance of mediation for gaining experience to engage in a dialogue with people with opposite points of view and that the changes that occurred in students' attitudes to socially meaningful activity were progressing in stages. The experiment confirmed the positive influence of mediation on the formation of teacher candidates' attitudes toward socially meaningful activity as a civic value.

Findings revealed it is fundamental for pre-service teachers to learn, implement and reflect upon mediation strategies since the school context is characterized by ever-changing contexts with equally challenging conviviality circumstances between actors from all school communities. Yssel et al. (2001) stated that in order for pre-service teachers to become skilled at mediation, the following key components should be addressed: self-exploration, theory, principles, and information, skill building, the mediation process, and simulated practice. Pre-service teachers should be allowed to explore their thoughts concerning conflict since they are often taught that conflict is inherently negative and have almost nonpositive examples on how to explore the conflict mediation in a constructive perspective. Since pre-service teachers are discovering who they are and constructing their professional identity, it can be stressful to address these questions. Regarding mediation process, Yssel et al. (2001) stated that it is constituted by four distinctive phases: premeditation meetings, open questioning or storytelling, mediated interaction, and, finally, problem-solving phase. Pre-service teachers should practice the different stages of a mediation process and inherent tasks through role playing. In so being, the authors advocate the implementation of a program during teacher education, where students learn and practice mediation skills throughout their initial training, developing from freshman year to senior year.

The need for practice is also acknowledged by Lane-Garon et al. (2005) stating that while participating in a mediation process it is possible for pre-service teachers to act as role models for their students. Pre-service teachers also pointed out that in order to be a good

mediator, one had to listen carefully; a characteristic also needed to become an excellent teacher. The way one teacher engaged in the mediation process led the students to become more respectful since he was making a great commitment with his personal life and their learning process. The point of view defended by the authors is closely linked to developing peaceful ways to resolve a conflict that, when implemented holistically, will affect learners in different ways, such as knowledge and communication about conflict substance, relationship between parties, and the process of constructive conflict management.

Also intimately related with peace education is the perspective of mediation stated by Koshmanova and Ravchyna (2010), namely because of the historical and cultural past of Ukraine, deeply marked by war. In such realities, mediation can be seen as a fundamental strategy to be used in a school context, since the aim is to develop a democratic relationship among the school community. Mediation engagement by pre-service teachers proved to have a positive influence on their formation process since they started to have gain experience in dialogue with persons with different points of view by finding common ground for mutual agreement. Mediation provided a methodology to overcome disagreements and to build experience of constructive communication by the pre-service teachers.

3.3 Mediation as a Tool to Introduce Initial Learning-to-Teach Experiences

Key elements regarding mediation as a tool to introduce initial learning-to-teach experiences to pre-service teachers were discussed in four studies. The data of these four studies were gathered in the same two continents (America and Europe) with most of the data collected in America. The reviewed studies were small-scale and qualitative. In these cases, qualitative methods entailed microteaching simulation, interviews, ethnography, written reflections, field observation and audio-recorded debriefs. Only one of the four studies draws on 'in situ' methodologies such as observation and ethnography. Among the studies reviewed in this category, there was one case study. Data were collected in a single country, with one study presenting conclusions based on data collected in two different countries.

Table 2. Chronological overview of the studies concerning mediation as a tool to introduce initial learning-to-teach experiences.

Author, year and context	Mediation definition/seen as…	Main data collection tools	Remarkable outcomes
Johnson and Dellagnelo (2013) USA and Brazil	Mediation from a teacher educator and peer teachers to introduce novice teachers in series of initial learning-to-teaching experiences.	Microteaching simulation project that was carried out as part of a TESL methodology course (Johnson & Arshavskaya, 2011). Sociocultural theoretical perspective on teacher learning (Johnson, 2009). 15-week project with 3 novice teachers	Group mediation requires teacher educators to be highly sensitive to the ZPD that individual novice teachers are functioning in while also skilled at calibrating their mediation, so it is maximally beneficial to both the individual and the group. The importance of mediation is highlighted, for teacher educators since it is not only responsive to individual need but also provided as novice teachers participate in the activity of actual teaching.
Montecinos 2016 Spain	Mediation as a tool to strengthen professional agency.	Case study 6 preservice teachers, 2 supervisor teachers from university and one cooperating teacher	An analysis of field notes and transcripts of the conversations among participants evidences how performing tasks authentic to teaching and the mediating tools used by cooperating teachers and supervisors moved candidates

			from a focus on their teaching to a concern for how much their students were learning.
Willey and Magee (2016) USA	Mediation as the process by which the more experienced person facilitates the development of more sophisticated mental processes, which includes the way learners (i.e., prospective teachers) can think about or talk about a concept in more nuanced or abstract ways.	Ethnographic study Artifacts and dialogue pertaining to instructors' iterative thinking about mediating prospective teachers' learning from clinical experiences. Conversations around student teaching lesson enactment.	Focusing attention on the intentional design and assessment of the mediational activities coupled with clinical experiences leads to more nuanced understandings and enactments of culturally relevant teaching among prospective teachers; and clinical experiences afford prospective teachers' abundant opportunities to shape complex identities as urban teachers. Specifically, we found that clinical experiences and corresponding mediational activities support prospective teachers' understanding of families of colour, allow them to recognize and address problematic schooling practices, and strengthen prospective teachers' otherwise fragile critical consciousness.
Guggenheim (2019) USA	Mediation as a tool for helping preservice teachers to approach literacies as political, learn with children who have different cultural, linguistic, and racial identities than them, and navigate the continual becoming inherent in equity-oriented practice	Case study Audio-recorded weekly debriefs with university partners (preservice teachers). Semi-structured interviews with university partners (preservice e teachers). Fieldnotes from university partners (preservice teachers) and two facilitators.	Participating in socio-critical literacy can support reaching toward equity in partnership with children. Wobbling can be supported within a robust teacher education program with mediation by university instructors and site facilitators across a practicum site and connected university course. Wobbling is not finished when preservice teachers become practicing teachers but rather is something that will hopefully be carried throughout their careers as they learn to sense, negotiate, and mediate the new wobbles that are sure to come.

Findings highlighted that in teacher education, mediation is often used in order to portray helping pre-service teachers moving from a rather simplistic perspective of teaching into more complex thoughts and to reflect upon their learning process, accommodating new teacher profession artefacts.

Johnson and Dellagnelo (2013) highlighted peer mediation importance so that pre-service teachers can experience actual teaching and attribute meaning to each moment. Mentoring processes can help pre-service teachers make sense of professional identity transformations and understand under what conditions these transformations occur.

In a study carried out by Córtez and Montecinos (2016) mediation is seen as a tool to enhance pre-service teacher agency, framing the triad made by pre-service teacher, cooperating teacher and university supervisor. Once again, peer mediation is key on developing pre-service teacher identity. Mediation allowed pre-service teachers to change focus from their teaching and refocus on how much and how their students were learning and act in conformity. Willey and Magee (2016) focused their attention on mediation as a way for pre-service teachers to develop more conscious attitudes towards problematic schooling practices and to enrich their critical consciousness regarding, for example, families of colour.

This perspective is also shared by Guggenheim (2019), as mediation is a tool for helping pre-service teachers to approach literacies as political and to deal with students with

different cultural, linguistic, and racial identities. Mediation will help pre-service teachers to negotiate their positions during school placement, by raising awareness concerning different power relationships and civic learning.

4. Discussion

While two continents (America and Europe) are represented in the reviewed studies, there appears to be an overreliance on studies from the USA. The fact that conflict mediation in teacher education studies are mostly single-sited and enacted in the same countries may constrain researchers from comparing and understanding different realities. Although conflict arises daily in school context, there is a lack of studies reliant on classroom/school observation, ethnography or the tracking of daily activities, routines, behaviours, socialization within school context and did so over a prolonged period. This suggests a lack of attention to such data collection tools and assessment in schools as suggested by Hakvoort et al. (2019). The analysis conveyed that in most studies, pre-service teachers' own perception of conflict mediation was not explored. The study carried out through 'in situ' methods relied on more than one tool to collect data, highlighting the need to cross reference data from more than one source to understand a concept as complex as that of conflict mediation in schools.

Few studies draw their attention to mediation as a skill to be developed by pre-service teachers and integrated in teacher education curricula. This was surprising, given that several authors acknowledge school as a crucial context for socialization (Costa & Sá, 2019; Costa et al., 2018; Martins et al., 2016). While there are consistencies between the perspectives of the different authors, there appears to be sufficient common points to frame conflict mediation in teacher education. Not only does mediation encourage emotional, cognitive and moral learning but also, it stimulates pre-service teachers' reflective thinking about inclusion and associated values and empathy towards different realities and prepare them to deal with inherent school coexistence (Costa & Sá, 2019; Ibarrola-García et al., 2017).

At the same time, by teaching pre-service teachers mediation skills, they will be recognized as role models by students and will be able to teach them how to mediate their own conflicts through self-regulation, contributing to a peaceful school environment (Blunk et al., 2017). The importance of reflection is foregrounded in several studies as a strategy that can facilitate conflict mediation since it represents a way to attribute meaning to the lived experiences during school placement and to questioning taken-for-granted assumptions (Torrecilla et al., 2017). Through reflection, pre-service teachers identified important themes for teaching practice development, shared concerns, and doubts, realized their emotions and developed strategies to cope with different teaching-related challenges. By providing spaces and times for pre-service teachers to reflect and engage in mediation role playing, cooperating teachers, and initial teacher education programs are also granting pre-service teachers an active voice.

Universities and schools should work closely in order to assist pre-service teachers dealing with conflict mediation, with many studies concluding that initial teacher education programs have a significant influence when negotiating conflicts. Initial teacher education programs should consider pre-service teachers' prior beliefs and experiences, grant opportunities for pre-service teachers to negotiate tensions and for pre-service teachers to develop strategies for socio-moral and civic learning. Sadly, the studies shared minimal contextual and practice-related information on initial teacher education programs.

5. Conclusion

There are few empirical studies in the last twenty years in which conflict mediation and its impact on teacher education is sufficiently explored. The reviewed studies were mostly one-site and qualitative. There is a necessity to reflect on how data is collected to study conflict mediation since only one study enacted in-situ methodologies, with potentially more substantial results arising from observation and ethnography approaches. Similarly, data collected in different contextual and cultural environments can deepen our knowledge about conflict mediation in teacher education. Conflict mediation skills entails the engagement in cognitive learning, interacting with different socializing factors and experiencing various emotions as the pre-service teachers develop conflict resolution skills. Collaborative work, peer mediation, constructively critical teacher education courses, mentoring, observation, role playing, reflections, and the construction of a discursive space seem to be adequate strategies to help pre-service teachers developing conflict mediation skills.

Although there is a growing interest in understanding conflict mediation in the school context, the conclusions of many studies related to this interest are not always developing or challenging the reality experienced by pre-service teachers on initial teacher education programs. There is a danger in perceiving conflict mediation skills as a natural process that will occur even without guidance. It is essential that initial teacher education programs ensure that conflict mediation is intentionally oriented with the purpose of helping pre-service teachers to become the type of teacher they strive to become.

Finally, this qualitative approach analysis aims to generate results that are useful and relevant for researchers and education decision-makers, in order to inform a research agenda and to more effectively influence policies and practices on teacher education.

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