

**50 years of research about teacher expectations:
Systematic sedimentation**

Kseniia Sitnikova

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Abstract

This project offers a fresh contribution to scholarship because it navigates a new path between the formal systematic literature review process and contemporary theoretically informed investigation. A disciplined review of significant international literature was undertaken about teacher expectations over a 50-year period. The aim of the study was to identify how knowledge about the concept of teacher expectations has changed over time. This was accomplished by examining what the scholarly literature has reported about teacher expectations, what underpinnings were chosen to justify the expectancy research and methodology, and how assumptions in this field have become sedimented “truth”. The study also revealed what has been reported about self-fulfilling prophecy, expectancy effect in the classroom and teachers’ influence on students, as well as how this knowledge has been formed. The systematic literature review was augmented with theory – Michel Foucault’s genealogy and disciplinary reflexivity – to pay attention to methodological choices and disciplinary perspectives in the literature. The study also offers a methodological contribution. The PRISMA 2020 protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) for systematic literature reviews was adapted from the field of Public Health for Education.

Declaration of Authenticity

I, Kseniia Sitnikova, declare that the Master of Research thesis entitled “50 years of research about teacher expectations: Systematic sedimentation”, is no more than 50,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

I have conducted my thesis in alignment with the Australian Code for the Responsible Conduct of Research and Victoria University’s Higher Degree by Research Policy and Procedures.

Signature:



Date: 21 June 2023

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My thanks go to all the lecturers who taught me how to distinguish constructivism from positivism, and qualitative research from quantitative. Just a year ago I knew nothing about these concepts, and research in general, since I came from a non-academic field.

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Chapter 1: Introduction to Teacher Expectations

1.1 Introduction

Two centuries ago, Plato asserted that expectations are “beliefs about the future”.¹ This notion continues to hold true today, as people navigate their lives and interactions with others guided by implicit rules and personal moral codes shaped by their expectations. The origins of these expectations, as well as their influence on our behaviour and interactions with others, remain important questions to explore. Additionally, there is a need to determine whether these expectations can be accurately measured.

“Do eggs come from chickens or do chickens come from eggs?” This is the basis of a substantial body of research that questions what comes first: teacher expectations, or student achievements that influence teacher expectations (West & Anderson, 1976). The main aim of this thesis was to investigate the development of the concept of teacher expectations over time and the body of knowledge formed by various scientists, tracing its evolution from initial conceptualisation. Additionally, this research aimed to identify the factors and the individuals that have influenced what should be studied and why. The results of the analysis were interpreted through the lens of educational theories, and I will discuss them in detail in later chapters.

The selection of methodology for the study – a systematic literature review – entailed conducting a rigorous, comprehensive and critical analysis of the body of relevant literature, with the objective of producing a knowledge system that is replicable and independent of the individual attributes of the author. The choice of methodology was informed by a range of pertinent studies that will be expounded upon in Chapter 4. In this chapter, early conceptualisations of expectations are mentioned and ways they have influenced our understanding are discussed.

¹ Plato wrote that “each man possesses opinions about the future, which go by the general name of ‘expectations’; and of these, that which precedes pain bears the special name of ‘fear,’ and that which precedes pleasure the special name of ‘confidence’” (Plato, *Laws* 644c, 370 BC).

Research on teacher expectations has a long and complex history deeply intertwined with the development of education systems. In this study, the focus is on the evolution of what has been understood by this concept. In recent years, there has been a growing interest in this area of research, with scholars from diverse fields seeking to understand the impact of teacher expectations on student outcomes. However, while early studies about teacher expectations indicated a direct connection between “teacher beliefs” and the effect on student academic performance (Anderson, 1937, 1939; Flanders, 1951; Lewin et al., 1939), these findings were later questioned (Flowers, 1966; Pitt, 1956). All of that raises a question: Do we understand the term “teacher expectations” the same way today as we did 50 years ago?

Many early researchers agreed that expectation was a teacher’s estimate of a child’s probable academic performance within the classroom based on their worldview, biases, behaviours and beliefs (Meichenbaum et al., 1969; Rosenthal & Jacobson, 1968; Snodgrass & Rosenthal, 1982; Sutherland & Goldschmid, 1974). According to Rosenthal and Jacobson (1968), expectations were said to give teachers the authority to favour certain students and undermine those who underperformed, and even predict their behaviour in particular circumstances. This kind of teaching expectation resulted in unjust learning opportunities for and unequal treatment of students.

To comprehensively explore the broad topic and incorporate various potential factors that affect teachers, a systematic literature review methodology was selected. The context of knowledge production was also considered, as it affects education policies, teacher training and teacher views. To examine the potential factors that have influenced the development of knowledge about teacher expectations over the years, the conventional methodology of a systematic literature review was “bent” – or altered – to include theoretical ideas from philosophers, such as Michel Foucault’s *genealogy* (the historical transformation of knowledge over time) and *disciplinary reflexivity* (Whitaker & Atkinson, 2021).

1.2 Dominant Research Paradigm

The main aim of this section is to introduce the study that brought attention to the issue of teacher expectations and to highlight the controversy surrounding it that subsequent researchers may have missed. In 1968, Robert Rosenthal and Lenore Jacobson's book *Pygmalion in the Classroom* was published, and it had a significant influence on subsequent research in this area. Considering the profound impact of this seminal work and the fact that the current research journey embarked in 2021, marking more than 50 years since the original study, it became not just a chronological milestone but a symbolic exploration of the longevity and enduring relevance of the topic. Examining the evolution of research over these five decades allows for a comprehensive understanding of the shifts, trends and persistent challenges in the realm of teacher expectations.

In the study, the researchers informed teachers that certain students showed exceptional intellectual potential, even though these students had been randomly selected. The teachers were provided with the names of these students who supposedly displayed exceptional potential for intellectual growth. This increased awareness led the teachers to develop higher expectations for these students, which then motivated them to perform better. The researchers found that, as a result of the teachers' increased expectations, the selected students made greater academic progress compared to their peers who were not identified as having exceptional potential. To clarify their definition of teacher expectations, Rosenthal and Jacobson explained the following:

There are many determinants of a teacher's expectation of her (*sic*) pupils' intellectual ability. Even before a teacher has seen a pupil deal with academic tasks, she (*sic*) is likely to have some expectation for his behavior. If she is to teach a 'slow group,' or children of darker skin color, or children whose mothers are 'on welfare,' she will have different expectations for her pupils' performance than if she is to teach a 'fast group,' or children of an upper-middle-class community. Before she has seen a child perform, she may have seen his score on an achievement or ability test or his last year's grades, or she may have access to the less formal information that constitutes the child's

reputation. There have been theoretical formulations, and there has been some evidence, most of it anecdotal, that the teacher's expectation, however derived, can come to serve as an educational self-fulfilling prophecy. (p. 10)

The study was based on the theoretical framework of "interpersonal self-fulfilling prophecies: how one person's expectation for another person's behavior can quite unwittingly become a more accurate prediction simply for its having been made" (Rosenthal & Jacobson, 1968, p. 272). According to this study, the teachers' expectations regarding the intellectual performance of allegedly "special" children (in fact, child participant names were randomly taken from the list) can lead to an actual change in their academic performance.

However, this research also ignited a great deal of controversy among scholars and educators. Some researchers, like Persell (1976), began to question the validity of the study and the significance placed on academic achievement. Persell's focus on education, inequality and sociology led her to question the research design and the metrics used to measure student success in the study. She also pointed out the complexities involved in the subject of teacher expectations and stressed the need for additional research to gain a more comprehensive understanding of their influence on student outcomes. Apart from Persell, other researchers have also questioned the validity and generalisability of the "Pygmalion in the Classroom" study (Dusek, 1975; Snow, 1969; Thorndike, 1968).

Although this landmark study would not have gained ethics approval in 2023, it was nevertheless significant and marked the beginning of studies in the field of teacher expectations. While not intended to be a transformative study, the Pygmalion research has prompted the academic community to explore potential solutions that can mitigate the negative impact of differential expectations on students who may be unfairly disadvantaged by their teachers. The key ideas explored in the Pygmalion study by Rosenthal and Jacobson are still relevant today, as modern researchers continue to investigate the influence of teacher expectations on students' academic outcomes. Some inquiries in modern studies have been built upon the insights

gained from the Pygmalion research. Among these are questions about the factors that can influence classroom expectations, whether a student's reputation can be undermined in the eyes of their teacher and whether students are adversely affected by their teacher's differential expectations. Thus, the Pygmalion study will be cited extensively throughout this thesis.

1.3 Aims and Research Questions

The concept of teacher expectations has been a subject of interest among scholars and educators for decades, with numerous studies examining its impact on students' academic performance and overall development. In light of this, the central aim of this study was to closely examine the concept of teacher expectations and shed light on its evolution over time. The study focused on processing the extensive body of literature available on this topic, identifying key themes and synthesising these findings to provide a comprehensive overview of the current state of knowledge in this field.

Engaging with hundreds of studies would be an onerous task for any researcher. Thus, a systematic literature review was selected as a research design since it helps to deal with the increasing volume of literature, by reviewing it and making it available in a digestible form (Gough et al., 2017). While the field of Education lacks guidelines on how to conduct a systematic literature review, the PRISMA 2020 guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) were followed to ensure that the requirements for conducting a systematic review were met. The methodology used in accordance with these guidelines, along with its bending – using the theoretical perspectives of philosophers – is further explained in Chapter 4.

The major aims of this work were to:

1. examine the development of knowledge about teacher expectations over 50 years in the scholarly literature;

2. employ a systematic approach to reviewing the literature in order to critically examine study designs, assumptions and assertions that have shaped knowledge about teacher expectations in the classroom over the last 50 years; and
3. address the research question: “What has not been considered in this body of research?”

Specifically, this study aimed to address the following research questions:

1. What does the international scholarly literature report about the significance of teacher expectations?
2. What disciplines and worldviews underpin the published research?

Although there are a limited number of systematic literature reviews on teacher expectations, especially from a transformative perspective, this thesis strives to contribute to the understanding of the influence of teacher expectations on students’ academic performance. It also contributes to knowledge about how systematic literature reviews can be used in critical and creative ways to cast an eye backwards on disciplinary patterns, questioning and uncovering potential directions for future research in this area, with a focus on real educational change and teacher interventions.

1.4 Significance

The study is built on the influential peer-reviewed works undertaken by many other researchers. The inclusion of qualitative studies and new domains of knowledge that have previously been mostly ignored is a major contribution of this study. 560 studies have been examined to address the research questions. Special attention has been paid to the methodology and conceptualisation the authors have used to justify their findings. As will be discussed later, disciplinary legacies and their residue shape research in education and are used to inform policies and practice in schools and other institutions.

Expectations in a classroom have emerged as a complex and interdisciplinary research topic, shaped by various educational contexts. This phenomenon has been influenced by multiple fields, such as psychology, education, sociology, economics, behavioural sciences and politics. Analysis of researchers' backgrounds in Chapter 6 has provided some understanding of the paradigms and methods they have used and made it possible to reflect on how this has shaped the reality in which we live.

When starting this work, I assumed that analysing theoretical frameworks or educational theories that researchers have used to justify their chosen methodology and interpret findings appropriately should be addressed. As someone with an educational background, I was surprised by the lack of theory in the extensive body of literature on teacher expectations. Given the focus on learning and teaching processes in educational theory, I anticipated that more attention would have been given to exploring teacher expectations in this context. This issue is carefully considered in Chapter 7.

Research requires epistemological justification for conclusions (Epstein et al., 2007), and this study has considered theory as one of the essential parts of social research which is not common in the tradition of systematic literature reviews. Social theory, for instance, provides rigorous epistemological tools to critique existing knowledge in the field of Education. Further, employment of "disciplinary reflexivity" (Whitaker & Atkinson, 2021) has added to this investigation.

A critical analysis of teacher expectations in the literature has been conducted in accordance with systematic literature review protocols, underpinned with disciplinary reflexivity, Foucault's genealogy and social theory. This approach aims to provide a creative perspective on existing knowledge and insights on the topic.

The practical significance of this study lies in its potential to provide valuable insights for the international research community and for educators. The findings could be utilised by both researchers and teachers to re-evaluate the role of students in the classroom and to reconsider their understanding of the interaction process between teachers and students. Implementing the results of this study could lead to a shift in

classroom focus towards enhancing processes and relationships between teachers and students, ultimately improving instructional practices.

1.5 Panoramic View of the Chapters

The thesis is organised into eight chapters. In *Chapter 1* the main aims, methods and basic concepts around teacher expectations are designated. The topic of teacher expectation is introduced by presenting various concepts and ideas extracted from the body of literature. Readers are invited to examine the dominant research paradigm and the overall organisation of this thesis.

Chapter 2 is devoted to what the literature says about teacher expectations and their significance. It includes a review of literature on the development of teacher expectations and their impact. Individual studies and systematic literature reviews are also considered in this chapter.

Chapter 3 provides an overview of the historical and cultural factors that might have shaped or at least influenced the behaviour of teachers and researchers, and schooling practices. The chapter describes the factors that have been shaping the significance of teacher expectations as reported in the literature. The significance of teacher expectations, as reported in the literature, is also highlighted by examining the various factors that shape them. The chapter provides context for the process of knowledge-making, and the connection between knowledge and power, by examining the broader social and cultural influences that have shaped the research questions and research aims of studies spanning over 50 years.

Chapter 4 presents the methodology and theoretical justification for the study. It outlines the general methodology as well as the specific eligibility criteria, the PRISMA 2020 protocol, along with its adjustment and the layers of criteria used in the selection process. This chapter justifies the methods that have been used and explains why they were chosen, as well as how the genealogy of Foucault and disciplinary reflexivity are involved.

Chapter 5, 6 and 7 present three major findings of this study. They summarise the results of the systematic synthesis, and core conclusions and analyses, through critical appraisal of the body of literature. Together with the discussion in *Chapter 8*, these chapters shed light on the body of teacher expectations research in relation to interdisciplinary studies, educational principles and theoretical underpinning in the field of Education. Additionally, study limitations and recommendations for future research are outlined in *Chapter 8*.

1.6. Conclusion

In summary, Chapter 1 outlines the main objectives of the thesis, including the investigation of the evolution of teacher expectations, identification of influential factors and examination of the overarching research questions. The chapter also outlines the thesis objectives, emphasizing the systematic literature review methodology for a replicable and comprehensive analysis. It introduces the research focus on the body of knowledge around teacher expectations, tracing its evolution from Plato's concept of expectations as "beliefs about the future" to Rosenthal's and Jacobson's understanding and famous research and contemporary investigations into teacher-student dynamics.

The selection of a systematic literature review methodology was justified, emphasizing the need for a replicable and comprehensive analysis of the existing body of knowledge. The inclusion of theoretical perspectives such as Foucault's genealogy and disciplinary reflexivity was highlighted as a creative approach to enriching the understanding of the concept of teacher expectations.

The significance of the study lies in its contribution to understanding the interdisciplinary nature of teacher expectations, examining historical and cultural influences and promoting a reflexive approach to educational research. The panoramic view of subsequent chapters was presented, providing a roadmap for readers to delve into the detailed exploration of teacher expectations in education.

Chapter 2: Literature Review

2.1 Introduction

In a thesis with a systematic literature review design, the literature review chapter plays a crucial role in establishing the current state of knowledge, presenting core ideas, defining key terms and providing a foundation for the subsequent chapters. This chapter serves to describe the relevant research studies that have been reviewed, evaluate their rationale and identify knowledge gaps. Additionally, it includes literature on the conduct of systematic reviews. It also highlights examples of systematic reviews that had an impact on this study.

After the first stage of this research, which included reading 30 randomly chosen articles about teacher expectations, a research gap was found. The aim of this study was formulated based on this preliminary search. It was designed to address the research question, “What does the international scholarly literature report about the significance of teacher expectations?”, by reconsidering and critically appraising literature published in peer-reviewed journals over 50 years. This thinking process prompted the exploration of academic literature, which led to this review. It also involved extensive reading of systematic reviews conducted in the field of social sciences.

To understand how this research in the area of teacher expectations was initiated, it is necessary to reference the central study in this field. The “original research” – the “Pygmalion in the Classroom” study – published in a 1968 book by German-born American psychologist Robert Rosenthal and a principal of an elementary school Lenore Jacobson,² received wide recognition, as well as criticism. We still hear echoes of this study in 2023.

² The significance of a researcher’s background will be explained in Chapter 6.

2.2 Individual Studies on Teacher Expectations

The definition or understanding of the phenomenon of teacher expectations is not universal; for example, it differs in the fields of education, sociology and psychology. According to some researchers, it is about *teacher-bias effects* (Dusek, 1975); according to others, it can be defined as *expectation (expectancy) effects* or *self-fulfilling prophecy effects* (West & Anderson, 1976). The discipline of the researcher affects the language, methods and layers of thinking that they employ in their studies, as they try to adhere to the dominating paradigm in their field. Since the Pygmalion study (Rosenthal & Jacobson, 1968), there have been many studies into teacher expectations. The extent to which they have contributed to new knowledge is a particular interest of this current study.

The Pygmalion study was a pivotal work that has had an enduring impact on the field of Educational Psychology. It caught the imagination of many researchers and it evoked sharp controversies, providing impetus for research by supporters and antagonists alike. The explicit focus of the argument was whether the Pygmalion study indeed proved that experimentally manipulated teachers' beliefs about "late blooming" caused systematic changes in students' IQ or not. In a journal article, Babad (1993) discusses the book that re-examined the Pygmalion results, *Pygmalion Reconsidered*, published by Janet D. Elashoff and Richard E. Snow, three years later in 1971.

Critics also fiercely attacked the original study (Taylor, 1970). Some replication attempts failed to provide the same results (Claiborn, 1969), while other studies managed to show similar correlations (Meichenbaum, 1969; Sutherland, 1974). It was also criticised for utilising inconsistent methods (Raudenbush, 1984) and the exaggerated influence of teacher expectations on students (Wineburg, 1987). Jussim (1986) asserted that teacher expectations do not influence students that much, but even those who criticised agreed that teacher expectations are powerful in terms of influencing students in many ways (Jussim & Harber, 2005; Raudenbush, 1984; Wineburg, 1987). Weinstein (2002, 2008) investigated students from disadvantaged backgrounds as well as more advantaged students for whom high

expectations were imposed. In both contexts, students demonstrated that they can follow suit when teachers set low expectations and when they set high expectations (Rubie-Davies et al., 2006). Finally, Weinshtein (2002, 2008, 2009) showed how important student voice is in such research and urged scholars to also explore the side of student perception.

Concerns about entrenched low teacher expectations of children's potential in low-income communities have been examined in some studies (e.g., Timperley & Phillips, 2003). Many studies have centred on the problem of biased expectations towards "low achievers" and "high achievers" in the classroom, their academic performance, and their overall success in learning depending on the teacher's expectations (Ambady & Rosenthal, 1993; Ashton & Webb, 1986; Babad et al., 2003; Marsh & Roche, 2000; Rubie-Davies, 2006; Rubie-Davies et al., 2015; Tenenbaum & Ruck, 2007; Weinstein et al., 2002; Worrell & Kuterbach, 2001).

Numerous expectancy and self-fulfilling prophecy studies were conducted in the 1960s and 1970s, some attempting to replicate and others to question the Pygmalion findings. Additionally, many researchers simply saw scientific interest in investigating this phenomenon in a new context. The development of meta-analysis made it possible to empirically examine the accumulated results of the various self-fulfilling prophecy studies and, over the years, Rosenthal published several meta-analytic summaries proving the validity of the self-fulfilling prophecy phenomenon (Rosenthal & Rubin, 1978). Supported by Smith (1980), the idea of prophecy was further developed. Smith found, with no doubt, that self-fulfilling prophecy effects exist, and that teacher expectations – based on fabricated information as well as on real differences among students – can have systematic influences on (in descending order of effect magnitude) teachers' impressions of students, teachers' grades, students' performance on objective achievement tests and even students' IQ (Smith, 1980).

Later, in the 1990s and at the start of the new millennium, the dominance of self-fulfilling prophecy research in the fields of psychology and education began to weaken as more educationalists came to speak out. Several attempts have also

been made to conduct research on teacher expectation interventions (Cooper, 1977; De Boer et al., 2018; Perrella, 2017; Rubie-Davies et al., 2015; Rubie-Davies & Rosenthal, 2016).

Independent studies have extensively reported the results of quantitative research that has investigated the existence of a correlation between biased teacher expectations and student outcomes (Ambady & Rosenthal, 1993; Ashton & Webb, 1986; Babad et al., 2003; Brophy, 1983a; Cooper, 1977; Marsh & Roche, 2000; Perrella, 2017; Tenenbaum & Ruck, 2007; Timperley & Phillips, 2003; Weinstein et al., 2002; Worrell & Kuterbach, 2001). There have also been various meta-analyses (Ambady & Rosenthal, 1992; De Boer et al., 2018; Hattie, 2008; Rubie-Davies & Rosenthal, 2016; Tenenbaum & Ruck, 2007) that have emphasised the significance of teacher expectations. Despite the dominance of quantitative studies in the field in past decades, there have been some notable articles that have utilised qualitative methods to explore the concept of teacher expectations. They will be closely analysed in Chapter 6.

2.3 Systematic Literature Reviews on Teacher Expectations

Section 2.2 focused on individual studies that helped to identify the knowledge gap and influenced the formulation of the research questions. This section references studies that utilised systematic reviews as their methodology. Some of the methods or techniques employed in this study have been drawn from these systematic reviews. Studies undertaken by Persell (1976), Hitt and Tucker (2016), De Boer et al. (2018) and Johnston et al. (2019), will be examined in this section to better understand how systematic reviews in social research may be done. Each of these studies was a systematic literature review focused on school-related issues, including teacher expectations.

One of the earliest studies of this kind that was found (within the 50-year period) that focused on teacher expectations and the effects on student achievement was a report published by Caroline Persell in 1976. The objective of this study was to explore potential reasons for biased expectations and to highlight the significance of

teacher expectation interventions and social positionality in understanding this phenomenon. Most of the studies of that time focused on the cognitive and cultural deficiencies of lower-class (*sic*) and minority students and suggested an alternative interpretation. Persell (1976) analysed studies available at that time and, in the review of student characteristics that were said to cause biased teacher behaviour, she identified the following groups of factors:

- a) demographic (race, student socioeconomic status, sex and age, knowledge of siblings, religion, region);
- b) tested ability (student test score, IQ data);
- c) student appearance; and
- d) verbal, academic and social behaviour.

The systematic literature review undertaken by Hitt and Tucker (2016), contributing to the topic of educational leadership, observed 56 empirical research studies from 2000 to 2014 and recommended a unified framework. This study was used as an example of systematic review to better understand how research with this design is generally done. Although the focus of that review does not align directly with this current study, the protocols and methods have been of particular interest for this work. Hitt and Tucker relied on Hallinger's (2014) approach, with five guiding questions that researchers need to ask before starting a systematic literature review:

1. What is the central topic of interest?
2. What is the conceptual perspective for study selection and interpretation?
3. What are the sources and types of data?
4. What are the criteria for inclusion?
5. What is the major impact of the resultant paper?

The outcome of Hitt and Tucker's study was a synthesis of the peer-reviewed empirical research into the influence of educational leaders on student academic results.

Another systematic review investigated the effects of 19 teacher expectation interventions (De Boer et al., 2018). Three variations of interventions were

examined, including changing the behaviour of teachers, contributing to teachers' awareness of expectancy effect and addressing the beliefs underlying their behaviour. According to narrative review and interview data from the 19 interventions, the willingness of teachers to participate in the research and their support for the interventions played an important role.

The research design employed by De Boer et al. (2018) formed the methodological basis for my study. Their journal article provided eligibility criteria, the process of searching and appraising articles, how to code for narrative review and meta-analysis, and an overview of the characteristics of each teacher expectation intervention and intervention effects on teacher expectations. Their comprehensive vision of the problem of teacher expectation interventions was also presented in a table format with characteristics and effects. A similar design was used in a recent study on trust in education by Niedlic (2021).

Another study by Johnston et al. (2019) critically synthesised international teacher expectations research. The review gave a broad comprehensive picture of key research questions on the topic of teacher expectations that were published in English within a 10-year time frame. The results presented in the study were based on data spanning a decade, indicating a growing interest in qualitative design among the target audience since 2008. The study also drew attention, similar to several other systematic reviews about teacher expectations, to a lack of sufficient rationale for the findings of some studies and the need for theoretical underpinnings to interpret the results. The authors also suggested that raising teachers' awareness of their expectations could potentially benefit students.

2.4 Conclusion

In summary, the literature review presented in this chapter has encompassed a substantial body of studies that have been primarily examined via systematic review, shedding light on the dominance of certain ideas and research paradigms within the field of teacher expectations. The chapter has provided an overview of studies on teacher–student interactions, including unethical experiments and biased meta-

analyses which, despite their limitations, have marked the initiation of scientific discourse on this topic.

The main aim of this study was to investigate the process of knowledge production about teacher expectations, to identify any “sedimentation” that may have occurred and to explain them through theories such as Foucault’s genealogy and disciplinary reflexivity. By sedimentation the term that describes the process of taking on information about environment in a form that enables people to act intelligently without much effort or thought is understood. Therefore, understanding the contextual background that has influenced knowledge formation throughout the 20th century is crucial. In Chapter 3, concepts such as coloniality, modernity, knowledge-making processes and the prevalence of certain ideas over others will be explored to comprehend the contextual influences on knowledge formation.

Chapter 3: Context and the Politics of Knowledge-Making

3.1 Introduction

The purpose of this chapter is to analyse the context of the 1960s for insights into the socio-historical landscape of early research about teacher expectations. It is an effort to determine the degree to which teachers and researchers who conducted experiments about teacher expectations followed the tenets of the prevailing philosophy caused by global transformations or driven by other external factors. Moreover, events of the 20th century – such as the Great Depression, two World Wars, the Cold War and the Vietnam War, followed by the internet that revolutionised the way people interacted – could not help but affect the connection between education (teachers) and the state. These events influenced the knowledge-making process, which is an important consideration of this thesis.

In this chapter, the concepts of coloniality and knowledge-making are introduced as they relate to schooling, in general, and the forming of teacher expectations, in particular. How this background contributed to the dominant research paradigm, design and focus is also discussed. Consideration of these key issues became significant for the development of the argument in this thesis, as culture and political and societal changes influence teacher values and practice.

In the 1960s the world was a very different place, and it was divided into “elite” and “third-class” communities. For example, in the United States at this time there was a burgeoning body of literature around intercultural relations, and cognitive and behavioural dimensions of prejudice and discrimination, as a result of the atrocities of World War II and the civil rights era. The Vietnam War was just one – although essential – contributor to the knowledge-making process. It lasted for over 20 years, and it had a constant influence on American society, providing them with more and more doses of anxiety (Herring, 2008; Kagan, 2007). Additionally, Babad (1993) notes that “a strong antiestablishment movement had left its mark on university campuses; the government was giving low priority to education; [and] continuous

struggles over busing and school desegregation were draining much energy” (p. 127). Issues of colonialism and racism gained prominence, leading educators, psychologists and sociologists involved in researching teacher expectations to reflect on these themes. Hence, it is crucial to discuss these factors in this thesis.

3.2 Modernity/Coloniality and the Politics of Knowledge-Making

In this study I undertook a comprehensive analysis to explore the foundational principles that have shaped the research on teacher expectations over the past five decades. A critical component of this analysis was the investigation into the researchers themselves and their methodologies. This section emphasises the importance of considering the impact of colonisation on the production of knowledge about teacher expectations throughout history.

For decades, Western countries have been considered the primary creators and custodians of knowledge. Most researchers who have examined the impact of teacher expectations in the past century have been from Western countries, particularly the United States. The focus of this current research is centred on educational systems, the learning process and the potential practical outcomes that it can bring. It also examines the research methods used by scholars to describe teachers and their expectations, which can both be influenced and exert influence. The study seeks to explore the history of research and knowledge creation, not only from the perspective of teacher expectations but also in the more global context of schooling and education as a broader process.

To begin with, the impact of racism and colonialism on knowledge-making processes in the 20th century has been significant. Oppressive systems have affected not only the way knowledge is created but also how it is perceived and valued (Grosfoguel, 2011). Colonialism was a way for European and American powers to control territories around the world. As a result, they were able to collect information and knowledge about these regions and their inhabitants, often with a view to exploiting resources or people. This knowledge was then used to justify colonialism and to support the notion that Western cultures and people were superior to those in other

parts of the world (Said, 1978). This created a system of knowledge production in which Western cultures were the dominant force, and the knowledge produced by other cultures was deemed less important or valuable.

Racism, on the other hand, is seen to be a system of beliefs and practices that is used to discriminate against and marginalise people based on their race or ethnicity. In the United States, for example, racism was used to justify segregation and discrimination against African Americans, Native Americans and other minority groups. This has had a significant impact on the knowledge-making process, as researchers from marginalised communities have been excluded from participating in research, and their knowledge has often been ignored or dismissed. Racism in education has been studied extensively. Even in the 21st century, American teachers in New York still express the idea that it is impossible to work with “black boys” (*sic*) due to their hyperactivity and lack of control, while disregarding the misbehaviour of white boys (*sic*). (Landsman, 2004).

The influence of racism and colonialism on the creation of knowledge has created a hegemony – the superiority of Western cultures – that has historically disregarded the viewpoints and insights of other communities and cultures, leading to an inequitable knowledge production system that upholds prevailing power structures. The use of reflexivity is crucial in acknowledging and addressing the inherent “biases” that existed in the 20th century. As reflexivity is employed as a theoretical tool in this study, those biases cannot be ignored.

The concept of “classes” arose from two prevailing notions of imperial knowledge: the belief in the inferiority of certain bodies and the association of inferior bodies with lower intelligence. Prolific decolonial scholar Walter D. Mignolo (2009) wrote that knowledge production in the second half of the 20th century “had been located by and through the making and transformation of the colonial matrix of power” (p. 3) – a system of classification that divided the world linguistically and literally into first, second and third world during the Cold War. Mignolo’s epistemological claims about subaltern knowledge owe much to the work of Michel Foucault, whose genealogy and power-knowledge concept was applied to this research to trace how past ideas

continue to shape present knowledge. The work of Mignolo is introduced because these “roots” and answers are of great importance for this study, and they were mentioned in his major work. According to Mignolo’s (2009) study on modernity/coloniality/decoloniality, Western civilisation was built on entities and denotation, not on relations. Based on his work about epistemic disobedience,

knowledge-making entrenched with imperial/colonial purposes...
was grounded ... in specific languages, institutions and geo-historical
locations. (p. 18)

Therefore, ideas about *how* education should work now (and should have worked 50 years ago) seem to have been also shaped through a Western “developed” lens. For this study it means that the origins of education policies, reforms and grading systems should be examined or at least mentioned. For instance, education policy has been heavily influenced by extra-national forces. This has given rise to many dominant trends in education policy today: the OECD’s Programme for International Student Assessment (PISA), the dominance of the World Bank in the “developing” world and even attempts to borrow from “high performing” countries to improve education policy and practice, to transfer it into different education contexts (Silova et al., 2020). This implies that schools and teachers aim to educate their students based on these norms. This study draws on the works of such researchers as Walter Mignolo because he identified emerging research directions that are influencing the global future of knowledge production, such as a shift towards de-westernisation, decoloniality and consideration of ontological alternatives.

A crucial contributor who studied the production of social inequality and its links with education was Pierre Bourdieu (Bourdieu, 1984; Bourdieu & Passeron, 1990). He compared financial assets, cultural assets and cultural knowledge and claimed that educational credentials are a form of cultural capital that play a similar role to economic resources such as money and tangible resources. The way cultural capital in a society is distributed is as unequal as the way economic capital is distributed. Therefore, pupils with higher levels of education and with “accepted” education are more likely to succeed. Therefore, research conducted in the field of Education

should be aimed at making educational success possible for mass schools, rather than just the privileged strata.

Hence, when discussing inequality and teacher expectations, scholars of the previous century likely employed terminologies that reflected the presence of a societal class system, whether consciously or unconsciously. It is possible that researchers examining teacher expectations were attempting to comprehend the inequalities and prejudices within classrooms, although with limited attention to the underlying origins and mechanisms of these issues.

3.3 Knowledge and Power

The role of the state should not be underestimated in the study of teacher expectations, since the influence of states on schools and teachers in many parts of the world became highly significant, especially in the 20th century. It even caused a series of reforms that changed what schooling looked like:

Schooling in itself had been a disciplinary response to the need to manage growing populations; within the progressively discriminating space of the schoolroom the productive regulation of large numbers of pupils also required new methodologies. (Deacon, 2006, p. 181)

As the discussion on the inseparability of the concepts of state and knowledge continues, it is worth noting that power and knowledge are often viewed as distinct concepts: one being political and the other epistemological (or pedagogical). It is of additional interest for this work to discuss philosophical ideas and theoretical frameworks that could illustrate the connection between schools and governments 50 years ago, and then to help compare it with what we know about teacher–state interaction now. A sharp decline in public trust in government, business, the public media and non-government organisations (NGOs) has occurred, which has been linked to “a rising sense of injustice and helplessness, a lack of hope and confidence in the present system, and a desire for radical change” (Hosking, 2019, p. 77).

Additional ideas about governmental influence on schools can be taken from the studies of French philosopher Michel Foucault, who attracted wide attention as one of the most controversial thinkers of his day. His books *The Order of Things* in 1966, *Discipline and Punish: The Birth of the Prison* in 1975 and *The History of Sexuality* in 1978 were a direct indication that this connection between knowledge and power was quite direct. This study has employed Foucault's theorisation on the inextricable link between power and knowledge, since it implies and proves that "government" refers to any activity meant to shape, guide or affect the conduct of people.

It is important to understand that Foucault did not refer to traditional ideas of top-down power relationships between participants, saying that people are involved only in hierarchical systems similar to those between a king and those retained in service. He argued that a teacher may have power over their students, determine their levels of achievement, influence their academic careers and promote or hinder their future success (Dreyfus & Rabinow, 2014). Considering the mutual relationships that exist between teachers and students, some researchers assumed that students may also have the ability to impact their teachers' teaching methods, as well as provide feedback through surveys and questionnaires. However, student voices are often left unheard. In the concluding chapters, the significance of student participation in research on teacher expectations, and the necessity to hear their voices, will be addressed.

3.4 Academic Achievement Through a Positivist Lens

In the preceding section, we delved into two pivotal features of the 20th century that are relevant to this study: class systems (*sic*) and the notion of an inseparable link between knowledge and power. The following section will shift focus towards the dominant paradigm in social research during that era, as well as key understandings in the field such as academic achievement.

Starting from the mid-20th century, American educational thought and practice was characterised by a culture of positivism (Giroux, 1984). Building on the previous

discussion, it appears that acknowledging the range of processes that occur in the classroom was challenging. As variables cannot be readily isolated and controlled, one possible explanation for the rise in research in teacher expectations is that it met positivist research requirements. This section aims to examine what happens when a professional with a positivist mindset gets down to classroom business trying to investigate teacher–student relationships.

Since this paradigm implies the existence of some truth, it also implies that it just needs to be discovered. The only obstacle in the way of a positivist is to find the right model, process data, run regression analysis and interpret the results according to their understanding of the world. The argument being developed here is that disciplines themselves may shape and limit the knowledge production. According to Smith (1987),

...a wholly positivist approach in social research is inadequate on epistemological grounds, and ... the procedures characteristic of this approach, particularly the experimental method, are unlikely to prove generally feasible or useful. (p. 1)

Hence, the infiltration of positivism in the field of Education has manifested in the reliance on tests as a means of measuring knowledge and utilising the results of those tests for assessment purposes. By examining the historical context of educational assessment, it is evident that standardised academic tests were commonly employed as the primary tools to measure student performance. Although there were scholars and teachers who argued that the results of IQ tests were enough to draw conclusions about students' success in the classroom and to introduce interventions, there were those who purported that test results were insufficient. Moreover, the idea that “not every skill needed in adulthood is well captured by performance on achievement tests” (Jackson, 2018, p. 1) gained widespread acceptance.

Viewing the role of teachers and academic achievement through a positivist lens may appear one-sided, particularly when relying on metrics such as IQ test results (as seen in the Pygmalion study) as the sole indicator of academic success, as was

prevalent in 20th-century research. This approach may not adequately account for student differences when examining academic performance solely through such test results.

Even if it was done to contribute to racial research and to show that there was no difference between students of different race, the use of IQ scores was extremely limiting in terms of providing researchers and schools (or principals) with any qualitative conclusions. Especially considering that

...pedagogy demands and constructs complex social relationships. Through exchange, pedagogy becomes productive, constituting the forms of knowing, the conditions for knowing, and the subjectivities of knowers. Pedagogy points to the agency that joins teaching and learning. (Britzman, 2012, p. 54)

In 2023, 50 years after the Pygmalion research, teaching is generally considered as a process that is not just about taking tests and showing "excellent" academic performance at the end of the academic year. This raises the question of whether scholars should continue investigating achievement tests and grades in their further research or if it is time to look towards new approaches in education, such as also employing qualitative research.

3.5 Conclusion

The changing landscape of education today, influenced by many factors such as globalisation, the internet and evolving attitudes towards education, underscores the need for new approaches that can bring real change in schools. There is a possibility that what we know about the world has been shaped by those who benefit from it, because power and knowledge are inextricably linked, according to philosophers of the 20th century. Foucault, whose ideas have been used for extensive analysis of the body of literature in this study, emphasised that discipline itself can be powerful enough to shape and narrow the research around the most *convenient* topics. Thus, there is never mere power or mere knowledge; there is only power/knowledge.

It is worth analysing whether the field of psychology, which is predominantly positivist in nature, has dictated the research methodologies employed in the field of Education during the 20th century. Social psychology has been closely interwoven in all social processes, including the field of Education. The application of positivist tools to assess changes in the classroom, and the reliance on test results to present the truth about teacher–student relations, has greatly influenced the transformation of research on education and teacher expectations.

It was assumed that experiments, statistical data and psychology alone cannot fully represent the complex and multifaceted process of teacher–student interaction. And after analysing the context and knowledge-making process, it was also assumed that the collaborative efforts of teachers and scholars, and the development of new frameworks for multicultural and multidisciplinary research that is open to novel ideas, might yield transformative theories and practices. This study will attempt to address this concern in Chapters 5, 6 and 7.

Chapter 4: Methodology – Systematic Literature Review with Theoretical Underpinning

4.1 Introduction

With a substantial increase in the number of studies published on any topic of research, systematic reviews have become popular in disciplines such as health care. Additionally, systematic literature reviews are now also widely accepted in social research as a rigorous and reliable method of evidence synthesis. This chapter will focus on methodology and provide the theoretical framing for the current study. Moreover, this chapter will explore the novel perspectives that can be gained in social research by utilising the theory as a theoretical justification.

A systematic literature review is a research method that involves systematically identifying, appraising and synthesising the existing literature on a particular topic or research question. It follows a predefined and transparent protocol to ensure that the review process is replicable. This approach involves an unbiased assessment and utilises layers of criteria for evaluating the literature.

Having served as an English teacher in diverse settings – ranging from a low socio-economic school with elementary English learners in grade 11 to instructing IT specialists with advanced English and adults at higher proficiency levels – I have come to realise that within educational contexts analytical approaches, numerical data, generalisation and systems should be in alignment with people's diverse characters, needs and capabilities. Recognising education as an intricate system of relationships that interconnects teachers, students, administrative staff, top management and contributes knowledge production to meet societal, governmental and business needs, it becomes crucial not to overly fixate on analytical aspects and instead possess the ability to see beyond the numbers and correlations.

In my research I used a systematic review design, paired with theory (Foucault's genealogy and disciplinary reflexivity), in order to answer the research questions that sought to re-evaluate the ways the topic of teacher expectations has been studied

previously, and to identify the factors that have influenced the sedimentation of knowledge in this area. This “bending” of the research method enabled me to look back onto a significant area of study in education, to examine the patterns of power and to uncover some of the mechanisms that drove this field of study. The examination of theory and reflexive thinking supports the overall methodological approach of this study, which deviates from the standard approach but aims to provide a high-quality explanation of the findings.

4.2 Conventional Systematic Reviews

As the body of literature on a particular topic grows, the task of comprehensively reviewing and synthesising all the available evidence on the topic may become increasingly challenging. This section aims to elucidate the principal characteristics and advantages of employing the research design chosen for this study, as well as highlighting the differences between systematic literature reviews, traditional narrative reviews and meta-analyses.

To initiate this discussion, traditional narrative reviews and meta-analyses will be examined. Traditional *narrative literature reviews* are generally conducted in a way that is familiar for researchers. They analyse relevant studies that may aid in identifying gaps in knowledge and conclusions regarding the body of literature. The process of conducting a narrative review typically involves a researcher undertaking the following steps:

- Explore several databases using relevant keywords and filter studies based on their title and keywords.
- Select the sections of the studies that appear relevant and significant.
- Select relevant research papers (journal articles) for further analysis.
- Extract relevant information from the articles in the form of notes, based on the researcher's judgement.

This means that if another researcher was ready to conduct similar research with a similar literature body, their results might be potentially different, because the search

itself and the results, as well as the process of including and discarding articles, would be extremely subjective, as people have different judgements and opinions.

Meta-analyses are generally a synthesis of quantitative studies. A meta-analysis is a statistical technique used to combine the results of multiple studies on a specific topic to generate a summary estimate of the effect size. In a meta-analysis, individual studies are pooled and analysed using statistical methods to generate an overall estimate of the treatment effect. A *systematic literature review* is also a methodology used to identify, select, evaluate and synthesise all relevant studies on a particular topic. The aim of this research design is to provide a comprehensive and unbiased summary of the existing evidence.

The main difference between systematic review and meta-analysis is that a systematic review aims to synthesise all relevant studies on a particular topic, whereas a meta-analysis focuses on analysing the results of individual studies to generate an overall estimate of the treatment effect. On the other hand, traditional narrative reviews may lack some critical details or be influenced by subjective perspectives.

The most important difference between reviews that are systematic and those that are not, is that personal judgement is not valid in the latter. According to Linde and Willich (2003), systematic reviews are considered to be the most reliable tool for summarising existing evidence. What is vital is creating a system or a design that will make decisions. Establishing the guidelines for such a system is the researcher's main obligation, which makes the research reproducible in the future. Systematic reviews are a methodology that can help researchers to summarise and synthesise the available evidence in a rigorous and transparent way, providing an objective basis for decision making.

While the systematic review methodology can be self-justifying, with strong theoretical justification, it can also provide non-judgemental objective conclusions. This approach offers a valuable means of re-evaluating the existing literature to identify key themes and areas for further investigation. Undertaking a rigorous systematic review requires establishing clear criteria and conducting an extensive

search of all available databases and sometimes “grey literature” to show a broad picture and new perspective on what has already been known (Dewey & Drahota, 2016). The involvement of a review protocol, explicit inclusion–exclusion criteria, comprehensive searches for all relevant studies, explicit criteria for evaluating methodological quality of individual studies and objectivity are taken into consideration throughout the review process.

4.3 PRISMA 2020 Protocol

Systematic literature reviews, which are commonly conducted in the health field to discover existing knowledge, have not been widely used in social sciences and educational research. Nevertheless, the potential for their use in these fields is evident (Zawacki-Richter et al., 2020). To meet the requirements for conducting a systematic review, the PRISMA 2020 protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) on how to carry out such reviews has been examined and adjusted for this study. This protocol serves as an essential tool for researchers who conduct systematic reviews and meta-analyses.

While PRISMA was primarily designed for biomedical research, its principles and guidelines can also be adapted for social research. Systematic literature reviews are commonly used in social research, and a systematic review was employed in the current study to synthesise evidence from multiple other studies. The use of PRISMA guidelines can help to improve the quality and transparency of reporting. By providing clear and concise reporting standards, the PRISMA 2020 protocol enables researchers to enhance the transparency, reproducibility and quality of their research.

The PRISMA protocol – specific methods for conducting systematic literature reviews – was established in the field of public health but has been adapted in this study for the field of Education. It includes:

- eligibility criteria (“search” criteria, “appraisal” criteria and “interrogation” criteria in the research);

- search strategy (search queries and databases);
- data extraction, collection and coding (EndNote); and
- systematisation of data, synthesis and new interpretation of this data or knowledge, with the help of theory.

This detailed checklist provided by the PRISMA 2020 protocol offers a comprehensive framework for reporting essential information in systematic literature reviews or meta-analyses. When adapting PRISMA for social research, researchers may need to consider the specific characteristics of their field, such as the types of studies being reviewed, the methods used and the reporting norms of the discipline. For example, social research may involve different types of data, such as qualitative or mixed-methods studies, which may require additional considerations beyond those outlined in PRISMA.

However, it is important to note that while PRISMA provides a valuable framework for reporting systematic reviews and meta-analyses, it does not dictate the specific conduct of the review process itself. It is still possible to adhere to established principles of social research, follow ethical guidelines and consider the unique aspects of the field when conducting systematic reviews in social research.

4.4 Bending the Systematic Review for Disciplinary Critique

Teacher expectations play a crucial role in student progress, which highlights the need for a comprehensive summary based on decades of research in this area. This study distinguishes itself by seeking to provide a rationale for the chosen methodology through the incorporation of concepts from philosophers of the 20th century. It shows how the gap between the formal systematic literature review process and contemporary theoretically informed investigation has been bridged. In this section, I conceptualise how I “bent” the conventional systematic literature review protocol, using theoretical ideas of genealogy and disciplinary reflexivity, that allowed me to form a new understanding of what has influenced the research into teacher expectations. It helped to facilitate the analysis of the selected studies,

authors' backgrounds, research disciplines and methodological limitations of their studies.

Teacher expectations are difficult to measure. Interpretation of data related to them is multifaceted, but employing Michel Foucault's approach to historical background called *genealogy* may prove helpful. Foucault's work on genealogy – and recent ideas of disciplinary reflexivity that are close to it (Whitaker & Atkinson, 2021) – are introduced as a critical tool and framework.

In order to gain a comprehensive understanding of what we know about teacher expectations today, it is crucial to examine the past, as well as research across different disciplines and prevailing paradigms. Therefore, this study employs Foucault's ideas, tools and methods to investigate the role of discipline and context. The approach taken in this study treats the historical journey as a discourse, with the aim of re-examining historical facts and knowledge from a new perspective.

4.4.1 Foucault's Genealogy as Critique

Michel Foucault was a philosopher, historian of ideas, writer and political activist who devoted years to working on various theorisations, each of which was designed to consider different aspects of an inquiry. This section focuses on elucidating the concept of genealogy, outlining the epistemic commitments it involves and exploring its role as a critical tool. Foucault's concept of genealogy, which refers to the historical transformation of knowledge over time, was essential to include in this study. The idea was first introduced by Foucault in his work *Discipline and Punish: The Birth of the Prison* in 1977, and Bevir (2008) defines it as a "historical narrative that explains the origins of an aspect of human life" (p. 263).

Asking questions and interrogating "truth" that was established decades ago is a fundamental principle of fair research about social phenomena and objects. Foucault also introduced the term *denaturalisation* to clarify epistemological commitment through a step-by-step revision of the concepts, knowledge and theories in the field. It is important for a researcher to "continually question, exposing the particularity of perspectives that appear to be universal or timeless truths, and this questioning

extends to their own perspective” (Bevir, 2008, p. 11). This “opens novel spaces for personal and social transformation precisely because it loosens the hold on us of entrenched ideas and institutions; it frees us to imagine other possibilities” (p. 14).

Any time we measure, we intervene. Therefore, if a researcher unquestioningly trusts the rationale created by a couple of progenitors with particular identities, personal engagements with the research and other subjective features, they might find themselves being influenced by this particular thought-style (Fleck, 1937/1979) or a scientific paradigm (Kuhn, 1996). The paradigm may be just the repetition of key ideas, accepted methods and role models, which may be especially pertinent in a consideration of the social disciplines. Researchers Cohn, Foucault and Koselleck were concerned about “footprints” left in the past and how this influences the present, underpinning and informing what is emerging from it in the present.

4.4.2 *Disciplinary Reflexivity as Critique*

Reflexivity was first defined as

a discussion about the ethical and normative commitments of anthropological knowledge and its accountabilities as such, in relation to specific publics, institutions and global projects as ethnographers move recursively in their circuits of inquiry. (Marcus, 2015, p. 92)

It “appreciates the perspective of the researcher and her relationship to the field as a decisive source of data and interpretation” (Kuehner et al. 2016, p. 700). It delves into the concept of *collective reflection*, which underscores the significance of “objectifying” social sciences and engaging researchers from numerous related fields in the practice of reflexivity. The importance of this concept in relation to the current study lies in the employment of reflexivity to underpin the research design, demonstrating that a systematic approach to studying the subject while taking into account the impact of disciplinary reflexivity can reveal surprising patterns.

According to Whitaker and Atkinson (2021), and their work about disciplinary reflexivity, the objects of research are often framed by the kinds of questions

researchers can ask, the kind of measurements they can make and the kinds of descriptions that are available to them. To continue this explanation, some terms important for this study must be introduced.

Reflexivity is fundamental to an embodied process of discovery. Reflexivity is closely linked to positionality. In order to understand and process the information we have, we need to be aware of who we are, where we have come from, and how that is influencing our understanding ... By foregrounding both positionality and reflexive processes, we are able to be authentic to ourselves and our experiences. (Leigh, 2021, p. 74)

As a non-Western researcher who studied in Australia, I am positioned in both critical and curious ways to Western knowledge. I have observed the dominance of Western perspectives in academic discourse in the field of teacher expectations, and this was my motivation to question and challenge existing knowledge. When I first began investigating the topic of this thesis, I noticed that earlier research and approaches to conducting research on teacher expectations tended to prioritise certain paradigms. While I appreciate the value of these perspectives for the field, I recognised that they would have been limiting in certain settings. My motivation to question these perspectives comes from a desire to develop more nuanced and comprehensive understandings of how teacher–student interactions should be studied.

Reflexivity encourages scholars to speculate on the consequences that their assumptions may bring, and to reflect on the possibility that trustworthy knowledge published in well-thought-of journals may be biased. It can become a methodological choice, providing explanations on how research has been conducted and conceptualised. It shows how personal and subjective justifications can be deduced and then employed for social research. It can include critical, self-conscious “reflection” about the whole field or the contribution of an individual representative (Whitaker & Atkinson, 2021).

Moreover, reflexivity highlights the imperfect nature of the social world and social research, including the complex relations which must be negotiated and the

implications that must be attended to during research – from design through to data collection and analysis. Today, it is increasingly expected that scholars should consider knowledge across fields and the implications of passing time on understandings and truth. A significant benefit of employing reflexivity is that the historical portrait serves to inform the research antecedents. The following commentary by Bourdieu and Wacquant (1992) summarises this succinctly:

His [Foucault's] analysis of intellectuals and of the objectifying gaze of sociology, in particular, like his dissection of language as an instrument and arena of social power, imply very directly, and in turn rest upon, a self-analysis of the sociologist as cultural producer and a reflection on the socio-historical conditions of possibility of a science of society. (p. 36)

The concept of collective disciplinary reflexivity may also prove to be helpful in drawing attention to the conditions of knowledge and work that inform the production of ideas about how teacher expectations appear and what level of influence they might have. Epistemic reflexivity invites the research community to share assumptions, question methods that are used in the field and become conscious of the scientific synthesis. As a result, research objects, effective interventions and methods to observe such phenomena in schools can be constructed.

Although tracing approaches used in studies on disciplinary reflexivity in the field of Education is beyond the scope of this study, it is important to note how reflexivity in teaching, and teacher knowledge, has been shaped and continues to shape educational practice over time. Research about reflexivity has demonstrated the importance of tracing the history of organisations and interactions between the people in them. It helps researchers to generate complex and potentially transformational interventions and to reveal findings in regard to education organisations, by exploring diverse opinions (Kuehner et al. 2016; Whitaker & Atkinson 2021).

When systematic research is undertaken in the field of Education, a number of key factors need to be considered in regard to every article that is included; namely,

research design, data, participants and rationale. Scholars should be free to question all aspects of earlier research respectfully and rigorously. All these things – conceptualisation, methodology, worldview and language – are imbued with power, and thus are vital for considerations about socially just research that examines schooling. This chapter considers some of the ways in which disciplines frame expectations. This helps to explain how research design can lead to consideration of particularly one-sided knowledge.

Recent social research has put forward the idea that teacher expectations are a complex and paradoxical phenomenon that is challenging to assess or measure. Moreover, the impact of educators' beliefs on their students' academic achievements and learning outcomes could be extensive and difficult to interpret. Any findings on this complex, multifaceted subject serve to highlight the significance of reflexivity. In order to create new opportunities for social transformation regarding this topic, consideration may be given to critical and systematic questioning of the current findings. Through this approach, researchers have the opportunity to delve into fresh viewpoints and question long-standing beliefs, which has the potential to weaken the influence of deeply ingrained ideas upon us (Whitaker & Atkinson, 2021).

In summary, the significance of the discussion in this chapter is that it frames key thinking underpinning the design of this research. When we arc back, systematically analysing who might have benefited, whose ideas may have been excluded and whose voices may have been silenced, we facilitate an alternative worldview and course of events (Cunliffe, 2020). Therefore, it could be argued that journal articles with theoretical substantiation and methodological justification retain credibility under the scrutiny of analysis.

4.4.3 The Inclusion of Qualitative Research

As systematic reviews are predominantly used in the field of health (with a focus on experiments and quantitative design), some adjustments were required for this study. While the health field prides itself on being critical and objective, it has a tendency to favour quantitative research, although with some recent inclusion of

qualitative research. However, qualitative research is more prevalent in the field of Education.

According to the chosen research design, studies utilising either method (quantitative or qualitative) were considered. Each method serves its own objectives and can be highly appropriate for different research questions and rationales. However, looking ahead, in social sciences and, in particular, in the field of Education, it seems reasonable to pay more attention to qualitative research, as

...qualitative researchers are required to be reflexive (Alvesson and Sköldbberg, 2000; Pillow, 2003) by acknowledging their worldviews, epistemologically and ontologically, and to be clear that their work is partial, situated and usually relates to a small sample. (White, 2015, p. 44)

The findings and results of employing this methodology will be demonstrated in the findings in Chapters 5, 6 and 7. The shifts in research design (that occurred in many fields), from an unwillingness to conduct qualitative research to the reasonable question as to how it might be properly performed (Carroll & Booth, 2015), will be also discussed there.

4.5 Employment of Protocol and Theory in the Study

To conduct a full-scale review of scholarly literature, to produce a “better” answer to the review questions and to successfully attempt to integrate the information from the individual studies, researchers resort to the help of a systematic review (Zawacki-Richter et al., 2020). According to conventional PRISMA guidelines, explicit justification of inclusion and exclusion criteria for the selection process is required. As a result, three layers of criteria were developed for this study and are detailed below.

This study employed a sequential method to review the literature identified through the inclusion criteria. The selection process included the following steps:

1. In the *preliminary phase*, 30 to 50 relevant publications and reviews were identified to clarify the research direction and the knowledge gap.
2. The *selection for inclusion* of publications was made after the eligibility criteria were applied and abstracts and discussion sections were screened.
3. Publications were critically appraised using the *interrogation criteria*.
4. During the *synthesis* phase, tables and summaries were prepared to assist with identification of new knowledge.

The three layers of criteria that were used in this study were:

1. Search criteria
2. Appraisal criteria
3. Interrogation criteria

The first layer – *search criteria* – comprised both the search terms and requirements, such as:

- Articles were published in English in peer-reviewed journals.
- Articles were published between 1968 and 2022.
- The titles and/or abstracts contained key phrase(s): “teacher(s) expectation(s)” or synonyms according to the search query.

Search source types for systematic reviews included:

- EBSCOhost metasearch (which included the following databases: Academic Search Elite, APA PsycArticles, APA PsycInfo, eBook Collection (EBSCOhost), Education Research Complete, ERIC, EBSCO Open Dissertations, Teacher Reference Center); and
- reference lists of the selected articles.

4.5.1 Search Criteria – Layer 1

It is important to note that the search methods and queries are vital for systematic literature reviews, since the number of studies and advanced search settings might impact upon search results and outcomes of the whole study. The query that was

used to search as many relevant studies as possible, adapted from De Boer et al.'s (2018) study, is shown below:

TI (“teacher expect*” OR “teacher* judg*” OR “teacher* percept*” OR “teacher* aspir*” OR “teacher* belief*” OR “teacher* feedback*”) AND TI (chang* OR interven* OR alter* OR reduc* OR decreas* OR 38vercome* OR treatment* OR experiment* OR instruct* OR training* OR rais* OR prevent* OR 38vercome*)*

The first layer served the purpose of identifying all articles that could be relevant to the review from the selected body of literature after entering the search query. A total of 860 studies were generated in the search result page upon running the query (see Figure 4.1).

Figure 4.1

Search Phase Results



4.5.2 Appraisal Criteria – Layer 2

The second layer – *appraisal criteria* – was used to decide what was retained and what was discarded in the review (see Figure 4.2). This layer of research involves maintaining records (in the form of tables) based on how each article measures up to the appraisal criteria. The purpose of this second layer is to discard most of the irrelevant studies and retain only the most relevant ones. This requires a new set of requirements that result in the inclusion of only a small number of articles.

These criteria in this study were:

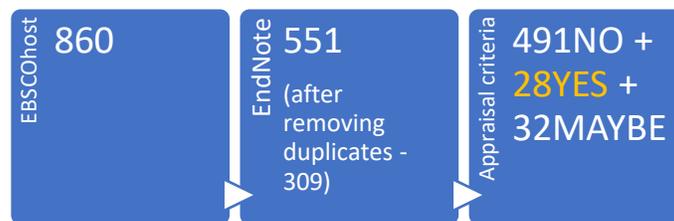
- relevance of the abstract (key words “teacher expectations”, “significance” and synonyms, plus total value of the study);

- research discipline of the authors (e.g., education, psychology, sociology);
- teacher expectations and their significance is the main topic of the article;
- explicit research design and method; and
- high level of credibility.

Articles were placed into the following categories: “YES” (if they were relevant), “NO” (if they were not relevant) and “MAYBE” (if there were some doubts about inclusion after a quick look at their abstract). A one-page example of the table that was compiled – with selected articles and detailed features/coding for this level – is presented in Appendix A.

Figure 4.2

Appraisal Criteria Results



4.5.3 Interrogation Criteria – Layer 3

All articles retained after appraisal then went through the *interrogation criteria*, where all YES and MAYBE articles were reanalysed for compliance with the criteria (see Figure 4.3). This final layer was needed to discard irrelevant articles identified in the initial search and to add those from reference lists, if they were:

1. relevant to the topic and research question;
2. quoted by many researchers in their reference lists (this means a high level of credibility); and
3. not entered in EBSCOhost or included in the list at the first stage but were valuable for the research.

The purpose of this layer was to address the research question, and to identify useful articles about the topic of teacher expectations with theoretical justifications – about the teaching and learning process or those that lacked it. If a study, related to the research question “What does the international scholarly literature report about the significance of teacher expectations?”, contributed to the analysis by helping to trace sedimentation or develop new knowledge, it was included.

Figure 4.3

Interrogation Criteria Results



4.6 Search Results and Analysis

In this study, the protocol developed in the health field for the conduct of systematic literature reviews has been adapted for the field of Education. As discussed earlier, 860 articles were extracted from the metasearch system EBSCOhost. The articles were downloaded through email zip archive after elimination of duplicates based on the stated criteria, which are listed again below:

- Articles were published in English in peer-reviewed journals.
- Articles were published between 1968 and 2022
- The titles and/or abstracts contained key phrase(s): “teacher(s) expectation(s)” or synonyms according to the search query.

After finding and deleting duplicates, and searching for other articles in the reference lists of relevant articles, 551 studies remained. 491 of these articles were neither relevant to the topic of knowledge formation in the teacher expectancy research, nor related to the research question, therefore they were discarded. 32 articles were hard to analyse by judging their titles or abstracts, so further reading was needed.

As anticipated, most of the articles were not relevant, as they described relatively unrelated peripheral issues and investigated rather specific narrow topics, including:

- teachers' perceptions of their own instruction (Al-Fadley et al., 2018; Attwood et al., 2020; Azam et al., 2020; Fakomogbon et al., 2014; Kaiser et al., 2009; Lau, 2013; Ng'eno & Chesimet, 2015; Ogiegbaen, 2006; Park & Ham, 2016; Read, 1999; Sornson, 2015);
- student disabilities (Collins & Gerber, 2001; Epstein et al., 1991; Janney et al., 1995; Leko et al., 2015; Roach et al., 2007; Singh et al., 1994; Taylor et al., 2010; Vaughn, 1999);
- study-specific research – such as English as a Second Language (ESL) (Akbanu & Yavuz, 2021; Burnett, 1998; Çapan, 2014; Yükselir, 2016), mathematics (Bahr et al., 2013; Barkatsas & Malone, 2005; Collins & Gerber, 2001; Dede & Karakuş, 2014; Good et al., 1990; Isiksal-Bostan et al., 2015; Marbach-Ad & McGinnis, 2009; McGee et al., 2013; Miller, 2013; Purnomo et al., 2016; Smith et al., 2005; Stipek et al., 2001; Timmerman, 2004; Wilkins & Brand, 2004), art (Hammel & Gerrity, 2012; Legette & McCord, 2014) or physical education (PE) (Aelterman et al., 2014; Bennie et al., 2017; “Instructional Effects of Teacher Feedback in Physical Education,” 1993; Lee et al., 1993; Martinek & Karper, 1986; Pill, 2008; Sarrazin et al., 2005; Slingerland et al., 2021; Yanik, 2020);
- Kindergarten teachers (Furtado, 2010; Hustedt et al., 2018; Lowrance-Faulhaber & Williams, 2019; Shaughnessy & Sanger, 2005; Umansky & Dumont, 2021; Vaughn, 1999);
- research about principals (Can, 2004; Devine & Alger, 2011; Grobler et al., 2017; Gurley et al., 2015);
- etc.

32 articles that were initially moved to the MAYBE section due to difficulties in selecting or discarding them were subsequently reanalysed. The selection process was repeated, and the MAYBE articles were evaluated based on the relevance of their abstracts and result/discussion sections. As a result, six articles were deemed relevant and added to the final selection. For example:

- one that was a systematic literature review analysing 10 years of research (Dusek, 1975);
- the qualitative study of Keys (2007) that describes a theoretical knowledge filter model and explains how teacher knowledge (beliefs and practices) shapes the implementation of a science curriculum; and
- the review by Jussim and Harber (2005) about unresolved controversies on teacher expectations and self-fulfilling prophecies.

26 articles were discarded – for example, the articles about:

- the Cooperating Teacher’s Pupil Control Ideology by Roberts and Blankenship (1970);
- teachers’ beliefs on reading and instructional practice (Davis & Wilson, 1999);
- Short et al.’s (1989) “Teacher Beliefs, Perceptions of Behavior Problems, and Intervention Preferences” (this article was not found on the web);
- Weinstein et al.’s (2002) “Expectations and High School Change: Teacher-Researcher Collaboration to Prevent School Failure” (it turned out to be not an article, but a book); and
- Sosu’s (2012) and Hugh’s (1982) studies.

These publications were not selected as they did not meet the general criteria (topic was not relevant, even though the title or abstract included target words). A book written by Weinstein (2009), “Reaching Higher: The Power of Expectations in Schooling”, had to be excluded, but some ideas from this book regarding the importance of student voice have been used in the final chapters of this thesis to discuss the findings.

Two additional articles were later added from the reference lists of other articles, since they were constantly quoted:

- Brophy & Good’s (1970) “Teachers’ Communications of Differential Expectations for Children’s Classroom Performance”; and
- Brattesani et al.’s (1984) “Student Perceptions of Differential Teacher Treatment as Moderators of Teacher Expectation Effects”.

Thus, as a result of the performed manipulations, 36 articles were sorted into the YES folder and were subjected to further analyses (see Figure 4.4). The table with the selected articles is presented in the appendices (Appendix B).

Figure 4.4

Selected Articles



As analysis of the studies progressed, several articles that met the criteria in the various layers were scrutinised for assumptions and assertions that conflicted with the principle of interdisciplinarity. When the final set of articles was examined through the lens of reflexivity, the ideas that are explored in the final chapters began to emerge, since

epistemic reflexivity is committed to the analysis of the evolution of the object of research both within the social field where it is encountered by the researcher, and, within the academic field where it is conceptualised. Here, there are resemblances to the kinds of (in)famous ‘history of the present’ work undertaken by Foucault (Garland, 2014). Other more esoteric examples help us to think through these ideas of collective reflexivity Bourdieu was trying to establish. (Whitaker & Atkinson, 2021, p. 24)

The utilisation of Foucault's concept of genealogy aided in the selection and critical analysis of the articles, revealing how the understanding of teachers' work and the contextual factors in which the studies were conducted have evolved over the past 50 years. This analysis provided a framework for synthesising and formulating the

research findings, facilitated by the insights gained from the genealogical approach and the reflexive examination of disciplinary assumptions. The findings obtained from this synthesis are presented in the following chapters.

Without the theoretical ideas of Foucault and of reflexivity, which were inspired by them, uncovering new knowledge, establishing connections between selected articles and accurately categorising relevant information within them would have been much more challenging. As the selected studies were analysed and critically evaluated, certain patterns began to emerge that shaped the results sought by this thesis. By combining conventional systematic literature review with theory, it has become possible to identify repeated methodological choices made by researchers over time, to speculate on the reasons behind these choices and to critically appraise the findings of selected studies. This includes examining certain theories based on self-fulfilling prophecies that were used 50 years ago, as well as considering the impact of researchers' personal backgrounds on their studies. This will be further discussed in Chapters 5, 6 and 7.

4.7 Conclusion

Chapter 4 outlines the methodology employed in the study, utilising a systematic literature review with theoretical frameworks such as Foucault's genealogy and disciplinary reflexivity. The chapter underscores the rigorous and transparent nature of systematic reviews, distinguishing them from traditional narrative reviews and meta-analyses. The integration of the PRISMA 2020 protocol for educational research is discussed, emphasising its role in improving the quality and transparency of reporting in the field of Education.

This chapter details the comprehensive process of selecting articles from an initial pool of 560, employing a systematic three-layered approach. After the preliminary phase, where 30 to 50 relevant publications and reviews were identified to clarify the research direction and address knowledge gaps, the search phase started. The selection process involved the application of eligibility criteria, screening abstracts, discussion sections and critical appraisal using interrogation criteria. This meticulous

process ensured the inclusion of articles aligned with the study's objectives, contributing to a robust and systematic review. As the analysis progressed, articles meeting these criteria were scrutinised for assumptions and assertions through the lens of reflexivity. This careful examination, guided by the principles of interdisciplinarity, laid the foundation for the synthesis of findings in subsequent chapters.

The discussion on Foucault's genealogy explores its application in critically analysing the historical evolution of knowledge on teacher expectations. Disciplinary reflexivity is introduced as a means of considering the researcher's positionality and prevailing research paradigms and design in the field. The chapter highlights the importance of reflexivity in shaping a more comprehensive understanding of teacher-student interactions. The synthesis of selected studies is teased as a forthcoming exploration in Chapters 5, 6, and 7, promising insights into methodological choices and the impact of personal backgrounds on research outcomes.

The employment of this rigorous selection process, grounded in a theoretical framework, was considered a research design aimed at bolstering the credibility and reliability of the research outcomes. This approach offers a novel methodological framework for systematically exploring the topic of teacher expectations in the field of Education.

Chapter 5: Prophecies, Magic and the Pygmalion Effect – The Early Sedimentation of Research about Teacher Expectations

5.1 Introduction

The aim of this research was to critically examine the production of knowledge in the area of teacher expectations, taking a systematic approach to identifying and analysing the trends, patterns and possibilities of research on this topic. Foucault's concept of genealogy and disciplinary reflexivity were employed as a theoretical framework to demonstrate how historical "footprints" shape what we know about the present. The key scholarly literature was reviewed to support the analysis, and the significance of social, political and disciplinary context has been discussed, in Chapters 2 and 3 respectively.

Epistemic and disciplinary reflexivity have influenced the layout and coding of research findings, tracing the ways in which one study in the late 1970s ("Pygmalion in the Classroom") sparked a frenzy of knowledge production in the area of teacher expectations. These have helped to shape this current study, and they have underpinned the analysis of the historical discourse about teacher expectations. Foucault's genealogy was employed as a tool to stratify the concept of expectations, prophecy and other related terms, to identify the moment it was applied in the field of Education and to explain why, if possible, it became a base for research in the educational field for decades.

After synthesising the data, three major findings emerged, revealing key discoveries related to the establishment of specific theoretical frameworks in investigating teacher expectations, the impact of disciplinary dominance and the presence of insufficient theoretical rationale. This chapter will primarily focus on presenting one of the significant findings of this thesis, which highlights the early formation of knowledge regarding teacher expectations and sheds light on entrenched terminology associated with it.

5.2 Are Teacher Expectations Self-Fulfilling?

An important starting point in this research was to examine the origins and initial conceptualisations of teacher expectations, and to place them in time, context and discipline. In the previous chapters, the concept of self-fulfilling prophecy was briefly introduced. In this section, this idea will be expanded since self-fulfilling prophecy recurred throughout the dataset. This section also examines the impact of self-fulfilling prophecy on knowledge-making about teacher behaviour and subsequent student performance.

The notion of prophecy came from the research of American sociologists William Isaac Thomas and Dorothy Swaine Thomas and Robert Merton. It was then taken up by many supporters, and a lot of research was subsequently published during the 1970s, 1980s and 1990s, based on Thomas' study alone. Most of these studies were partial replications of the Rosenthal and Jacobson (1968) Pygmalion study, with the addition of observations of teacher–student interactions.

In education, self-fulfilling prophecy pertains to the notion that teacher attitudes and beliefs, particularly those related to student aptitude, can have a profound impact on actual student performance. This implies that when instructors in the classroom maintain optimistic outlooks for their pupils, those pupils often exhibit higher levels of achievement than when instructors maintain pessimistic expectations.

This theoretical framework was later reconsidered and transformed to so-called teacher-bias effects (Dusek, 1975). However, one year later, West and Anderson (1976) defined it again as expectation effects or the self-fulfilling prophecy effects of induced expectations (biases) based on false information supplied to teachers. By expectancy effects, some researchers meant “effects on teacher-student interaction and student achievement that result in the expectations that teachers form naturalistically in the process of observing and interacting with their students” (Brophy, 1983b, p. 10). The development of the theoretical framework surrounding teacher expectations was inevitable. But although novel paradigms and definitions

of the expectancy effect were introduced, the concept of self-fulfilling prophecy emerged repeatedly in subsequent studies.

The presence of studies that challenged the findings and questioned the validity of the data in Rosenthal and Jacobson's experiments, as well as the lack of a strong scientific basis for self-fulfilling prophecy (Elashoff & Snow, 1970; Thorndike, 1968), did not impede the progression of this conceptualisation. Instead, several adherents conducted similar studies and affirmed the Pygmalion effect's authenticity. This controversy surrounding the early conceptualisation of teacher expectations sparked considerable interest among researchers on this subject. The following chapter will present the findings of the analysis.

5.3 The Universality of Prophecies

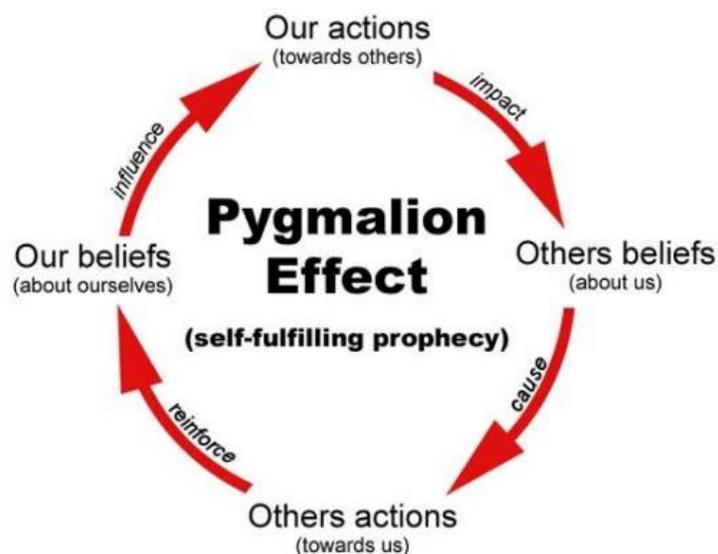
This sub-theme delves into the origins and idea of universality of the concept of self-fulfilling prophecy that influenced different disciplines, including the field of Education. Rosenthal and Jacobson, who introduced this term in their educational study in 1968, were influenced by the work of American sociologists Thomas's and Merton. Thomas developed and influenced the use of empirical methodologies in sociological research and contributed theories to the sociology of migration. For instance, the Thomas theorem (1928) implies that if men define situations as real, they are real in their consequences, it became a fundamental part of sociology as soon as it was invented. Another American sociologist, Merton, also investigated expectations as a phenomenon. His contribution fell into the sociology of science, sociology of crime and sociological theory. He is now called a founding father of modern sociology.

Prior to delving into the concept of self-fulfilling prophecy in education, it is imperative to establish a comprehensive understanding of what this phenomenon includes in other disciplines. Initially, the self-fulfilling prophecy concept as a sociological phenomenon suggests that societies and groups often meet the expectations that are placed upon them by others. It has been observed in various fields including business consulting (Loftus & Training, 1995), management (Eden, 1990), creativity

(Tierney & Farmer, 2004), employee “green” behaviour and leadership (Mo et al., 2021; Whiteley et al., 2012) and even cryptocurrencies (Nadeem, 2017). According to Nadeem, Bitcoin is also riding high on the Pygmalion effect (see Figure 5.1).

Figure 5.1

Pygmalion Effect



Importantly, there have been hundreds of studies across the fields of psychology, sociology and education that have also mentioned and linked teacher expectations with prophecy. Several early articles (among the 36 selected for this study) seem to form the key understandings of teacher expectations – some of which are still used. In this section, data from these articles are drawn to present these conceptualisations and entrenched beliefs regarding self-fulfilling prophecy.

Proponents of the idea of prophecies were of the opinion that it can be employed universally, including in the field of Education. Claiming that “there is nothing in the concept of the self-fulfilling prophecy that makes it go in only one direction”, Rosenthal and Jacobson (1968, p. 3) then gave examples of allegedly using it in various fields:

'Sweeney's miracle' (1969) and the case of race relations (industrial management and psychiatry), the field of international tension and war by Allport (1970), the analysis of the way a man golfs or bowls in relation to what is expected of him (*sic*), the effects on a person's behavior of the expectancies others have of that behavior illustrated by the learning theorist Guthrie (1938), area of reactions to disasters, when Goldstein (1962) notes Drayer's (1956) observation of the importance of the expectations of the rescue workers, psychiatric experience in the United States Army and more regular examples of driving a car and having expectations about behaviors of others. These examples, however, are accompanied by the conclusion that these studies cannot be generalised and provide at best a kind of anecdotal evidence. (Rosenthal & Jacobson, 1968, p. 6)

To apply self-fulfilling prophecy to interpersonal relationship research in schools and justify it, Rosenthal and Jacobson also used the series of experiments on interviewer bias begun by Stanton and Baker in 1942 as an example. What Rosenthal and Jacobson knew about general expectations was largely based upon "an industrial example of the self-fulfilling prophecy" published in the study by Bavelas in 1965 (Rosenthal & Jacobson, 1968, p. 6). This knowledge might have set the tone for how to study teacher expectations and planted seeds of how to conceptualise it. These diverse examples might have been the demonstration of the concept of prophecies in various situations. But how exactly it was perceived, employed and justified by researchers and whether it can be used in education remains to be analysed in this chapter.

5.4 Early Sedimentation of Knowledge Around Expectations

The focus so far in this chapter has been the early conceptualisations of teacher expectations and theories around this research. This section will delve into a series of early studies that substantiated the Pygmalion effect in the idea of predictability of the behaviour of participants in the educational process. Additionally, the studies that explicitly challenged the Pygmalion effect in the classroom at that early time will be mentioned in this section.

One of the earliest studies alluding to the use of “expectations” in psychiatry cited in the Pygmalion study dates back to 1890. It mentions the application of the self-fulfilling prophecy concept in a clinical context in a study by Albert Moll in the late 1890s (he specialised in hypnosis), and in the area of psychotherapy when the “therapist's own belief about the patient’s prognosis might be a determinant of that prognosis” (Rosenthal & Jacobson, 1968, p. 12). This means that therapists are not recommended to jump to conclusions before determining a prognosis/diagnosis.

The well-known study *Pygmalion in the Classroom: Teacher Expectation and Pupils’ Intellectual Development* (Rosenthal & Jacobson, 1968), that marked the beginning of broad discussion around expectations, equated expectations, interpersonal predictions and prophecies, saying that

there is now good reason to believe that another factor increases our accuracy of interpersonal predictions. It is about interpersonal self-fulfilling prophecies: how one person’s expectation for another person’s behaviour can quite unwittingly become a more accurate prediction simply for its having been made. (Rosenthal & Jacobson, 1968, p. vii)

Rosenthal and Jacobson introduced the idea of prophecies in education – a term that originated in sociology and was originally applied to show broader concepts and large-scale social and economic phenomena (such as racial and religious prejudice, the failure of banks) – and redirected it to the interpersonal level of interaction, with a strong focus on the individual. Thus, Rosenthal and Jacobson borrowed the idea from sociologists, and adapted it for interpersonal communication between learners and teachers and then placed expectations, interpersonal prediction and prophecy in one row, saying that

our expectations for another person’s behavior are accurate because we know his past behavior. But there is now good reason to believe that another factor increases our accuracy of interpersonal predictions or prophecies. Our prediction or prophecy may in itself be a factor in determining the behavior of other people. When we are led to expect that we are about to meet a pleasant person, our treatment of him (*sic*) at first meeting may, in fact, make him (*sic*) a more

pleasant person. If we are led to expect that we shall encounter an unpleasant person, we may approach him (*sic*) so defensively that we make him (*sic*) into an unpleasant person. That, in general, is the concern of this book. (Rosenthal & Jacobson, 1968, p. vii)

The single most striking observation from Chapter 2 of the Pygmalion study was to highlight those “prophets who are charged by society to bring about beneficial changes in the people from others” (Rosenthal & Jacobson, 1968, p.11), and to investigate their expectations separately. The authors were referring to professionals such as social workers, educators and doctors, as well as client service support. And they excluded examples of prophecies that occurred outside a societal context or that only happened occasionally. They noted that distinguishing between healing and educational professions was challenging; therefore, some examples from the health field were used to illustrate interactions in education. They suggested that these processes could be conceptualised similarly. Many parallels have been drawn between workers in the field of health – psychiatry in particular – and education:

When a physician predicts a patient’s improvement, we cannot say whether the doctor is giving a sophisticated prognosis or whether the patient’s improvement is based in part on the optimism engendered by the physician’s prophecy. If school children who perform poorly are those expected by their teachers to perform poorly, it might be that the teachers’ prophecy is accurate because it is based on knowledge... (Rosenthal & Jacobson, 1968, p. 25)

Some scholars involved in further research supported the notion that teacher expectations can be self-fulfilling and endorsed Rosenthal and Jacobson's assumptions. One year later, in 1969, Meichenbaum et al., who belonged to the field of psychology, used the definition of expectations suggested by Rosenthal and Jacobson in their research. Fully relying on previous conceptualisation without questioning it, they did not offer any new definitions of teacher expectations in their study, inferring that a person's expectation of another's behaviour may serve as a self-fulfilling prophecy. Meichenbaum et al. (1969) reported comparable findings to those of the Pygmalion study and discussed them in their analysis, ultimately

concluding that the “study provides further support for *teachers’ expectancy effect*, namely that expectancy instructions to teachers of pupils' academic potential significantly modifies the pupils' behavior” (p. 315).

The Pygmalion study and the idea of prophecies received confirmation in the series of studies by Brophy and Good (1970, 1971, 1974). Results were

...as supportive of the hypotheses of Rosenthal and Jacobson concerning teacher expectation effects and as indicative of the behavioural mechanisms involved when teacher expectations function as self-fulfilling prophecies. (Brophy & Good, 1970, p. 11)

However, the Pygmalion study was subjected to considerable criticism. Brophy and Good (1970) warned that

...the lack of data concerning the causal mechanisms at work in the Rosenthal and Jacobson study, combined with the tendency in most secondary sources to oversimplify or exaggerate their findings has cast an aura of magic or mystery around expectation effects. (p. 22)

Although Brophy and Good’s study partly confirmed the findings of the Pygmalion study, the authors concluded that generalisability of the findings on the topic of teacher expectations was not possible. They also argued that the Pygmalion study failed to fully acknowledge the significance of the student side.

Some important ideas that emerged from the study by Brophy and Good (1970) related specifically to *bidirectionality of expectations*. This interpretation differed from that of Rosenthal and Jacobson (1968), who missed the “student part” and suggested that there was always an influence of the teacher on students *and* students on the teacher. The idea of mutual influence considers the relational and interpersonal dynamics that develop within the classroom and their consequent impacts. It emphasised the need to view the influence of both parties, students and teachers, as observable sequences of behaviour. Therefore, Brophy and Good proposed a model that includes both teachers and students in assessing the significance of differential treatment of students by teachers and the responses of

students to such treatment. Although the investigation of teacher–student interactions from this perspective now appears to be crucial, the concept of mutual effects was not well-supported in earlier research conducted during the 70 years of the last century.

5.5 Unsuccessful Attempts to Replicate the Pygmalion Study

In systematic literature review, it is important to consider all perspectives, both supportive and opposing, in order to gain a comprehensive understanding of the topic. It means, in this context, that it is important to not only consider studies that support the original findings and ideas of self-fulfilling prophecies, but also studies that were unsuccessful in reproducing the results. With this in mind, it is worth noting that the first study that failed to replicate the findings of Rosenthal and Jacobson (1968) was published shortly after the original one.

The study was situated within the discourse of the Pygmalion study, and it adhered to a positivist paradigm. Claiborn (1969) undertook an experiment that showed "intellectual blooming" among 20 per cent of students picked randomly without regard to intellectual potential. The major hypotheses of the Pygmalion study were not supported, since according to Claiborn, "there were no clear changes in observed teacher-pupil interaction" (p. 380). The study examined how teachers responded to test results, but did not go beyond the existing paradigm in search for a new conceptualisation. It simply proved that the Pygmalion method may be replicated in certain conditions, but not always. However, despite being published a year after the Pygmalion study, this research did not garner much support and it was not cited in subsequent studies.

In 1971, another weighty research study by Jose in collaboration with Cody interrogated the findings of Rosenthal and Jacobson. Their study was another attempt to comprehensively evaluate both the studies that indicated that the behaviour of a teacher affects student behaviour and, at the same time, those that did not. They demonstrated that "expectancy may be a contributing factor in the changes that are effected", but they also found that there were studies showing "little

or no change in students' behavior after the teacher was given information concerning the students" (Jose & Cody, 1971, p. 40).

Thorndike's study, mentioned by Jose and Cody in their article, also raised doubts about the findings of Rosenthal and Jacobson as based on "untrustworthy" data (Jose & Cody, 1971, p. 39). Jose and Cody's main concern about the Pygmalion study was linked to inconsistency of raw data and inability to replicate the study with other age groups or reach the same outcomes. However, Jose and Cody neither defined the "expectancy effect" themselves nor offered any other theoretical underpinning for this research – "saying that no attempt was made to go beyond the Rosenthal paradigm" (p. 47). Their experiment resulted "in little difference in the performance of the experimental students in any of the areas investigated" (p. 47).

Jose and Cody were the first to propose that the Interaction Analysis Scale, which was being used in the United States at the time to evaluate student performance, may not have been sensitive enough to detect changes in teachers' conduct. The reason might have been that there was a lack of observations or an insufficient time period between observations, making it impossible to detect changes that might have occurred. Furthermore, they warned researchers at the end of their study that any generalisation of the Pygmalion findings should be made with caution. To conclude, although opposing perspectives and studies that could not reproduce the results of the Pygmalion effect surfaced soon after the original study was introduced, subsequent research still referred to the concept of self-fulfilling prophecy.

5.6 50-Year Transformation in the Definition of Teacher Expectations

The preceding section covered the origins and establishment of the importance of investigating the concept of teacher expectations. Theoretical frameworks employed in those early studies were described to show how the knowledge became established. This section will further develop the conceptualisation and introduce new theoretical frameworks that have emerged over time.

To continue the discussion around the Pygmalion methodology and add emphasis to the critique mentioned above, Finn's study should be introduced. Finn prepared a synthesis of published articles in the form of a critical review in 1972. The review begins with the idea that there was "a flurry of activity" caused by "expectancy effect"; Finn then cites other studies that not only proved the findings, but also demonstrated methodological flaws and inadequate results (Elashoff & Snow, 1971; Snow, 1969). This critical review (of literature published since the Pygmalion study) re-examined the Pygmalion effect from the point of view of students, similarly to Brophy and Good's study. It highlighted the amount of research on teacher expectations, focusing on how high the degree of teacher influence on students' learning experiences is and how students' reactions may differ.

While critiquing fundamental research by Brophy and Good (1970), Finn (1972) claims that "the methodology of the study leaves something to be desired" (p. 389). He also offers a slightly different definition of an expectancy, introducing the significance of *anticipation* and deliberately avoiding the language of self-fulfilling prophecy:

An expectancy, or expectation set, is a conscious or unconscious evaluation which one person forms of another, or of himself (*sic*), which leads the evaluator to treat the person evaluated in such a manner as though the assessment were correct [...]

It is the anticipation that shapes the manifestation of expectations. And it is anticipation that distinguishes expectations from hopes and desires, as well as from aspirations. (p. 390)

Finn's study challenged the circumstances in which the understanding of teacher expectations was being generated, including the use of experimental versus natural conditions and the credibility of the "truth" asserted in previous research, by scrutinising the classroom context. The study ends with a reasonable conclusion that there were few studies that succeeded in finding support for the expectation hypothesis. He asserted that teachers do hold differential expectations for the

achievement of student groups, but that it happens not because of prophecy, but in certain settings.

This new conceptualisation, questioning the existing definitions of teacher expectations and even the conditions in which they existed and were studied, transformed the idea of prophecies to an *expectancy effect*. The idea of expectations took on a slightly altered meaning, becoming associated with aspirations that reflect one's personal perception of reality:

When encountering a new class and new school year, a teacher may 'expect' model learning from the pupils but will most probably behave in much the same manner as with the previous year's average group. His (*sic*) actual behavior is tempered by notions of reality – the assumptions that this class is largely the same as last year's, that the facilities and materials are largely the same, and the knowledge that his (*sic*) own excitement is always higher at the beginning of the year, and before the daily classroom life becomes routinized. Thus, behavior resulting from given expectations reflect conscious, or unconscious estimates of the achievement to be made, under the circumstances given. (Finn, 1972, p. 390)

Finn's study brought about a shift in understanding of the idea of biases in teacher behaviour and thus eliminated the magic-and-mystery element of prophecies. While the expectancy effect refers to the impact of a teacher's expectations on student performance, bias can manifest itself in various ways and can be influenced by the teacher's personal perception of reality, such as their attitudes towards factors like race, gender or socioeconomic status.

Another quantitative study based on Rosenthal and Jacobson's methods, conducted by Sutherland and Goldschmid and published in 1974, with 109 grade one and two pupils from an average socioeconomic area of Montreal, Canada. There had been a call for discussion about the use of IQ testing in primary school, and suggestions of both teacher training and in-service training programs, especially when results showed no linear relationship between teacher expectation and IQ gain. Even though this article did not focus on developing new definitions or aspects of

expectations or expectancy effects due to the prominence of methodological and transformative questions, it significantly contributed to the transformation of the role of teacher expectations. Results suggested that “the curriculum during teacher training, as well as in-service supervision, should include consideration of possible teacher expectancy effects” (Sutherland & Goldschmid, 1974, p. 855).

Through a literature review conducted in 1975 (seven years after the Pygmalion study), another scholar, Dusek, examined the behaviour of educators that could potentially impact students' performance, whether intentionally or unintentionally. This study critically reflected on everything that had been known about teacher expectations, considering both supportive and opposing opinions, and introducing new pieces of knowledge about teachers' differential expectations. This research spurned the idea of hopes and beliefs, rather than prophecies, and refused to use the word “prophecy” in the study when describing the results of the experiments.

The results of Dusek's investigation largely supported Finn's earlier conclusions. Dusek's research was the first attempt to analyse self-fulfilling prophecies and biased teacher behaviour in a primary school, more or less systematically. Those domains pertinent to teacher-bias effects on children's learning and performance that were reviewed by Dusek were:

1. *experimenter-bias effects* in psychological research – reviewed by Rosenthal (1966, 1968, 1969a, 1969b), Friedman (1967), Barber and Silver (1968, 1968);
2. in-classroom studies where *expectancy effects* and *self-fulfilling prophecies* have been investigated; and
3. *teacher-bias effects* in elementary school classrooms or other classroom situations that have been investigated (Dusek, 1975, p. 663).

Dusek also assumed that simply providing educators with falsified test scores or telling them something about their students' potential academic performance and “blooming” was not sufficient to influence teacher behaviour and could not cause changes in students' academic achievements. Dusek's critical review of the literature was a pivotal moment in which disciplinary reflexivity was employed, as it called into

question the dominant scientific paradigm that had been established by the 1970s. The shift from the concept of prophecy as the only conceptualisation to new categories of knowledge, such as teacher-bias effects and teacher expectancy, allowed researchers to slightly expand the understanding of how expectations may be formed.

The distinction made between *bias* and *expectancy* proved critical in interpreting Dusek's findings. *Bias*, according to Dusek, is an "effect due to teachers' differential expectations for students' performance in the case where expectancies have been induced by a principal investigator", while *expectancy effect* is the result of "the teachers' own, self-generated expectations regarding students' performance" (Dusek, 1975, p. 666). The findings of Dusek's investigation further validated Finn's distinction between *biases* and *expectancy effects* and highlighted the clear foundation for differentiating between them. As new scholars entered the discussion on the topic of expectations, new research methods were required to meet the needs of the changing world. The old view of expectations was being slowly transformed.

West and Anderson, in their critical review in 1976, provided a summary of 10 years of scholars' understanding of expectancy. They concluded that there was no solidarity in definitions:

By 'teacher expectation' some investigators apparently mean assumed teachers' attitudes about students which are a function of some information supplied by the investigator (Rosenthal & Jacobsen, 1968; Beez, 1968; Henrickson, 1970). Other investigators apparently mean assumed teachers' attitudes which are a function of information supplied by the investigator and the only evidence of these attitudes is certain observed teacher behaviors (Rubovitz & Maehr, 1971, 1973). Other investigators seem to reduce the necessity of assuming the expectancy by taking a teacher's ranking of students' achievement after teacher-student interaction to be the expectancy (Good & Brophy, 1972; Brophy & Good, 1970, 1972). In yet another study, the expectancy indication is a prediction of the student's future academic success (Mason, 1973). In other studies, the construct of expectancy is operationalised in statements made directly to students, such as 'I think you can do a good job on this

problem' (Moore, Means, & Gagné). (West and Anderson, 1976, p. 616)

In 1984, Cooper and Tom synthesised all definitions and knowledge about expectations and categorised it into three domains:

- *expectation as estimation of the present achievement* level of the students (in these studies, teachers were asked to provide their current assessment of students as an indication of their expected performance);
- *expectations of future academic progress* (teachers were asked to predict the future academic progress of their students and identify the expected point B of improvement); and
- *discrepancies between teachers' assessment and factual test results* (teachers' estimates of students' ability were compared with standardised test results or other "objective" performance assessment) (p. 78).

Good (1987) wrote that teachers expectations

[...] include teachers' beliefs about the changeability versus the rigidity of students' abilities, students' potential to benefit from instruction, the appropriate difficulty level of material or students, whether the class should be taught as a group or individually, and whether students should memorize material or interpret and apply key concepts that are presented. (p. 33)

However, Babad, in 1993, again mentioned prophecy and defined teacher expectations as the most significant influence in the classroom:

[...] there is no doubt that self-fulfilling prophecy (SFP) effects exist, and teacher expectations – based on fabricated information as well as on real differences among students – can have systematic influences on (in descending order of effect magnitude) teachers' impressions of students, teachers' grades, students' performance on objective achievement tests, and even students' IQ (Smith, 1980). However, this phenomenon is probabilistic, and SFP effects do not take place in every classroom and for every teacher. (p. 128)

Kuklinski and Weinstein (2000) investigated differential teacher treatment and paid close attention to children's reports of differential treatment. They gave the following definition of expectancy effect:

[...] the associations between teacher expectations and actual student learning outcomes, beyond what prior outcomes would predict – are related not just to teacher expectations themselves, but to the coupling of teacher expectations and patterns of teacher behavior. (p. 7)

However, Marra (2005) looked at the process of forming epistemological beliefs among college teachers and did not mention any of Merton's concepts of self-fulfilling prophecy for higher education. She wrote about the importance of *pedagogical activities* that encourage students and epistemological development such as *technology-based environments, problem-solving tasks* and *learning-support strategies – modelling, coaching, scaffolding*. In their study on teacher expectations, Timmermans and colleagues (2015) incorporated a definition of teacher expectations that originated in the work of Riley and Ungerleider (2012), that encompassed the *inferences* teachers make about their students' ability to succeed. Thus, the concept of teacher expectations has undergone significant evolution over the course of decades, reflecting the long journey of its development.

In conclusion, this chapter has been devoted to the evolution of the concept of teacher expectations. From the early 1970s, it had become evident that understanding of the role of teacher expectations, the role of self-fulfilling prophecy in knowledge-making and the validity of experiments were being debated by subsequent generations of researchers. After analysing the body of literature, it is clear that there was no agreement on the definition of teacher expectations, and it gradually transformed over time from linking teacher expectations to beliefs and prophecies to their interaction with specific pedagogical tools that can be implemented during interventions.

5.6 Conclusion

The chapter provides valuable insights into the early formation of knowledge in the field around teacher expectations, shedding light on entrenched terminology and conceptualisations. The systematic review, underpinned by Foucault's genealogy and the later concept of disciplinary reflexivity, traces the historical "footprints" that have shaped the current discourse.

The study identifies a pivotal moment in the late 1970s with the emergence of the influential "Pygmalion in the Classroom" study, which sparked widespread knowledge production on teacher expectations. The concept of teacher-bias effects and the utilisation of the sociological term "prophecies" in many fields are explored, illustrating the interdisciplinary influence of the self-fulfilling prophecy beyond the field of Education. Throughout this historical journey, the persistence of the self-fulfilling prophecy as a theoretical framework is evident, despite controversies.

The early sedimentation of knowledge around teacher expectations is scrutinised, showcasing both supportive studies and those challenging the Pygmalion effect's replicability. Later in the chapter, the 50-year transformation in the definition of teacher expectations is showcased, presenting critical reviews that mark a conceptual shift from self-fulfilling prophecies to an expectancy effect, with a particular emphasis on the role of teacher biases in shaping student performance.

Overall, Chapter 5 contributes to a nuanced understanding of the advent of the notions important for this thesis, emphasising the need for continued critical reflection. The historical analysis serves as a foundation for this research, encouraging scholars to consider diverse perspectives, question prevailing paradigms and contribute to the ongoing evolution of knowledge in the realm of teacher expectations.

Chapter 6: Psychologisation of Teacher Expectations

6.1 Introduction

In this chapter, the series of revealing findings is continued, with a focus on the presentation of results and patterns that have emerged during the analysis of studies related to teacher expectations. While the preceding chapter was dedicated to exploring the concept of teacher expectations, its early conceptualisation and its evolution over time, the current chapter aims to highlight additional noteworthy ideas related to the significance of disciplinary dominance in the research. It will delve into how accumulation of narrowed knowledge, limited with certain research paradigms, has affected contemporary scholars and subsequent knowledge production.

Whitaker and Atkinson (2021) state that "the intellectual field not only provides paradigm-like frames for the design and conduct of research, but it also furnishes the critical audience for that research" (p. 31). Therefore, comprehending how the field of research around teacher expectations was established, considering the various discourses within disciplines and identifying the individuals who comprised the research community served as an important line of inquiry for this study. I noticed that one particular field has predominantly been at the forefront of shaping understanding of what teacher expectations are, and this will be further explored in this chapter.

I have already analysed the emergence of the concept of teacher expectations and its interpretation: how the initial studies in this area set the tone for what was studied, what understanding was formed and how it was studied. By adopting a cross-sectional perspective and drawing on the principles of Foucault's genealogy and disciplinary reflexivity, we can now gain a deeper understanding of the discipline that has dominated the research. Foucault employed the genealogical technique of discursive inquiry (as previously mentioned in Chapter 3) to reveal how order of knowledge is formed – "rules of formation" – something that may cause the emergence of certain discourses within certain timeframes.

The findings of this study reveal that the research on teacher expectations was predominantly led and backed by scholars with close ties to the field of psychology or educational psychology (Appendix B). Out of the 36 included studies, 23 were conducted not by educators but by psychologists or in partnership with them. For example, the sample of early studies conducted between 1968 and 1975 employed the “paradigm of psychologists”.

This attribute of the initial formation of knowledge regarding teacher expectations – the tendency towards a “psychologisation” of research – involves the dominance of the psychology discipline and its rules. This tendency encompasses a range of factors, including researchers' backgrounds, adopted methodologies and perspectives, underlying motivations for conducting a study, sources of data, formulated hypotheses and assumptions that influenced the discourse. Drawing upon the analysis of selected studies for this systematic review, the next section will focus on analysing the identified tendency towards a psychologisation of research within the context of teacher expectations.

6.2 Author Background and Disciplinary Anchoring

6.2.1 *Disciplinary Norms*

In this section, the focus of the analysis is directed towards the training and research interests of the researchers, as these factors are crucial in shaping the scientific community in which they operate. Factors such as professional networks, country of origin, peer-review processes, published studies, conferences attended and other influences all contribute to the formation of a researcher and will be analysed further. Understanding these factors is important according to principles of reflexivity, which were a theoretical justification for this study.

It is the work of the social scientist to track the source of knowledge production in the field. To do this objectively, some degree of freedom from biographical, disciplinary and methodological constraints should be achieved. This study as a whole is an attempt to question hegemonic perspectives in particular areas of social

science and to “critique white male epistemic privilege” (Whitaker & Atkinson, 2021, p. 58).

It is important to consider the principles that guide researchers' work, including their approach to data collection and analysis. Employing reflexivity can provide a critical perspective that challenges dominant forms of knowledge. This section explores the significance of the researchers' disciplinary backgrounds, fields of study and research institute in shaping their views. Drawing upon Foucault's concepts of genealogy and disciplinary anchoring, this section analyses how these factors influence the process of knowledge production.

The training that researchers receive in psychology often aligns with a specific school of thought, which can shape their careers and establish norms for conducting research. This can create a set of rules to follow, since in the discipline it is crucial to follow them to become successful. Disciplinary training and institutions are also deemed significant because of the expectation that researchers should publish within their respective fields and have their work evaluated by other experts in the same field. The insularity of disciplines is acknowledged, and it is widely accepted that publishing in specific journals, attending conferences and joining relevant societies is beneficial for the representatives of a discipline. According to Fuller (2016), becoming familiar with disciplinary knowledge leads to a strong connection with influential figures, local loyalties and intellectual identities. The practice of peer review can reinforce this sense of genealogical authority, as authors are required to include references to other relevant works before publication.

Therefore, this research affirms prior suppositions regarding the prevalence of a particular discipline and offers further proof that avoiding this disciplinary hegemony is necessary because of the unreliable nature of knowledge generation within such systems.

6.2.2 *Western Knowledge*

In order to strengthen the notion of dominant control over the production of knowledge and potential biases in the “truth” concerning different subjects, it is

essential to consider not only the authors' professional education and the field they specialise in, which was done in the previous section, but also their country of origin. Akena (2012) asserts that "truth is not absolute, but rather relative, influenced by factors such as society, class and group affiliation, and is therefore subjective in nature" (p. 602). By considering Akena's argument in regard to truth, "Western knowledge" has been established as the only legitimate form of knowledge by European colonisers and, according to analysis of the field of expertise and country of origin of the researchers included in the article sample for this study, a significant amount of evidence arose to suggest that they originated from a single region.

During investigation of the researchers' biographies in the selected articles, it was assumed that the primary author listed in the study had the most significant impact on it. Consequently, this individual was included in the analysis. Additionally, not only was the person's country of birth or nationality examined, but also their country of education and workplace, as this information reflects where they acquired their degree, adopted norms and worldviews, and conducted research related to the topic of teacher expectations.

As an illustration, if an individual was born in China but spent a significant portion of their career in the United States, they would be classified as an "American researcher" (see Figure 6.1). Following a comprehensive evaluation of the selected scientists' articles, primary publications and research interests, it is apparent that until 2006–2007, over four decades since the Pygmalion study, the paradigms, norms and perspectives of American psychologists had a dominant influence on research on teacher expectations. Out of the 36 chosen articles, 26 were authored by scientists from the United States or individuals who were studying or working there at the time of their research.

If the chosen studies and scientists were separated based on their geographical locations (as shown in Table 6.1), it would be evident that there are three significant "knowledge factories": North America (comprising the United States and Canada), Europe (including Germany, the United Kingdom, the Netherlands and Switzerland) and Oceania (encompassing New Zealand and Australia).

Figure 6.1

Geographic Areas of Knowledge Production (Map)

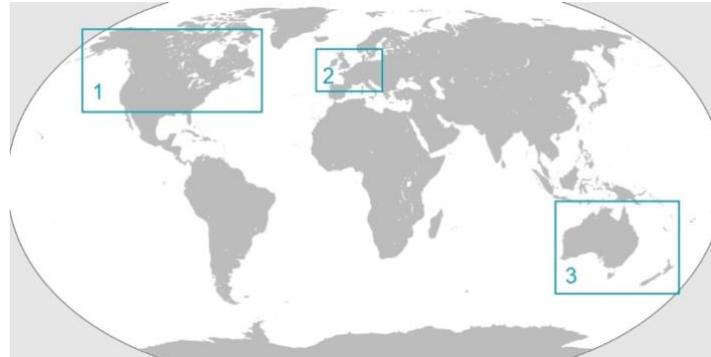


Table 6.1

Geographic Areas of Knowledge Production

North American research	European research	Oceanic research
<p><u>American</u>: Rosenthal (1968), Meichenbaum (1969), Jose (1971), Finn (1972), Brophy (1970), Dusek (1975), Yoshida (1975), Persell (1976), West (1976), Cooper (1977), Guskey (1982), Snodgrass (1982), Brattesani (1984), Cooper (1984), Raudenbush (1984), Rolison (1985), Good (1987), Ambady (1993), Gottfredson (1995), Kuklinski (2000), Jussim & Harber (2005), Weinstein (2000, 2002, 2009), Milner (2005), Bae (2008), Andrews (2017);</p> <p>+ <u>Israeli</u>: Babad, trained at Duke University (USA) (1993, 2003)</p> <p><u>Canadian</u>: Sutherland (1974), Munby (1982)</p>	<p><u>British</u>: Tenenbaum (2007)</p> <p><u>German</u>: Friedrich (2015), Zhu (2017)</p> <p><u>Dutch</u>: Timmermans (2015, 2018), De Boer (2018)</p> <p><u>Swiss</u>: Neuenschwander (2021)</p>	<p><u>New Zealand</u>: Rubie-Davies (2006, 2009, 2015, 2016, 2019), Ding (2019)</p> <p><u>Australia</u>: Keys (2007), Johnston (2019)</p>

Note: This table demonstrates the distribution of studies about teacher expectations in different regions and highlights the prevalence of research from the North American region.

One suggestion was to take a country-of-origin perspective when examining this body of literature, which involved briefly examining the authors of the Pygmalion study. Rosenthal, who was and is an *American psychologist*, was a professor at Harvard University in 1968. Together with Jacobson, they were the first to introduce the discourse on teacher–student relationships from a psychological standpoint.

This discussion was further advanced by Meichenbaum, a distinguished *American psychologist* and professor of psychology at the University of Waterloo in the same year, through replication of the original research. Subsequently, Good, a *professor of educational psychology* at the University of Arizona and Sutherland, who held a PhD in *psychology* from McGill University, partly supported the concepts of the Pygmalion study and the “self-fulfilling prophecy” as a theoretical framework. Later, in 1975, Dusek, a *professor in the psychology department* at Syracuse University, along with Yoshida from the Neuropsychiatric Institute at Pacific State Hospital Research Group in California (1976), and Persell from the *department of sociology* at New York University (1976), questioned previous contributions to the field and conducted reviews of the academic literature on teacher expectations at that time.

Given the disciplinary context of a strong emphasis on “replication”, it comes as no surprise that a considerable number of studies on teacher expectations after Pygmalion were conducted by psychologists, including those in educational psychology and behavioural sciences. The list of such studies is quite extensive, including Cooper (1977, 1984), Guskey (1982), Snodgrass (1982), Brattesani (1984), Rolison (1985), Ambady (1993), Kuklinski (2000), Babad (1993, 2003), Tenenbaum (2007), Friedrich (2015), Timmermans (2015) and Zhu (2017), with North American psychologists being particularly well represented.

6.2.3 Robert Rosenthal's Influence

It can be surprising to observe a researcher's continued pursuit of a particular set of arguments and concepts, despite encountering significant resistance, particularly if it appears to influence the wider discourse in that area. This is evident in the professional trajectory of Robert Rosenthal, which suggests a persistent adherence

to his ideas without much reconsideration, potentially influencing the direction of research within the field. The professional trajectory of Rosenthal's path will be scrutinised in this section. The subsequent section (6.3) and discussion (Chapter 7) will delve into a detailed examination of the possible limitations of quantitative methods for the field of Education.

After the publication of the Pygmalion study in 1968, Rosenthal furthered the development of the expectations field by conducting numerous studies on the subject, with a predominant focus on employing quantitative methods. Notably, he authored works such as "Interpersonal Expectancy Effects" in 1978 (published in *Behavioral and Brain Sciences*) and meta-analysis "Further Issues in Summarizing 345 Studies of Interpersonal Expectancy Effects" in 1980 (also published in *Behavioral and Brain Sciences*). Over the next 15 years, Rosenthal focused on exploring the methodological intricacies of psychological research, producing a number of articles on the topic, including:

- "Ensemble-Adjusted p Values" (1983)
- "Statistical Analysis: Summarizing Evidence Versus Establishing Facts" (1985)
- "Focused Comparisons in the Analysis of Variance" (1987)
- "Interpretation of Significance Levels and Effect Sizes by Psychological Researchers" (1986)
- "Meta-Analytic Procedures for Combining Studies with Multiple Effect Sizes" (1986)
- "Testing for Moderator Variables in Meta-Analysis" (1991)
- "Focused Tests of Significance and Effect Size Estimation" (1991)
- "Correlated Correlation Coefficients" (1992)

He came back to teacher expectations only in 1992 to become a co-author with Nalini Ambady in at least three studies:

- "Thin Slices of Expressive Behavior as Predictors of Interpersonal Consequences: A Meta-Analysis" (1992)

- “Half a Minute: Predicting Teacher Evaluations from Thin Slices of Nonverbal Behavior and Physical Attractiveness” (1993)
- “Physical Therapists’ Nonverbal Communication Predicts Geriatric Patients’ Health Outcomes” (2002) – this study conducted in the field of health examined how the patterns of nonverbal communication displayed by healthcare providers predicts patients' health outcomes.

Another block of studies on expectations in the field of Education was done in co-authorship with Elisha Babad:

- “Teachers' Brief Nonverbal Behaviors in Defined Instructional Situations Can Predict Students' Evaluations” (2003)
- “Prediction of Students’ Evaluations from Brief Instances of Professors’ Nonverbal Behavior in Defined Instructional Situations” (2004)

And with Christine Rubie-Davies:

- “A Teacher Expectation Intervention: Modelling the Practices of High Expectation Teachers” (2014)
- “How I Spent My Last 50-year Vacation” (2015)
- “Intervening in Teachers' Expectations: A Random Effects Meta-analytic Approach to Examining the Effectiveness of an Intervention” (2016)

Despite the shift in discourse towards educational theories in these studies and a trend towards implementing qualitative research designs, it appears that Rosenthal and his co-authors persisted in exploring the domain of teacher–student interaction through a positivist lens. The researchers relied on employing or at least mentioning theories of the 20th century, such as self-fulfilling prophecy, and they did not extensively investigate the intricacies of the learning process. Their primary focus was not on what was being taught and learned within schools, how it was being accomplished and the wider contextual factors affecting it, but rather on identifying correlations.

Overall, the predominance of Western, specifically North American centred psychological research in the domain of teacher expectations might have led to a

shift in research methodology and consequently influenced the formation of potentially biased understanding of the phenomenon. Therefore, examining the field of teacher expectations through the lens of reflexivity, authors' backgrounds and the criticism they encountered has been important and productive. Furthermore, it is worth acknowledging that despite early criticisms regarding the exclusion of qualitative method, proper theoretical rationale and the "student side", which resulted in flawed outcomes, the self-fulfilling prophecy and overall approach to investigating teacher expectations through experimental trials persisted. Initially, the findings were replicated on a restricted group of first- and second-grade students, but this later extended to higher levels and other education settings. This expansion was mainly possible and supposedly driven by the research interests of specific scholars, such as Rosenthal.

6.3 Rationales for the Research Studies

Chapter 6 as a whole is dedicated to presenting the results of a systematic analysis of selected articles, which were chosen after a rigorous examination of the existing literature on teacher expectations. However, the focus of this particular section is to highlight the significance of the underlying rationale that drove academic research.

The rationale behind a research study is the underlying reason or purpose for conducting it. It explains why the study is important and why it needs to be carried out. The rationale is typically based on a problem, gap in knowledge or a need for further investigation in a particular area. It is an essential component of a study, as it provides the context for it and helps to justify its significance and potential contributions to the field. This section is divided into four sub-sections: Early Authors, Era of Early Critical Reviews, Back to Positivists and Blossoming of Qualitative Social Research.

6.3.1 *Early Authors*

In some selected studies, the results present a clear-cut understanding of whether something exists or not, or if something is right or wrong. However, it is worth

examining whether the motivation behind exploring a particular phenomenon stemmed from a social issue and if the research aimed to be transformative in its purpose, such as addressing inequalities, differential treatment or expectations. Focusing on the true intentions of the scholars behind the studies may shed light on goals the researchers set, the research questions they raised, the conclusions they drew and the credibility of the research in general. In this sub-section, what was important for each researcher and what ideas influenced them to initiate their research will be analysed in an attempt to answer the research questions.

Early research, including the works of Rosenthal and Jacobson (1968), Meichenbaum et al. (1969), Brophy and Good (1970), and Jose and Cody (1971), included observations of teacher–pupil interactions during different periods of time. It aimed to find the existence of influence of teacher expectations on student performance. This research was, mostly, about demonstrating experiment results, either confirming or refuting the hypothesis of teacher impact on student “blooming” or “spurting”. Rosenthal and Jacobson (1968) aimed to show that the *teacher’s expectation can come to serve as an educational self-fulfilling prophecy*. The efficacy and reliability of IQ testing had been criticised even at that time, since some people can be more susceptible to labelling effects than others. Besides, the experiment’s attempt to artificially control the student environment could have compromised the outcomes.

Meichenbaum et. al (1969) observed fourteen 15-year-old girls and four teachers. Observation of teacher–pupil interactions lasted 6 days (baseline) and 8 days (expectancy period), and was “*designed to examine the mediating variables which underlie the teacher-expectancy effects*” (p. 1, emphasis added). Because of the limited timeframe, changes in intellectual functioning were not checked at the end of the process. No theoretical underpinning was described and the rationale behind this study was to *re-examine the Rosenthal and Jacobson study* on a different group and context.

The study by Brophy and Good (1970) was, at first sight, supportive of the hypotheses of Rosenthal and Jacobson, but it was different in terms of rationale.

Four first-grade classrooms from a rural area in Texas with a low-socioeconomic population were observed. In contrast to the Pygmalion study, this research focused on “*the intervening processes, applying the method of classroom interaction analysis* to identify and *document differential teacher behavior* communicating different teacher expectations to individual children” (p. 2, emphasis added). Although they were trying to inspect more closely the aura of magic or mystery around expectation effects, the authors ended up discussing how sex (boy or girl), *label* (high or low achiever) and *class* (there were pupils from four classes) *affected overall teacher treatment*. They employed quantitative methods and calculated the number of teacher–student interactions or contacts, the quality and frequencies of these interactions.

The study by Jose and Cody (1971) was a partial replication of the Pygmalion study (1968). Researchers randomly selected 18 teachers and 144 students and assigned them to experimental and control groups. Experimental conditions *were replicated*, and no attempt was made to go beyond the Rosenthal and Jacobson paradigm. However, no significant differences were found in IQ, achievement, students' grades or behaviour, and no differences were observed in teacher behaviour. Some concerns about validity of the findings were expressed, as well as an urge to identify the nature of expectancy as well as the means of its establishment. The rationale for this research was to *answer two research questions, closely related to the rationale of the Pygmalion study*, without going beyond it.

As with differential achievement by sex, differential achievements by race for African-American and white students were supposed to be a matter of public record. Brophy and Good (1970), and Palardy (1969), were early researchers who brought this question up and pointed to *differential expectations held for the behaviour of pupils from different socioeconomic groups*, linking their rationale inexplicitly to issues of racial, gendered or class inequality. However, they did not further flesh out the implications for their research in a way that could be translated into transformative action or suggest interventions; rather, their approach to research implied only confirmation or refutation of the hypotheses. The narrative made no mention of any

explicit exhortations to combat discriminatory practices, but rather focused on an examination of the challenges faced by students of diverse racial and gender identities, who were frequently subjected to disparate treatment in terms of their academic aptitude.

Finn (1972), as a member of an *Educational Studies* faculty, depicted the environment and various expectations of peers, parents and teachers that form the confidence of a pupil in the classroom and cause (or not cause) their academic blooming. He pointed readers' attention to *the importance of exploring how perceived characteristics of individuals* (age, race, sex, abilities, prior achievements) *may be the source of expectations* impinging upon them. In Finn's critical review in 1972, two questions were raised: "Why has an idea which seems so intuitively pleasing to so many, received so little empirical support? And does the expectation hypothesis deserve further consideration?" (p. 388). The possible reason of a lack of empirical support, as the author said, might have been connected with "the perspective from which the problem had been attacked" (p.388). He also mentions scepticism concerning standardised tests in general, and highlights the importance of expectations which are formed and continually modified on a daily basis in class and elsewhere. Finn introduced the concept of a "network" of expectations, showing various sources of expectations impinging upon students – *cultural traditions and demands, and perceived characteristics like age, race, sex, abilities, prior achievements and the expectations of many people around them*. He was one of the first researchers who investigated the influence of race on differential expectations. His rationale moved far beyond the simple confirmation of prior knowledge. It served as a call to other researchers to consider the more dynamic and complex worlds of influence and socialisation that children and young people exist in.

Sutherland and Goldschmid (1974) conducted a series of related experiments about the relationship between "naturally established" teacher expectation and IQ change. Subjects were 109 pupils from an average socioeconomic area of Montreal. Using simple gain scores in their analysis "was prompted by the desire to more clearly replicate the procedure used by Rosenthal and Jacobson" (Sutherland &

Goldschmid, 1974, p. 853). Their research subjected the Pygmalion study to intense scrutiny, identifying significant flaws in both its methodological and statistical underpinnings. Despite this, the study proceeded to examine the various hypotheses that pertained to the potential linear correlation between the level of teacher expectations and corresponding gains in student IQ.

6.3.2 Era of Early Critical Reviews

After a decade of teacher expectancy research, critical reviews began to appear. The rationale of a critical review is usually to provide a thorough and objective evaluation of the body of literature, with the aim of assessing its strengths and weaknesses.

Dusek, who introduced the concept of teacher-biased effect in 1975 and published his critical review on 10 years of teacher expectations, wanted to “review the literature pertinent to teacher-bias effects on children's learning and performance *in order to determine if teachers do, in fact, bias the education of children* under their tutelage” (p. 661, emphasis added). As a result, he urged the scientific community to delineate child characteristics that determine teacher expectancies and to consider demographic and psychological traits of pupils. He also drew attention to the studies that recommend one-year-long observations and groups of teachers at different grade levels (not only elementary school teachers) to gain understanding of the formation of teacher expectancies for pupils' outcomes.

In 1975, Yoshida and Meyers conducted an experiment aimed at examining the effects of perceived bias on teachers' perceptions of students who had been labelled as educable mentally retarded (EMR). The study sought to investigate *whether the labelling of students had an impact on teachers' expectations for their success*. While the research was openly published at the time, it would be considered unethical by contemporary standards in 2023. Nonetheless, the study contributed to the development of ideas about self-fulfilling prophecies and the notion of labelling-induced deviance. Specifically, the research focused on the theories of deviance and

societal reaction, highlighting the potentially negative consequences of overly harsh or misguided expectations. *The question of race was raised in the study.*

Persell, a researcher with interests in education, inequality, sociology, teacher expectations and ability grouping, conducted a thorough analysis and synthesis of existing knowledge on expectations in 1976. Her work touched on topics such as *testing systems, expectations and the relationship between socioeconomic status, race and academic achievement.* She argued that the perception of “achievement” for a student is often one-sided and fails to provide a comprehensive understanding of what school achievement entails. Her research delved deeply into *the impact of IQ testing, tracking arrangements and expectations.* Her findings indicated that teachers are more likely to harbour negative expectations for children from lower socioeconomic and minority backgrounds than for those from middle-class and white backgrounds (*sic*). Additionally, Persell noted that "teacher expectations may be influenced by (1) the teacher's demographic characteristics, by (2) their personality, or by (3) their career experiences" (p. 99).

In 1976, West and Anderson, both associate professors of educational psychology, authored a critical review that was published in the *Review of Educational Research.* Their review addressed the expectancy hypotheses, which suggest that teacher expectations influence student achievement, and their proposed alternative hypotheses, which propose that student achievement influences teacher expectations. The authors also made an effort *to incorporate student voices and student side to the model of teacher expectations.* An important element of this model was the information provided to teachers, which “should be broadly conceived as both subjective and objective historical data about a student from a variety of sources [...] student's past behavior, socioeconomic status, sex, race, medical records, previous grades, previous achievement and intelligence tests...” (West & Anderson, 1976, p. 615).

As was demonstrated, in the late 1970s researchers began to shift their focus from the simplistic correlation and direct approach to more nuanced and comprehensive methods of examining the effects of teacher expectations on student performance.

This involved considering the limitations of IQ tests and other “objective” measures of performance, as well as considering the wider context of a student’s background and the personality, training and professionalism of their teachers. Rather than simply testing the existence or non-existence of expectancy effects, researchers began to draw a more complex picture of the factors that contribute to differential behaviour and student reactions to them.

6.3.3 Back to Positivists

Numerous quantitative studies were later conducted in the field of teacher expectations, including research by Cooper (1977), Guskey (1982), Snodgrass (1982), Brattesani (1984), Ambady (1993), Babad (1993, 2003), a synthesis of 18 experiments by Raudenbush (1984) based on teacher expectancy theory, research by Rubie-Davies (2015, 2016, 2019) and, more recently, Zhu et al. (2017). It is challenging to identify a distinct rationale behind these studies because they all shared a common goal of either proving or disproving the hypothesis about the existence of the expectancy effect and its outcomes. Some of these studies also relied on Rosenthal’s assumptions, utilising the concept of self-fulfilling prophecy and modifications of the Good and Brophy model created in 1970.

Special attention should be paid to the study of Good (1987), where he reflected on two decades of research and where he again insisted on the power of self-fulfilling prophecy effects, with several insightful remarks on the complexity of the two-sided expectation formation process. He proved that expectancy effect appeared to be much more complex than originally believed. The rationale behind this work was *to demonstrate the adjusted model that helped for understanding the dynamics of expectation* communication in the classroom between teacher and student and to synthesise findings for 20 years.

Good's research did not extensively address the findings of authors who held opposing views on the classroom prophecy, such as Jose in 1971, Finn in 1972 and Dusek in 1975. However, it showed that researchers started considering various factors that contributed to the complexity of the classroom, such as different

assumptions about *intelligence* (some viewed it as fixed, while others viewed it as changeable), *student perception* of the teachers' actions and behaviour, and their *methods of expressing expectations* (such as the choice of curriculum topic, rationale given to students for the curriculum topic and performance feedback). Good (1987) suggested that by utilising this conceptualisation and exploring its development, it may be feasible to enhance classrooms that have low expectations and boring, unchallenging routines.

6.3.4 Blossoming of Qualitative Social Research

A new comprehension of the interaction between teachers and students started to emerge towards the end of the 20th and beginning of the 21st centuries. The shift of focus in expectancy research from psychologists to educational theorists and practitioners became transparent. This was accompanied by the emergence of qualitative studies and the involvement of educators in the study of teacher expectations, leading to a change in the rationale behind the research towards transformative objectives.

For example, Milner (2005) investigated the epistemological beliefs of instructors that can affect their teaching beliefs and behaviours. Factors that could impact student outcomes were explored. The importance of professionalism and a good command of teaching strategies for enhancing students' performance was considered. Finally, certain pedagogical interventions, such as *scaffolding and modelling*, were introduced to demonstrate their positive impact on student results.

Milner (2005) – as a professor of *education*, Keys (2007) – whose interests were *curriculum development, pedagogical knowledge, science teaching and teachers' beliefs*, and Bae et al. (2008), employed qualitative designs to focus on the change of prospective teachers' beliefs and practices around diversity of students' characteristics and learning how to teach. A theoretical knowledge filter model explained how teacher knowledge (beliefs and practices) shaped the implementation of a science curriculum and explored high and low achieving low-income Mexican-American students to show specificity of the context.

Despite continued reference to the Pygmalion findings in some psychological studies – for example, by Rubie-Davies and Rosenthal (as a co-author in 2015 and 2016) – these recent studies have taken a transformative approach aimed at changes. These studies utilised quantitative methods, such as a random effects meta-analytic approach and randomised control trials, but their focus was on *adopting the best practices of high expectation teachers*.

A group of researchers from a faculty of behavioural and social sciences – Timmermans et al. (2015) – analysed a sample of 420 primary schools that were representative of the Dutch context. The rationale behind this study was *to investigate the factors that contribute to the variation in academic achievement among primary schools*, to find the link between the expectations and the scores for a test at the end of the year. The authors aimed to identify the factors that were most strongly associated with academic achievement in primary schools and to provide insight into how schools can improve student outcomes. The findings of the study could potentially be used to inform policy decisions and interventions aimed at improving educational outcomes in primary schools.

A professor and chairperson for the Department of Teacher *Education* and a professor of race, culture and equity, Andrews participated in a larger mixed-method investigation of factors contributing to achievement and discipline inequities in Holly Springs Public Schools. Together with Gutwein (2017), they investigated students of *varying racial backgrounds and teachers' differential treatment toward them*. The study expanded the literature on teachers' expectations for students by drawing on student voice to examine how middle and high school students describe and experience the expectations that teachers have for them.

The significance of the topic of teacher expectation interventions was reflected in two recent reviews: a 2018 systematic review by De Boer et al. examining the effects of 19 interventions, and a 2019 critical literature review by Johnston et al. synthesising teacher expectation research from 2008 to 2018. De Boer et al.'s exploratory review aimed to determine whether it is possible *to increase teacher expectations and prevent low expectations from negatively impacting students*. The

findings suggested that teacher expectation interventions may have promising effects on both students and teachers. Johnston's synthesis sought to provide a comprehensive understanding of the current state of *knowledge on teacher expectation interventions*, including the various types of interventions and their effects on student outcomes.

As of the 2010s, fewer studies were citing the original Pygmalion study, partly due to a growing trend towards the use of qualitative methodologies in the field of Education at that time. While some researchers still used the Pygmalion study as a framework, others stopped using it. Some scholars questioned the approach and attempted to find new ways. Nevertheless, the shift away from blindly using the Pygmalion study and self-fulfilling prophecy as the one-and-only framework was evident. Educators were increasingly encouraged to participate in the discourse and to contribute their practical knowledge and experience to the academic field. However, there were still empirical investigations being conducted based on the self-fulfilling prophecy theory. For example, Zhu, Urhahne and Rubie-Davies applied the Brophy and Good model from 1970.

Thus, despite occasional instances of studies without theoretical underpinning, there has been a clear shift in the focus of the rationale behind teacher expectation research from merely confirming the existence of the expectancy effect to exploring how teacher expectation interventions can be used to improve educational outcomes for students. However, while early literature had mainly focused on establishing associations between teacher expectations and student learning, without taking further action, constructivist and transformative studies have emerged with the aim of working with detailed information on real classroom reactions, behaviours and attitudes. These recent studies have sought to explore how teacher expectation interventions can serve as a source of data, how perceptions of expectation phenomena can be altered, and how teacher behaviour and expertise can be enhanced.

6.4 Limitations of Research Paradigms and Methods

The purpose of this section is to present the third major factor revealed in the theme of psychologisation of research, and to provide the main conclusion regarding the worldviews and paradigms utilised by researchers who conducted studies in the area of teacher expectations. These findings were derived by analysing the research methodology of all the chosen articles and synthesising their research designs. In this section, several limitations to the particular design and methodology will be acknowledged.

A paradigm is characterised by its epistemological, ontological, axiological or methodological elements. Analysing worldviews and paradigms is essential in this research, since, according to Whitaker and Atkinson (2021),

the paradigm is not just a preference for one theory over another at a given point in time. It is a package of key ideas, key works, accepted methods, leading figures, role-models, and classic studies. A paradigm frames simultaneously *what* to study, the appropriate *methods* to identify the most relevant phenomena, and what the *expected outcomes* should look like. (p. 26, emphasis in original)

Upon reviewing the articles and their narratives, and as noted earlier, it was evident that one particular intellectual field or discipline with a specific paradigm took the lead and established the “rules of the game”, placing the self-fulfilling prophecy concept at the forefront of the entire framework when the research was initiated. The question arises as to whether scholars of that time were constrained by their worldview while analysing IQ test outcomes, whether that research design was adequate to comprehend the broader disciplinary context and fundamental components of the learning process, and whether researchers considered such limitations of this worldview.

During the 1960s and 1970s, experiments with quantitative methodology were generally reproduced uncritically. However, as the issue of the integrity and possibility of proving teacher expectancy was raised, educational researchers began to question these studies in the late 1960s and early 1970s. Despite these concerns,

experiments continued to be successfully processed, and the focus remained on revealing causal effects and dependencies for several decades. The studies were published in peer-reviewed journals and proved the existence of a linkage between variables, as required by positivist methodology – which was dominating, since most of the research came from the field of psychology. In this context, it is important to mention the concept of reflexivity again:

Techniques of data collection [...] and analysis shape the kinds of information and inference that are possible. They also exclude other possibilities that fall outside the possibilities that such techniques facilitate. Technologies of research can reflexively exert a strong influence on research methods, and hence of the kinds of data and analysis that they support. (Whitaker & Atkinson, 2021, p. 51)

As noted earlier, positivism is built on the belief that knowledge can only be acquired through empirical observation and experimentation. It implies the use of quantitative research methods such as surveys, experiments and statistical analysis to collect and analyse data. Positivists use deductive reasoning to formulate hypotheses and then test them through empirical observation, and they believe that scientific findings can be generalised to other populations and settings. The majority of the initial studies, which have been reviewed and explained in previous chapters, adhered to these specific methods.

On the other hand, researchers who were interested not only in specific variables and empirical observations, but in the processes, relations and students' voice, found considerable dispute arising from methodological issues. They questioned the authenticity of IQ tests, the impact of administering the same test multiple times and the variations in results across different grade levels in the initial investigations into teacher expectations (Aronson & Steele, 1995). The methodology of Pygmalion and other similar studies were vigorously challenged by Thorndike (1968), Snow (1969), Gage (1966, 1971) and Dusek (1975). They all raised questions about the failure of methods and criticised the setup of the studies, demonstrating disagreement. Thus, this appeared to have led to a transformation of the discourse with a shift towards investigating relations rather than stating facts about 15 to 20 years ago.

In order to determine the predominant methodologies, an analysis of the methodologies employed in the selected articles was undertaken. After examining the paradigms and research designs employed in the 36 systematically chosen articles, three main categories emerged: quantitative studies, qualitative studies and critical reviews/syntheses (see Table 6.2 for further details). The chosen articles were categorised as follows:

Quantitative studies

- Experiments with control and experimental groups (Cooper, 1977; Good & Brophy, 1974; Guskey, 1982; Jose & Cody, 1971; Meichenbaum et al., 1969; Munby, 1982; Sutherland & Goldschmid, 1974; Yoshida & Meyers, 1975)
- Regression analyses (Brattesani et al., 1984; Cooper, 1977; Friedrich et al., 2015; Neuenschwander et al., 2021; Timmermans et al., 2015)
- Longitudinal survey design (Friedrich et al., 2015; Zhu et al., 2017)
- Experiments with experimental design (Babad, 1993; Babad et al., 2003; Cooper, 1977; Ding & Rubie-Davies, 2019; Gottfredson et al., 1995; Jose & Cody, 1971; Raudenbush, 1984; Rolison & Medway, 1985; Rubie-Davies & Rosenthal, 2016; Snodgrass & Rosenthal, 1982; Yoshida & Meyers, 1975)
- Meta-analyses (Raudenbush 1984; Tenenbaum et al., 2007)

Qualitative studies

- An individual semi-structured interview with all instructor participants; the interview protocol consisted of open-ended questions about the instructors' opinions concerning the ideal college course (Marra, 2005)
- Class discussions, class assignments, interviews and an open-ended feedback questionnaire (Milner, 2005)
- The study by Keys (2007) described a theoretical knowledge filter model that explains how teacher knowledge (beliefs and practices) shaped the implementation of a science curriculum in Australia – it was based on Eisner's (1991) methodology of educational criticism
- Semi-structured interviews (Bae et al., 2008)

Critical Reviews/Syntheses

- Finn (1972), Dusek (1975), Persell (1976), West (1976), Cooper (1984), Babad (1993), Jussim and Harber (2005), Rubie-Davies (2009), De Boer et al. (2018), Johnston et al. (2019)

Table 6.2

Research Design

Research design	Number of studies
Quantitative + meta-analyses	22/36 (2 meta-analyses)
Qualitative	4 (2005, 2005, 2006, 2008)
Reviews (critical, syntheses)	10

Note: This table demonstrates the number of studies in the field of teacher expectations with different research designs

Table 6.2 displays the count of scholars who had chosen quantitative, qualitative or review methodology as their research design. Since researchers are constrained not only by their perspectives and expertise but also by the techniques used in the dominant paradigm, their selected research methods might shape the potential findings. Perhaps paradoxically, “description here becomes prescription, in that methodological strategies determine what should be observed” (Whitaker & Atkinson, 2021, p. 20).

6.4.1 Drawbacks of Experiments

From the extensive positivist research conducted in the field of teacher expectations over the years, it has been demonstrated that impartial and neutral detachment is critical to achieving unbiased outcomes. Positivist researchers consider “subjectivity” as a potential risk in their research (England, 1994). However, it is worth noting that the notion of objectivity in the field of Education might differ from this perspective.

Considering the drawbacks of experimental design, Yoshida and Meyers (1975) wrote in their study that certain findings from it could have been invalid or

insignificant because of methodological issues, including problems with the videotape's content. Additionally, they proposed that “the typical special education and regular elementary teacher operates in a more complex environment that includes more children, a diverse curriculum and a broad range of student ability” (p. 526).

Many other scholars have also noted the inconsistency of using quantitative methods in their own research. Here are a few examples:

- Meichenbaum et al. (1969, p. 316)

... the present study was a rather macroscopic one: only the gross teacher expectancy effect on student classroom behavior and academic performance was examined. It remains for further research to demonstrate how microscopic interactions between teacher and student can contingently and reciprocally influence each other in ways that tend to maximize or minimize the expectancy effect.

- Brophy and Good (1970, pp. 17–18)

While this research has demonstrated the applicability of class-room interaction analysis methods to the study of the communication of teacher expectations and has yielded data which are consistent and interpretable as far as they go, it has dealt with only a few of the events intervening between the formation of teacher expectations and the initiation of reciprocal behavior by the children. Several related studies are needed to complete the picture.

- Jose and Cody (1971, p. 48)

Until further research becomes available, concerning the nature of expectancy as well as the means of modification or establishment of expectancy, caution should be used in making generalisations from the findings reported.

- Sutherland (1974, p. 855)

Arguments have been brought forward suggesting that the administration of group IQ tests in the primary grades may not really assist in the instructional program (Fleming & Anttonen 1971).

- Cooper (1977, pp. 20–21)

From the present design, it is impossible to tell whether experiment participation, teacher differences or an interaction of the two caused the observed results. [...] The second problem to be pointed out is that the small size of the sample calls into question the reliability of the mean square estimations.

Several recent studies that utilised quantitative designs have highlighted the limitations of this methodology. For example, Timmermans et al. (2016) note that “several findings, such as the degree of association among performance and the teachers’ expectations of students may depend on the educational system, heterogeneity of classes and the prevalence and stereotyping of ethnic minority groups” and that “results derived from the estimated models can only be interpreted in the context of the available performance information” (2015, p. 475). Additionally, Rubie-Davies and Rosenthal (2016) cautioned that while their study showed positive effects on student achievement, “the results of the experiment may not be generalised” (p. 90).

In a recent longitudinal study conducted by Friedrich in 2015, the Pygmalion effect was examined in regular classrooms with a large sample size. There were limitations to the research design; for example, the study was conducted in a specific context, which may have limited the generalisability of the findings to other settings. The study also relied on quantitative data, which may not capture the full range of factors that influence teacher expectations and student achievement. The purpose of this study was to scrutinise the Pygmalion effect.

There were several later studies carried out by Ambady (1992, 1993) and Rubie-Davies (2006, 2015, 2016) that were supported by Rosenthal (either guided or written in co-authorship with him) that used randomised controlled trials of teacher expectation interventions. Despite over 50 years of critiques, in the 21st century

there have been randomised controlled trials of teacher expectation interventions conducted by Ambady (1992, 1993) and Rubie-Davies (2006, 2015, 2016), some of which were supported or co-authored by Rosenthal.

Overall, to finalise the discussion about using quantitative methods in the research on teacher expectations, several limitations of these methods in social research should be mentioned:

- **Limited generalisability.** Findings from experiments and quantitative designs may not be applicable to real-life situations beyond the specific context in which the research was conducted.
- **Lack of context.** Quantitative designs often do not provide sufficient context or detail about the social phenomena being studied. This can make it difficult to understand the complex social processes and meanings that underlie the research questions.
- **Ethical issues.** Experiments and quantitative designs can raise ethical concerns, such as the use of deception or manipulation of participants. This can compromise the wellbeing and autonomy of research participants.
- **Simplification of social reality.** Social phenomena are complex and multifaceted. Quantitative designs may oversimplify or reduce them to easily measurable variables. This can result in a loss of important information and nuances that are essential to understanding the social phenomena being studied.
- **Reliance on quantitative data.** Quantitative designs often rely solely on numerical data, which may not capture the full range of experiences and perspectives of research participants. This can limit the scope and depth of the research findings.

While each research design has its own purpose and there is no strict dichotomy between qualitative and quantitative research, the focus of this chapter was to illustrate the limitations and potential negative effects of relying solely on one particular methodology.

6.5 Qualitative Research

After exploring the potential limitations of quantitative research design in the previous section, attention is now turned to qualitative research design. Qualitative research offers a unique approach to understanding the social world; however, it is not without its own drawbacks. These limitations can include issues related to data collection, analysis and interpretation. Therefore, it is important to critically examine the drawbacks of every research design in order to fully understand its strengths and weaknesses for a certain study.

After conducting this analysis, it became apparent that publications produced in the late 1960s and early 1970s utilised quantitative designs and sought to emulate the concepts employed in Rosenthal and Jacobson's research. Rather than exploring, expanding or providing a more nuanced understanding of self-fulfilling prophecy and teacher expectations through qualitative methods, they simply replicated the original study.

In the realm of social research, qualitative studies gained popularity during the 1990s and 2000s. For instance, the educational criticism methodology (Eisner, 1991) was employed by Keys (2007). Milner (2005) also utilised qualitative methods, including class discussions, class assignments, interviews and open-ended feedback questionnaires to investigate, assess and represent the findings. Despite this trend, a significant number of scholars still employ experimental designs in research in the field of Education. For example, Ding and Rubie-Davies (2019) used regression analyses and multivariate analyses of variances to demonstrate that students' backgrounds and low socioeconomic status may affect teachers' expectations of their academic outcomes.

Both methodologies have their own limitations; therefore, it might be important to acknowledge them and consider supplementing quantitative methods with qualitative ones in social research where applicable and possible. This may involve, for example, educational criticism and class discussions in order to obtain a more comprehensive grasp of the impact of teacher expectations on student outcomes.

6.6 Conclusion

Discipline and dominant paradigm, as well as the personality, training and professional adherence of a researcher, shape the understanding of how knowledge is being formed and what topic should be researched, and which methods might potentially be the best fit for this purpose. Serious doubts about the reliability and validity of Rosenthal and Jacobson's findings were immediately thereafter being raised in the professional literature (Snow, 1969; Thorndike, 1968), due to a tendency to look at interpersonal relationships as a dataset, deliberately simplifying or occasionally omitting social context.

Despite the controversy and critique, employment of quantitative designs from the psychological field in social educational research, back in the 1970s, was ubiquitously spread and considered appropriate. A great number of quantitative studies were made by psychologists who adhered to positivism and were in search of the "truth" about the existence of expectancy effect. This led to some entrenched beliefs about teacher–student interactions that might not have been fully correct because, for example, they may have lacked some important features of interpersonal communication and interaction.

It is now evident that research studies with a positivist worldview may fail to consider important factors, such as demographic features, individual traits of students and teachers, and the complexities of the classroom and school system, which is often a government-led institution. However, quantitative studies may also be considerably limited for some research questions. Both quantitative and qualitative methods can be effective. However, if research should align with the necessary evolutionary changes in schools and consider the relationships among people within complex systems, qualitative design might become a better option. To ensure that teachers are a good fit professionally, ethically and institutionally, it is essential to implement necessary changes in a timely manner. Qualitative methods can also be particularly useful in achieving these goals.

Chapter 7: Evolution of Theory in Teacher Expectations Research

7.1 Introduction

The preceding chapters have discussed findings related to the initial accumulation of knowledge related to teacher expectations, the prevalence of certain research disciplines and methodologies, and their effects and limitations. In this chapter, we will delve into another significant finding that emerged from this systematic literature review, which concerns the application or lack of application of specific theoretical frameworks. This part of the study will reflect on the use of various theories, models and frameworks utilised by scholars in their research on teacher expectations. It will primarily focus on certain theoretical frameworks that were incorporated into the educational context, thereby influencing the discourse, ethical standards and knowledge development within the field.

Theory is an essential component of any study because it provides explanation and brings meaning that data researchers can gather. Additionally, sometimes theories that are used or created do not merely describe phenomena, but *shape* the social reality (Callon, 1998; Gond et al., 2016).

7.2 Early Studies

The first theoretical framework that was closely related to the topic of teacher expectations was the self-fulfilling prophecy theory (which was not evidence-based). Although it gained widespread popularity in the fields of sociology, psychology, education and many more, acknowledging its potential drawbacks is crucial, as relying on it may lead to the perpetuation of errors, “with the prophet using the actual course of events to support their pre-existing beliefs” (Merton, 1948, p. 195). In this section, examples of the use of this theoretical framework will be presented.

To begin with, Meichenbaum et al. (1969), Brophy and Good (1970) and Jose and Cody (1971) were examining the mediating mechanisms of teacher expectancy. *No theoretical underpinning* was suggested, since this investigation was “a partial replication of the Pygmalion study, with the addition of observation measures of teacher-pupil interaction” (Jose & Cody, 1971, p. 40). These three studies were supportive of the hypothesis of Rosenthal and Jacobson and indicative of the behavioural patterns when teacher expectations function as self-fulfilling prophecies. However, Brophy and Good *created their own 6-step model* that included the student side. This became widely used later by both psychologists and education specialists.

Dusek (1975) did not explicitly state a theoretical framework in his review. However, he drew upon various studies and theories from the fields of psychology and education, such as self-fulfilling prophecy and the concept of behavioural confirmation. He argued that

...since there is no theoretical or empirical reason to justify limited expectancy effects, they are at best suggestive but certainly not conclusive evidence that teacher expectancies bias students' IQ test performance. (p. 672)

Dusek explained the relationship between teacher expectations and student outcomes. He also discussed the impact of teacher behaviour and communication on student self-concept and motivation.

Sutherland and Goldschmid carried out a study in 1974 to investigate the connection between students' expectations and their increase in IQ. However, the study *did not rely on educational theory or knowledge* to back up its conclusions. Likewise, in 1977, Cooper refrained from relying on an evidence-based pedagogical framework. The absence of any explicit theoretical framework made it challenging to discern. Nevertheless, it is highly likely that Cooper was swayed by the dominant theory of self-fulfilling prophecy during that era. This theory suggests that expectations can significantly affect the conduct and achievement of individuals, particularly in educational contexts.

Snodgrass (1982), who investigated the factors mediating teachers' expectations for their pupils' performance in co-authorship with Rosenthal, used the theoretical framework of prophecies or expectancies, assuming "that one person's expectations for another person's behavior can actually affect that other person's behavior, increasing the likelihood that he or she will behave as expected" (Snodgrass & Rosenthal, 1982, p. 219). This study was based on the ideas of social learning theory and attribution theory.

Social learning theory suggests that individuals learn and model their behaviour based on their observations of others. In the context of education, this means that students may model their behaviour and expectations based on how their teachers treat them and other students. Attribution theory, on the other hand, suggests that individuals try to understand the causes behind the behaviour of themselves and others. In the context of education, this means that teachers may form expectations of their students based on their perceptions of the causes behind their behaviour, such as their abilities, effort or external factors like family background.

Raudenbush (1984), who published a synthesis of 18 experiments, as well as his contemporaries, used *teacher expectancy theory*. His synthesis included experimental studies that had tested the effects of teacher expectancy on pupil IQ. He started with the explanation that the process of expectancy induction was "viewed as the Achilles' heel of Pygmalion (Rosenthal & Jacobson, 1968) experiments" (Raudenbush, 1984, p. 85).

Despite the fact that studies had already appeared that were not supportive of Rosenthal and Jacobsen's hypotheses and findings on similar samples, and casting doubt on previous assumptions and theories, some researchers were not willing to give up their beliefs and kept defending established paradigms (established mostly by themselves).

Rosenthal himself has been party to a long and varied history of research on teacher expectations. In 1974, he offered the model with four factors that affect student outcomes in the classroom that may lead to the maximisation of student achievement as a result of "positive self-fulfilling prophecy effects". He used this

concept of prophecies later as a co-author of different studies about expectations with Ambady, Babad and Rubie-Davies. Over the years, Rosenthal's theoretical framework evolved to include a greater emphasis on social cognitive theory, but self-fulfilling prophecy theory was also his major justification.

In 1993, Rosenthal collaborated with Nalini Ambady on a subsequent study that utilised the *ecological theory of interpersonal perception*. This theory posits that individuals communicate certain stimulus information, or “affordances”, that perceivers can detect if they are attuned to detecting it. The study suggested that teachers could benefit from being aware of their nonverbal behaviour and undertaking training in nonverbal skills, although it did not guarantee that such training would improve teaching effectiveness (Ambady & Rosenthal, 1993).

The study by Guskey (1982) was inspired by the topic of expectancy effect and by the research of earlier scholars, including numerous studies written by Rosenthal, Brophy and Good. But despite the apparent similarity of views, Guskey's study shed light on the lack of inclusion of important aspects of the learning process in discourse. According to this study, “several aspects concerning teacher expectations have received only scant attention” (p. 345). Guskey shifted focus to the importance of programs and curricula that had been developed *to enhance the instructional effectiveness of teachers*, the mastery of learning instructional strategies and educational philosophy – formally proposed by Benjamin Bloom in 1968, when the era of the educationalist in the topic of teacher expectations began.

7.3 Shift towards Educationalists

While early research was characterised by a lack of theoretical framework, it is now time to move beyond the self-fulfilling prophecy era into a period where the theoretical landscape of educational research had undergone a significant transformation. Educationalists started questioning the psychologisation of the discourse and the lack of theoretical grounding for teacher expectations. This necessitated the development of new theories that could validate and broaden the scope of the inquiry.

Two decades after the Pygmalion study, Good (1987) summarised what had been known by that time about “two types of teacher expectation effects [...] which are *the self-fulfilling prophecy effect and the sustaining expectation effect*” (p. 32, emphasis added). He relied on Brophy and Good’s model, introduced in 1970, although he also said that as teachers tend to change their expectations when more information becomes available, it subsequently “limits the possibility for self-fulfilling prophecy effects which are based on false or unjustified expectations to occur” (p. 34). Good further speculated in this later research on *pedagogical techniques and instructional strategies* of interaction with pupils in mixed-ability classrooms, showing their significance and mentioning 17 strategies that a teacher may consciously or subconsciously follow and use to communicate their expectations. Such strategies include:

- waiting less or more time for students to answer;
- giving answers immediately rather than waiting or trying to improve students’ responses by giving clues;
- rewarding inappropriate behaviour;
- criticising low achievers;
- praising some students less or more frequently;
- not giving required feedback;
- interacting with low achievers less frequently;
- seating low achievers farther away from the teacher;
- less eye contact; and
- less acceptance of the ideas of particular pupils.

The study by Good (1987) also contains references to models for *indirect mediation of expectation effects* (Cooper’s model, 1979, 1985) and *attribution theory models* (Dweck & Elliott, 1983; Eccles & Wigfield, 1985). Another book by Good and Brophy, published in the same year (1987), outlined a series of practical advice and guidelines for teachers based on expectation research. This guidance aimed to improve classrooms that feature low expectations, unfair climate or any other challenges. Later, Good and Weinstein (1986) collaborated on a study that

investigated how students perceive information and differential teacher treatment in relation to their self-esteem, motivation and performance expectations. Specifically, the study focused on how teachers' treatment of their students could influence their self-concept and subsequent academic performance. The researchers found that when teachers provide positive feedback and high expectations for their students, it can enhance their self-esteem, motivation and performance. Conversely, when teachers provide negative feedback and low expectations, it can lead to a decrease in self-esteem, motivation and performance. The study highlighted the importance of teachers being aware of how their treatment of students can impact their academic outcomes.

Another critical study that drew the line in trying to theoretically comprehend teachers' influence 25 years after the initiation of teacher expectation research, was Babad's (1993) article "Pygmalion – 25 Years after Interpersonal Expectations in the Classroom". Babad explained the limitations of paradigms and theories that educational psychologists had been stuck to, and he used "historical analysis" (p. 125) in his study, which seems to be similar to Foucault's concept of genealogy. Since the psychologist perspective "is more practical than theoretical, focused on the classroom context and on teacher-student interaction, they [psychologists] are concerned about potential (particularly negative) influences of teacher expectancies on students" (p. 126). Babad pointed to the lack of studies examining affective student outcomes, such as students' self-concept, sense of efficacy, motivation, morale and school satisfaction. He focused in his review on the shift from SFP (self-fulfilling prophecy effect, or "Pygmalion effect") to *SME (self-maintaining expectancies, or "Golem effect")* and *from experimental studies to actual classroom studies* that finally made clear what transformations in the classroom can be introduced.

By that time, the lack of applied intervention was considered to be the weakest aspect of teacher expectancy research. Three types of interventions were developed and proposed to address this gap: sets of recommendations, controlled experimental studies and large in-service training projects. The ideas of Babad also formed the

basis for creating such training programmes as TESA (Teacher Expectations and Student Achievement) (Kerman et al., 1980), which was designed to reduce the negative effects of low teacher expectations (Gottfredson et al., 1995).

The next shift in knowledge production occurred when research began to focus on *students' perceptions of instructional events* and how students reacted to those events. This line of inquiry investigated students' perspectives and voices, and the impact they had on instruction and its outcomes. For example, in 1984, Brattesani et al. conducted research that examined students' perceptions of instructional events. Similarly, Kuklinski and Weinstein investigated children's perceptions and the stability of the classroom environment in 2000. *A student mediation model of teacher expectation effects* was like a mirror, demonstrating that students acquire information about their abilities by observing the differential treatment of their teachers and performing according to the expectations perceived, changing their behavioural patterns and actions. It was clear not only that teachers influence students, but also that students influence teachers. Later, in 2017, Gutwein and Andrews also focused on students' interpretations and understanding of teachers' expectations for them.

Keys (2007) examined the system of beliefs from a novel perspective by presenting the *theoretical knowledge filter model*, which shows how teacher beliefs and practices shape science curriculum implementation in Australia. *Eisner's educational criticism methodology* was employed in this study, which entailed describing, analysing, interpreting and evaluating an everyday school activity. The curriculum development was illustrated in the theoretical knowledge filter model as being filtered through several types of teacher knowledge, such as craft knowledge, pedagogical content knowledge, personal pedagogical knowledge, practical knowledge and beliefs. These beliefs, according to the model, can be observed at different stages of the educational process, including planning, implementation and assessment.

The series of research studies about expectations conducted by Rubie-Davies (2006, 2009, 2014, 2016) were aimed at class-centred expectations, and the self-perceptions of students placed in the classrooms of high- and low-expectation

teachers in schools in New Zealand. Rubie-Davies employed *social cognitive theory* and also drew on *expectancy value theory* and *attribution theory* in her research.

Johnston et al. (2019) conducted a recent literature review that critically synthesised ten years of international research on teacher expectations, analysing the effects of teacher expectations on students, teachers' development of expectations, teachers' differential treatment of students and students' reactions to teacher expectations. However, Johnston et al. argued that there is a knowledge gap in the analysis of what students think about their teachers, which can only be addressed through qualitative research that explores students' reactions to teacher expectations. The study employed a simplified version of the *expectation effect process model* developed by Brophy and Good in 1970 as a framework, which includes four steps. While previous research has focused on teachers' development of differential expectations and students' outcomes, such as IQ test scores, Johnston et al. argued that an important step in the expectation effect process, which is consistently omitted in research, is *how students react to teacher expectations*.

7.4 Conclusion

Over time, there has been a substantial transformation in both directions – in the production of knowledge related to teacher expectations and in the application of theoretical frameworks in this area of research. Initially, it was seen through the lens of psychology and research focused on examining the impact of teachers' expectations on students' academic performance. However, as more educationalists became involved in the research, attention was paid to the processes and relationships involved in teaching, as well as interventions that could be implemented to improve the behaviours and perceptions of teachers and students. Despite the early studies being primarily focused on hypothesis testing, due to a strict adherence to positivism, recent research has demonstrated tangible changes.

Educationalists brought evidence-based theories to the field of teacher expectations. For example, *attribution theory*, that examines how individuals make sense of their own and others' behaviour and the impact of those attributions on subsequent

behaviour. Or *expectancy value theory*, that focuses on how an individual's expectations for success and the perceived value of a task influence their motivation and performance. Or *social cognitive theory*, that explores how individuals learn from observing others' behaviour and the impact of those observations on their own behaviour. These theories were mentioned in some of the studies. Incorporating these and other theoretical frameworks has enabled researchers to gain a more comprehensive understanding of teacher expectations and their impact on students.

Chapter 8: Discussion

8.1 Introduction

The present study aimed to investigate the phenomenon of teacher expectations, which has been widely recognised as an important factor in shaping students' academic outcomes and educational experiences. Through a comprehensive review of the literature, this study sought to identify key patterns in the knowledge production about teacher expectations over time.

As discussed in the previous chapters, the findings of this study suggest that the understanding of teacher expectations has evolved significantly over the years, from initial psychologisation, when studies focused mainly on testing hypotheses, to more recent attention to teaching interventions. Recent research has demonstrated the potential for real transformations by changing teachers' beliefs, knowledge, skills, attitudes and practices.

This chapter will analyse the study's findings and their broader significance for education policy and practice. It will specifically explore how the insights gained about teacher expectations can be utilised to develop effective interventions and strategies for enhancing education quality and communication between all participants in the educational process. To speculate on the potential benefits of this knowledge, the ideas of educational philosophers such as John Dewey and Paolo Freire will be discussed. Through this discussion, I aim to critically reflect on the implications of the study's findings, share ideas and suggest avenues for future research in this field.

8.2 Disciplinary Influence and future research

One of the key tasks of this research was to identify how teacher expectations have been perceived and why, and how this line of inquiry has been developed. To understand *who* undertook research, *why* this research was initiated in the area of teacher expectations and *why* it was supported, reference is made to the central

study that emerged around this topic. The “Pygmalion in the Classroom” study was cited by other scholars more than 13,000 times, according to Google Scholar citations. It influenced scholars, who employed the methods and principles laid out in this study in their own research. And even though these principles were questioned when some studies failed to obtain similar results, this paradigm of the Pygmalion remained popular.

The prevailing self-fulfilling prophecy framework was primarily applied to sociological contexts, particularly racial discrimination, when the term was introduced to social science by Thomas Merton in 1948. Later on, this framework was given various names, such as the “Oedipus effect” in psychoanalytic theory (Popper, 1957), “bootstrapped induction” in sociology (Barnes, 1983) and “Barnesian performativity” (MacKenzie, 2006), and it gained widespread use. But the origins of how the concept of self-fulfilling prophecy was applied to the classroom and the teaching–learning process still remains uncertain. It was readily accepted by proponents without opposition and treated as factual. This led to subsequent research in the 1970s to the 1990s being solely based on this premise, without any other theoretical basis or critical examination.

It is evident now that the extent to which research is moulded is greatly influenced by the role of the academic field. Various factors – such as the discipline, paradigm, author's background and training, traditions and methodological approaches – have a direct impact on how phenomena are conceptualised. They also determine the scope of research. As previously mentioned, reflexivity is crucial for conducting fair research. According to Whitaker and Atkinson (2021), these aspects provide researchers with templates and exemplars that can guide them. However, they can also limit research by implicitly excluding, downgrading or marginalising other phenomena, making them “unthinkable” (p. 26).

Continuing the idea of disciplinary reflexivity, Whitaker and Atkinson (2021) assert that “there is a tendency towards the personalisation of research, the confessional revelation of the author's biography and the expression of personal, even emotional, engagements with the research” (p. 21). That is why knowing those people who

stood at the origins of knowledge formation and influenced the scientific paradigm might move the discussion from what was studied and what was supposed to be confirmed to *who* studied, *what* assumptions were confirmed, supported by *which* theoretical framework/s, *why* the research was generally done this way, for *what* purpose, *how* and using *what* methods.

Interdisciplinary research is crucial for generating knowledge that can have practical applications in academic investigations. By bringing together researchers from diverse backgrounds and acknowledging how their upbringing, training and social location (e.g., race, ethnicity and social class) might have impacted their work and the participants they study, interdisciplinary research allows for a more nuanced understanding of research questions, methodologies and outcomes. Additionally, interdisciplinary research emphasises the significance of examining the impact of those who benefit from it as well as those who may be vulnerable. This issue has become integral to this thesis and its research questions.

If researchers had more opportunities to interact with experts from different fields (such as sociology, psychology and education), and who possess practical knowledge and teaching experience, the research on teacher expectations might have been significantly enhanced. Collaboration between diverse fields can lead to a more holistic understanding of complex phenomena and can help researchers to identify new research questions and approaches that they might not have considered otherwise. Furthermore, interdisciplinary research can lead to more practical and applicable results, as it allows researchers to approach problems from multiple angles and perspectives, which can be particularly valuable in addressing real-world issues.

For future research, it would be fruitful to explore the intersectionality of teacher expectations by investigating how various social factors, such as race, gender, and socioeconomic status, intersect and influence these expectations. Additionally, longitudinal studies could provide insights into the long-term effects of teacher expectations on students' academic and personal development. The role of cultural differences in shaping teacher expectations is another area that warrants

exploration, as it can contribute to a more comprehensive understanding of the dynamics at play in diverse educational settings. Moreover, investigating the impact of teacher expectations on students with different learning styles and abilities can offer valuable insights into inclusive educational practices. Finally, future research could delve into the practical implications of these findings for teacher training programs, curriculum development, and educational policies to foster a more equitable and supportive learning environment for all students.

8.3 Student Voice

The Pygmalion study asserted the existence of expectancy effects. Differential teacher behaviour that communicated different expectations to individual children was also well documented in the studies of Brophy and Good. The approach suggested by many scholars in the 1960s and 1970s disregarded the idea that students themselves are active participants in relationships in the classroom, rather than passive subjects of learning. Therefore, later approaches regarding teacher expectations utilised interventions and attempted improvement in interaction in the classroom, assuming the importance of both teacher and student reactions and behaviour.

The extensive use of Rosenthal and Jacobson's paradigm and experimental design resulted in a modest contribution to our understanding of the actual effects of teacher expectations on students' lives and the dynamics of classroom interaction. The significance of teacher expectations was not extensively discussed in the replicated studies. Instead, researchers focused on quantifying self-fulfilling prophecies, thereby neglecting other factors and conditions that influence student development and learning. Questions still remain regarding why some studies on teacher expectations concentrated on the existence of expectancy effects, rather than examining factors that may have contributed to unequal treatment and underrepresentation of students' perspectives.

Later research, as proposed by Weinstein et al. (1982), investigated the role of student behaviour in shaping teacher expectations. It was found that teacher

expectations are not solely based on preconceptions but are also influenced by students' past behaviour and performance in class. This suggested that students have agency in shaping their own treatment in the classroom. Good and Brophy (1990) extended this line of research by examining the effect of teacher–student interactions on academic achievement. They found that teachers' positive interactions with students, such as providing constructive feedback and supportive environments, are associated with higher academic performance. Babad (1993) further explored the impact of students' perceptions of teacher behaviour on academic achievement. He found that students' beliefs about their teachers' differential treatment of them can affect their motivation and ultimately their academic performance.

These studies have shifted the focus from viewing teacher expectations as prophecies that fulfil themselves to investigating the multiple factors that influence teacher behaviour and student outcomes, including students' behaviour, teacher–student interactions and students' perceptions of differential treatment, making this research student-oriented.

To further explore the student perspective, future research could delve into qualitative methodologies, such as in-depth interviews, focus group or surveys, to capture the nuanced experiences of students in the classroom. Understanding how students perceive and interpret teacher expectations can provide valuable insights into the mechanisms at play and the potential impact on their academic and personal development. Additionally, investigating the role of student agency in shaping teacher expectations and exploring interventions that empower students to positively influence their educational experiences could be a fruitful avenue. Moreover, exploring the intersectionality of student experiences, considering factors like race, gender and socioeconomic status, can contribute to a more comprehensive understanding of how teacher expectations impact diverse student populations. Finally, incorporating student feedback into teacher training programs and educational policies can help create more inclusive and equitable learning environments.

8.4 Interventions

During the process of collecting data from the 36 selected articles that met the interrogation criteria (as detailed in the Appendix B), a number of issues arose regarding the reliability of knowledge that was stated in the early studies, and the rationale behind the findings. There were questions about the reasons for investigation of prophecies in education and whether this should even be studied. Such educational aspects as communication in the classroom, curriculum, quality of teacher training and classroom management techniques were not discussed much, according to the 36 studies that were analysed. This approach may have led to insights that could have transformed knowledge and discourse and enabled researchers to identify effective interventions that could have improved teacher–student relationships in the classroom.

However, several studies have proposed effective interventions in classrooms to address biased teacher behaviour and expectations. Here are a few examples:

- **Expectancy value interventions.** These interventions aim to increase students' motivation and interest in a subject by helping them to develop a sense of belonging and emphasising the value of the subject. Good et al. (2003) found that an expectancy value intervention led to improved performance in a math course, particularly among African-American students.
- **Professional development for teachers.** Several studies proposed that providing professional development for teachers that focuses on recognising and addressing their own biases can lead to more equitable classroom practices. For example, Burgess and Sievertsen (2020) found that a professional development program for teachers that focused on addressing implicit biases led to improved academic outcomes among marginalised students.³
- **Culturally responsive teaching.** This approach involves teachers adapting their teaching practices to better align with their students' cultural

³ They described their findings in the article “Schools, Skills, and Learning: The Impact of COVID-19 on Education”.

backgrounds and experiences. Ladson-Billings (1995) proposed this approach and found that it led to improved academic outcomes among African-American students.

In a 2005 article, Milner argued that teachers' beliefs, knowledge, skills, attitudes and practices needed to be transformed or at least reconsidered to meet the needs of diverse learners in an ever-changing world. This prompted a renewed focus on the interaction between the subjects of the educational process and the unique characteristics of the process and participants. Factors such as cultural, racial differences and learner diversity were said to be central for teachers in public schools.

In light of the findings and the envisioned future research focusing on students' perspectives of teachers and their treatment discussed previously in the paragraph 8.3, there is an opportunity for the development of innovative studies and interventions aimed at enhancing the quality of education and monitoring the transformative impact of these interventions. Future research could delve into a qualitative exploration of students' nuanced experiences, capturing their perceptions of teacher expectations through methods that qualitative research can offer.

Moreover, interventions could extend beyond teacher training programs to include multifaceted strategies fostering open communication and mutual understanding in the classroom. Initiatives might involve the implementation of peer mentorship programs, where students support each other in navigating academic challenges, thus promoting a collaborative and supportive learning environment. Additionally, the establishment of student advisory boards could offer a platform for students to actively contribute to shaping classroom dynamics, curriculum, and school policies.

Furthermore, interventions could encourage student involvement in goal-setting processes, fostering a sense of ownership and agency in their educational journey. Creating opportunities for student-led initiatives and projects could empower students to showcase their talents, interests, and perspectives, challenging traditional notions of teacher expectations. By embracing these interventions, education systems can move beyond conventional paradigms, fostering inclusive,

student-centered environments that not only question but actively reshape teacher expectations. Continuous assessment and tracking mechanisms can then measure the effectiveness of these interventions, ensuring a dynamic and responsive educational landscape.

8.5 Positivism versus Educational Philosophers

The research conducted by representatives of one particular field (psychology, in our case) may lack a comprehensive understanding of the broader context of the classroom, such as everyday experiences, interactions, challenges, self-beliefs, social judgements, personalised education and modern teaching techniques. As we can see from the findings, research of the 1960s and 1970s was built mostly on positivism. In positivists' studies, the role of the researcher is limited to data collection and interpretation. Positivist researchers employ theories that see the world "as it is" and base their assumptions upon analysing physical elements (McGlinchey, 2022). Since the dominance of psychological research in education was established right from the beginning, it is not surprising that most of the research used quantitative rather than qualitative design in the field.

It is worth noting that quantitative studies are not wrong or inaccurate; they are useful in a positivist paradigm when some hypotheses should be proved. However, in the case of teacher expectations, when we analyse processes and relationships between the subjects of these processes, the topic itself requires depth and descriptiveness rather than replications and correlations.

Looking back at the historical development of research on teacher expectations, it becomes apparent that several key adjustments could have been made to prevent the "under-theorisation" of this field. Instead of solely focusing on the objective truth of laboratory experiments, research could have paid more attention to the reactions of students and the practical experiences of teachers in their everyday work. By prioritising the insights of those who are directly involved in the teaching and learning process, the significance of teacher expectations and their impact on students could have been better understood.

Given the significant limitations of the positivist research paradigm, it is crucial to interpret findings with caution to ensure accurate conclusions are drawn from the study. It is also important to acknowledge that experimental conditions and interpretations are often limited. To gain a broader perspective, it may be beneficial to consider the ideas of educational philosophers to enrich the discourse about teacher expectations and deepen our understanding of the topic.

8.5.1 John Dewey's Philosophy

To gain a deeper understanding of classroom dynamics and how teacher expectations affect students in this context, it is essential to consider the perspectives of educationalists. If ideas of education philosophers had been considered in the late 1970s when expectancy research was initiated, deeper results could have been gained – for example, such studies as John Dewey's *The Child and the Curriculum* (1902) or Paulo Freire's (1972) ideas about the “banking concept of education”.

John Dewey's ideas could have had a significant impact on the ideas of teacher expectations and the interaction of teachers and students in the classroom. The philosophy of John Dewey in 1938 implied that

anything that can be called a study must be derived from materials that at the outset fall within the scope of ordinary life experience. There appears a consensus that our everyday life experiences are significant for articulating indigenous knowledge that is central to our harmonious existence with our surroundings. (Akena, 2012, p. 602)

Dewey was a progenitor of *progressive education* and one of the founders of American *pragmatism*. He advocated a child-centred curriculum to make sure that students participate in the education process and receive adequate education according to their present state of mind. He believed that the role of a teacher is to facilitate a child's learning by adapting instruction to the child's individual needs, abilities and interests. Dewey's ideas challenged the traditional model of education, which was characterised by a rigid curriculum, rote memorisation and authoritarian teaching methods. By emphasising the importance of individualised instruction and

the role of the teacher as a facilitator of learning, Dewey's work could have changed the way that teachers interact with their students in the classroom.

In the context of teacher expectations, Dewey's emphasis on individualised instruction could have led to greater recognition of the importance of understanding each student's unique background, experiences and abilities. This could have resulted in a more nuanced understanding of how teacher expectations can impact students in different ways, depending on their individual traits. Additionally, Dewey's philosophy could have emphasised the importance of a collaborative relationship between teachers and students, which could have encouraged teachers to be more open to feedback and to adjust their expectations based on the needs and abilities of their students. Dewey's main message was that the significance of teachers is in becoming a vehicle that imparts and delivers the curriculum (knowledge and skills) to give students the experience they need in the context of democratic social living. He pointed out that the authoritarian knowledge approach of education is too focused on delivering knowledge instead of acknowledging students' experiences and differences.

In the late 1960s, a crisis in education resulted in a shift towards reducing the understanding of "achievement" or "academic performance" in the classroom to numerical grades and letters, prompting changes in grading policies and the adoption of a pass/fail system in American colleges. This may explain why IQ achievement test results received a significant amount of attention.

Dewey focused on the ways that universal education serves the needs of society and popularised the theory of "ends-means" through education, saying that if we find the process of learning to be amiss, then its initial "goal" cannot be satisfied, nor can it really be called its actual goal. It is tempting to claim that he would not endorse the research methods employed to establish the existence of expectancy effects or to check the relation between teachers' beliefs and students' IQ test results. Dewey's perspective on grading systems suggests that instead of reducing a student's diverse abilities in subjects such as music, drama, drawing and mechanical skills to

a single numerical or letter grade, a more adaptable measure of achievement should be proposed.

IQ testing was the means that had been unanimously accepted by psychologists who included its results in their experiments to analyse expectancy effects and make conclusions based on their findings. However, conflict theorists⁴ argue that IQ tests, which claim to assess intelligence, actually assess cultural knowledge and therefore exhibit a cultural bias (Tomlinson, 2017). While testing how successful first graders were in answering IQ-test questions, and implementing these principles universally, researchers of the late 1960s and 1970s might have unwittingly supported inequality, differential treatment and those conditions where they are formed.

8.5.2 Paulo Freire's Contribution

Since this sub-section is focused on the philosophical perspective of education's function in shaping societies, it is essential to incorporate another significant idea raised by educational philosopher Paulo Freire. Freire, a Brazilian thinker and educator, saw his mission as liberating impoverished Brazilian peasants from "oppression":

Brazilian people found themselves castrated from the start when it came to expressing themselves. Marginalized and devoid of civil rights, the common man found himself (*sic*) irredeemably alienated from any experience of self-government or dialogue: made constantly submissive, 'protected', the only way to react was by a clamorous outcry – the voice of those who are mute when faced with the growth of communities and never have the option of finding an authentic voice. (Gadotti & Torres, 2009, p. 1258)

Freire strongly criticised the education system based on the fundamental principles of a banking system, where students are treated as empty vessels to be filled by teachers without the opportunity to contribute their own voice to their learning. He advocated for the complete elimination of the teacher–student dichotomy and

⁴ Conflict theory is based on the idea that education maintains inequality and perceives the power of those who dominate.

recommended replacing it with concepts like teacher–student (where the teacher learns while teaching) and student–teacher (where the student teaches while learning), which he incorporated into his 1968 seminal book, *Pedagogy of the Oppressed*. He focused extensively on citizenship education, which he referred to as education for a sustainable society.

It is possible that if Paulo Freire or John Dewey had collaborated with Robert Rosenthal in the 20th century, the focus of research on teacher expectations would have shifted away from IQ test results towards understanding the fundamentals of the learning process, giving voice to students, enhancing teachers' expertise and using education techniques, curriculum delivery and dialogue formats that build trust and foster honest interaction between teachers and students. If such a collaboration had taken place, it is highly probable that the methods and findings we have today would have been distinct from what they are now.

While it is widely acknowledged that it is essential for education researchers to investigate interventions, techniques and methods that can enable teachers to have a positive impact, there remains a shortage of such research and transformative actions are lacking. There are still many questions for scholars who conduct positivist research in social science without theorisation or implement at least some ideas of practitioners and philosophers. However, it appears that current education research is becoming too focused on students' perspectives and their understanding of the situation, as well as the factors that contribute to developing professional teachers, so that they “act on judgements made in the best interests (as they see them) of their students” (Furlong & Barton, 2000, p. 289).

By considering various psychological and educational theories, scholars can develop more nuanced and evidence-based strategies for improving teacher expectations and ultimately enhancing student outcomes. It appears essential for scholars and governments to identify and address any biases in teacher and student behaviour that may result in unequal expectations and treatment to ensure that all students are treated equitably. Incorporating the ideas of education theorists may also be helpful in achieving this goal.

8.6 Limitations of the study

Despite the meticulous application of the PRISMA framework and the establishment of three layers of criteria for article selection, it is essential to acknowledge the inherent human factor involved in assessing and selecting articles. The subjective nature of this process, influenced by the researcher's judgment, may introduce potential biases. Personal inclinations and perspectives, as well as the personality of the author, could inadvertently shape the research selection, affecting the objectivity of the study.

Furthermore, the constraints of time and the nature of this research posed challenges in delving into certain topics with the desired depth. For instance, the transition from Mignolo to Foucault and the path from genealogy to disciplinary reflexivity were touched upon, but the limited scope hindered a more exhaustive exploration. In this context, a more comprehensive discussion incorporating perspectives from scholars like Wanda Pillow, particularly her noteworthy contributions to reflexivity in qualitative research, especially her recent publication "Reflexivity: The Matter of Reflexivity or What Matter Matters in Postqualitative Inquiry" (2024) could enrich the narrative. Additionally, if time allowed, a deeper exploration of educational researchers and activists such as Dewey and Freire could have been undertaken, offering insights into how they might respond to contemporary research on teacher expectations. These limitations highlight avenues for further refinement and expansion.

The observation concerning the underrepresentation of female scholars, such as Lather and Pillow, raises valid concerns about gender balance in the discourse. This aspect could be another intriguing point for exploration in further research. Additionally, the gendered dynamics within the university, particularly in relation to Bourdieu's work on class, prompt a critical examination of the intersectionality of these issues.

Finally, the absence of a comparative analysis between the U.S. and Australian contexts in terms of racism and colonialism underscores a potential area for future

exploration. Such a comparative lens would contribute to making the work more relevant to the Australian context and foster a nuanced understanding of the intricacies surrounding these issues. Moreover, it is noteworthy that the study leans towards a Westernized paradigm, largely drawing on the perspectives of American psychologists, which could be an avenue for further reflection on the global representation of research in this domain.

8.7 Conclusion

This systematic review aimed to show the significance of teachers' expectations and to reflect on knowledge production over half a century. This research became an attempt to examine what has been known about teacher expectations and arc back to take a close look at decades of teacher expectations research.

This close examination of 50 years of social research about teacher expectations through a disciplined systematic literature review, that met PRISMA 2020 guidelines, and employing Foucault's genealogy and disciplinary reflexivity to examine key studies, has revealed three major findings.

1. The conceptualisation of teacher expectations has undergone significant transformation over time from blind replications based on self-fulfilling prophecy theory to analysing pedagogical practical tools and their influence on teacher–student relationships.
2. The traditional psychological perspective has dominated the field. Additionally, the disciplinary worldview of traditional psychology employed in early studies about teacher expectations ignored teacher professional knowledge and tended to uncritically replicate earlier studies.
3. The field of teacher expectation research still lacks theoretical development and consideration. Incorporating the ideas of philosophers such as Paulo Freire or John Dewey could have significantly enhanced the depth of research in this area. Synthesis of data has shown that around half of those studies that were selected did not aim to justify their findings with any education or

social theory. The under-theorisation of research related to teacher expectations has been identified as a major challenge in the field.

Based on these significant findings, it is imperative to prioritise the role of theory in guiding research related to teacher expectations. This will help to ensure that the field produces rigorous and meaningful research that considers the diversity of classrooms and students, and their varied reactions, perceptions and goals.

In conclusion, this study has highlighted the intricate nature of the concept of teacher expectations, which requires multifaceted and interdisciplinary approaches for a comprehensive understanding.

The findings of this research suggest that there is a need to broaden the scope of teacher expectations research by exploring the various factors that shape teachers' expectations, including the impact of social and cultural factors on teachers' beliefs and practices. Moreover, there is a need to critically reflect on the role of dominant disciplinary perspectives in shaping the research agenda and to embrace interdisciplinary approaches that allow for a more comprehensive understanding of teacher expectations. By doing so, we can ensure that education research is more inclusive, relevant and effective in addressing the diverse needs and challenges of contemporary educational contexts.

Appendix A: One-Page Example from the Table of 36 Selected Studies

Year, Author, Title	Mention of Pygmalion effect	Research field	Author background	Article focus	Research design/method	Cited by ... (on Google Scholar)	Journal/publisher
1968 Rosenthal, Robert Jacobson, Lenore Pygmalion in the Classroom: Teacher Expectation and Pupils' Intellectual Development	-	Self-fulfilling prophecies in educational context Behavioural sciences	Robert Rosenthal is an American psychologist, Distinguished Professor of Psychology at the University of California Lenore Jacobson was a principal of an elementary school in the South San Francisco Unified School	It shows that teacher expectations influence student performance. Positive expectations influence performance positively, and negative expectations influence performance negatively.	Quantitative Experiment with control and experimental groups Harvard IQ Test of Inflected Acquisition (Based on Flanagan's (1960) Tests of General Ability) Oak School	13,064	New York: Holt, Rinehart and Winston
1971 Jose, Jean Cody, John J. Teacher-Pupil Interaction as it Relates to Attempted Changes in Teacher Expectancy of Academic Ability and Achievement	Yes	Area of expectancy Educational psychology	Jean Jose Gardenville Diagnostic and Adjustment Center John J. Cody Southern Illinois University (Associate Dean of Education, Chairman of the Dept. of Educational Psychology)	Experimental conditions, as described by Rosenthal and Jacobson (1968), were replicated in this study. No attempt was made to go beyond the Rosenthal paradigm in this study.	Quantitative IQ test, used by Rosenthal and Jacobson, standardised achievement test 18 teachers and 144 students were selected randomly and randomly assigned to experimental and control groups Questionnaires for teachers Separate three-factor analysis of variance	5	American Educational Research Journal

Appendix B: Authors' Background

N	Year, Author, Name	Author background	Journal
1	1969 Meichenbaum; Donald H., Bowers, Kenneth S.; Ross, Robert R. “A Behavioural Analysis of Teacher Expectancy Effect”	Professor of psychology, preeminent hypnosis researchers, cognitive psychology	Journal of Personality Social Psychology
2	1971 Jose, Jean; Cody, John J. “Teacher-Pupil Interaction as it Relates to Attempted Changes in Teacher Expectancy of Academic Ability and Achievement”	Dean of Education, Educational Psychology	American Educational Research Journal
3	1972 Finn, Jeremy “Expectations and the Educational Environment”	Author was a visiting faculty member at the Ontario Institute for Studies in Education	Review of Educational Research
4	1970 Good, T. L.; Brophy, J. E. “Teachers' Communication of Differential Expectations for Children's Classroom Performance: Some Behavioral Data”	Professor of Educational Psychology	Journal of Educational Psychology
5	1974 Sutherland, Ann; Goldschmid, Marcel L. “Negative Teacher Expectation and IQ Change in Children with Superior Intellectual Potential”	PhD graduate of McGill University in psychology	Child Development (developmental psychology)
6	1975 Dusek, Jerome B. “Do Teachers Bias Children's Learning?”	Professor in psychology department	Review of Educational Research
7	1975 Yoshida, Roland K.; Meyers, C. Edward “Effects of Labeling as Educable Mentally Retarded on Teachers' Expectancies for Change in a Student's Performance”	Neuropsychiatric Institute	Journal of Educational Psychology
8	1976 Persell, Caroline Hodges “Testing, Tracking and Teachers' Expectations: Their Implications for Education and Inequality. A Literature Review and Synthesis”	Department of Sociology	Reports – Research Sponsor: National Inst. of Education (DHEW), Washington, DC

N	Year, Author, Name	Author background	Journal
9	1976 West, Charles K.; Anderson, Thomas H. “The Question of Preponderant Causation in Teacher Expectancy Research”	Education Psychology, Associate Professors of Educational Psychology	Review of Educational Research
10	1977 Cooper, Harris M. “Intervening in Expectation Communication: The ‘Alterability’ of Teacher Expectations”	Center for Research in Social Behavior	Reports – Research National Inst. of Mental Health (DHEW), Rockville, MD
11	1982 Guskey, Thomas R. “The Effects of Change in Instructional Effectiveness on the Relationship of Teacher Expectations and Student Achievement”	PhD, Professor of Educational Psychology	The Journal of Educational Research
12	1982 Snodgrass, Sara E.; Rosenthal, Robert “Teacher Suspiciousness of Experimenter's Intent and the Mediation of Teacher Expectancy Effects”	American psychology educator	Basic and Applied Social Psychology
13	1984 Brattesani, Karen A.; Weinstein, Rhona S.; Marshall, Hermine H. “Student Perceptions of Differential Teacher Treatment as Moderators of Teacher Expectation Effects”	Community psychology	Journal of Educational Psychology
14	1984 Cooper, Harris M.; Tom, David Y. “Teacher Expectation Research: A Review with Implications for Classroom Instruction”	Associate Professor of Psychology and Research Associate Professor at Psychology University of Missouri-Columbia	The Elementary School Journal
15	1984 Raudenbush, Stephen W. “Magnitude of Teacher Expectancy Effects on Pupil IQ as a Function of the Credibility of Expectancy Induction: A Synthesis of Findings from 18 Experiments”	Graduate School of Education, Harvard University Department of Sociology	Journal of Educational Psychology
16	1993 Ambady, Nalini; Rosenthal, Robert “Half a Minute: Predicting Teacher Evaluations from Thin Slices of Nonverbal Behavior and Physical Attractiveness”	Indian-American social psychologist and a leading expert on nonverbal behavior American psychologist who is a Distinguished Professor of Psychology at the University of California	Journal of Personality and Social Psychology

N	Year, Author, Name	Author background	Journal
17	1993 Babad, Elisha “Pygmalion – 25 Years after Interpersonal Expectations”	Social and educational psychology	Interpersonal Expectations
18	1995 Gottfredson, Denise C.; Marciniak, Elizabeth M.; Birdseye, Ann T. “Increasing Teacher Expectations for Student Achievement”	Professor in criminal justice Professor at the University of Maryland Department of Criminal Justice and Criminology.	Journal of Educational Research
19	2000, Kuklinski, Margaret R.; Weinstein, Rhona S. “Classroom and Grade Level Differences in the Stability of Teacher Expectations and Perceived Differential Teacher Treatment”	Director of the School of Social Work’s Social Development Research Group Professor of the Graduate School (Community Psychology)	Learning Environments Research
20	2003 Babad, Elisha; Avni-Babad, Dinah; Rosenthal, Robert “Teachers’ Brief Nonverbal Behaviors in Defined Instructional Situations can Predict Students’ Evaluations”	Social and educational psychology	Journal of Educational Psychology
21	2005 Jussim, L.; Harber, K. D. “Teacher Expectations and Self-Fulfilling Prophecies: Knowns and Unknowns, Resolved and Unresolved Controversies”	Department of Psychology	Personality and Social Psychology Review
22	2005 Milner, H. Richard “Stability and Change in US Prospective Teachers’ Beliefs and Decisions about Diversity and Learning to Teach”	Professor of Education	Teaching and Teacher Education
23	2006 Rubie-Davies, Christine M. “Teacher Expectations and Student Self-perceptions: Exploring Relationships”	Faculty of Education	Psychology in the Schools
24	2007 Keys, Philip “A Knowledge Filter Model for Observing and Facilitating Change in Teachers’ Beliefs”	Teachers, Educators	Journal of Educational Change
25	2007 Tenenbaum, Harriet R.; Ruck, Martin D. “Are Teachers’ Expectations Different for Racial Minority than for European American students? A Meta-analysis”	Developmental Psychology, Educational Psychology	Journal of Educational Psychology

N	Year, Author, Name	Author background	Journal
26	2008 Bae, Soung; Holloway, Susan D.; Li, Jin; Bempechat, Janine “Mexican-American Students’ Perceptions of Teachers’ Expectations: Do Perceptions Differ Depending on Student Achievement Levels?”	Teacher Education, Teaching Methods EdD Professor at Boston University Wheelock College of Education and Human Development	The Urban Review
27	2009 Rubie-Davies, Christine “Teacher Expectations and Labeling”	School of Learning, Development and Professional Practice Faculty of Education	International Handbook of Research on Teachers and Teaching
28	2015 Friedrich, Alena; Flunger, Barbara; Nagengast, Benjamin; Jonkmann, Kathrin; Trautwein, Ulrich “Pygmalion Effects in the Classroom: Teacher Expectancy Effects on Students’ Math Achievement”	Hector Research Institute of Education Sciences and Psychology, University of Tübingen	Contemporary Educational Psychology
29	2015 Rubie-Davies, Christine M.; Peterson, Elizabeth R.; Sibley, Chris G.; Rosenthal, Robert “A Teacher Expectation Intervention: Modelling the Practices of High Expectation Teachers”	Education academic, and as of 2018 a full professor and head of school at the University of Auckland	Contemporary Educational Psychology
30	2015 Timmermans, Anneke C.; Kuyper, Hans; van der Werf, Greetje “Accurate, Inaccurate, or Biased Teacher Expectations: Do Dutch Teachers Differ in their Expectations at the end of Primary Education?”	Faculty of Behavioural and Social Sciences	British Journal of Educational Psychology
31	2016, Rubie-Davies, Christine M.; Rosenthal, Robert “Intervening in Teachers’ Expectations: A Random Effects Meta-analytic Approach to Examining the Effectiveness of an Intervention”	Education academic, and as of 2018 a full professor and head of school at the University of Auckland	Learning and Individual Differences
32	2017 Andrews, Dorinda Carter; Gutwein, Melissa “Maybe That Concept Is Still with Us”: Adolescents’ Racialized and Classed Perceptions of Teachers’ Expectations”	A professor and chairperson for the Department of Teacher Education; also a professor of race, culture and equity	Multicultural Perspectives

N	Year, Author, Name	Author background	Journal
33	2018, De Boer, Hester; Timmermans, Anneke C.; Van der Werf, Margaretha “The Effects of Teacher Expectation Interventions on Teachers’ Expectations and Student Achievement: Narrative Review and Meta-analysis”	Faculty of Behavioural and Social Sciences, Research and Evaluation of Educational Effectiveness.	Educational Research Evaluation
34	2017 Zhu, Mingjing; Urhahne, Detlef; Rubie-Davies, Christine M. “The Longitudinal Effects of Teacher Judgement and Different Teacher Treatment on Students’ Academic Outcomes”	Martin-Luther-Universität Halle-Wittenberg Institute of Education Department of Educational Psychology	Educational Psychology
35	2019 Ding, Hui; Rubie-Davies, Christine Margaret “Teacher Expectation Intervention: Is it Effective for all Students?”	School of Foreign Languages, Central South University, Changsha, People’s Republic of China Faculty of Education and Social Work, University of Auckland, Auckland, New Zealand Dean, Graduate School of Education	Learning and Individual Differences
36	2019 Johnston, Olivia; Wildy, Helen; Shand, Jennifer “A Decade of Teacher Expectations Research 2008–2018: Historical Foundations, New Developments, and Future Pathways”		Australian Journal of Education

Appendix C: Methodology and Research Design

Year, Author, Title	Research design/method	Cited by ... (Google Scholar)
1968, Rosenthal, Robert & Jacobson, Lenore	Quantitative Experiment with control and experimental groups	13,064
1969, Meichenbaum, Donald H. et al.	Quantitative	274
1971, Jose, Jean & Cody, John J.	Quantitative IQ test, used by Rosenthal and Jacobson, standardised achievement test, questionnaires for teachers	5
1972, Finn, Jeremy	Critical Review Considers standardised test results as worse than useless	379
1970, Brophy, J., & Good, T.	Quantitative	226
1974, Sutherland, Ann & Goldschmid, Marcel L.	Quantitative Testing the hypothesis	80
1975, Dusek, Jerome B.	Literature Review	345
1975, Yoshida, Roland K. & Meyers, C. Edward	Quantitative Experiment, videotape	56
1976, Persell, Caroline Hodges	Literature Review and Synthesis	8
1976, West, Charles K. & Anderson, Thomas H.	Critical Review Critique of the teacher expectancy effect research in terms of not only methodological difficulties, but also explicative problems of a logical, empirical and psychological nature	229

Year, Author, Title	Research design/method	Cited by ... (Google Scholar)
1977, Cooper, Harris M.	Quantitative Experiment , multiple regression analyses	4
1982, Guskey, Thomas R.	Quantitative	102
1982, Snodgrass, Sara E. & Rosenthal, Robert	Quantitative Experimental manipulation	3
1984, Brattesani, Karen A. et al.	Quantitative Hierarchical regression analyses Students also completed the Teacher Treatment Inventory Self-Rating	471
1984, Cooper, Harris M. & Tom, David Y.	Literature Review	270
1984, Raudenbush Stephen W.	Synthesis of 18 experiments Meta-analysis All studies employing IQ as an outcome and normal children in Grades 1–7 as subjects were included in the sample for the synthesis	569
1993, Ambady, Nalini & Rosenthal, Robert	Quantitative	1493
1993, Babad, Elisha	Review On studies about teacher expectations, expectancy effects	178
1995, Gottfredson, Denise C. et al.	Report Experimental study Experimental program 329 students from one school 250 students whose teachers did not participate	145
2000, Kuklinski, Margaret R. & Weinstein, Rhona S.	Quantitative Analytical framework described in Rogosa et al. (1984) and Gustavsson et al. (1997)	125

Year, Author, Title	Research design/method	Cited by ... (Google Scholar)
2003, Babad, Elisha et al.	Quantitative Experiment + questionnaires	85
2005, Milner, H. Richard	Qualitative Class discussions, class assignments, interviews and an open-ended feedback questionnaire	228
2005, Jussim, L. & Harber, K. D.	Review	
2006, Rubie-Davies, Christine M.	Quantitative Students completed the Reading, Mathematics, Physical Abilities and Peer Relations subscales of the Self-Description Questionnaire-1	407
2007, Keys, Philip	Qualitative Eisner's (1991) methodology of educational criticism This research has adopted Creswell's (1998) recommendation Three frames of verification which involve the data collection and analysis: structural, consensual validation and referential adequacy	110
2007, Tenenbaum, Harriet R. & Ruck, Martin D.	Meta-analysis	1,190
2008, Bae, Soung et al.	Qualitative Semi-structured interviews	90
2009, Rubie-Davies, Christine	Review	57
2015, Friedrich, Alena et al.	Quantitative Scrutinised the Pygmalion effect in a longitudinal study by using a large sample in regular classrooms and multilevel regression analyses	252
2015, Rubie-Davies, Christine M. et al.	Quantitative A randomised controlled trial of a teacher expectation intervention	203

Year, Author, Title	Research design/method	Cited by ... (Google Scholar)
2015, Timmermans, Anneke C. et al.	Quantitative Multilevel random slope models	136
2016, Rubie-Davies, Christine M. & Rosenthal, Robert	Experimental study A random effects meta-analytic approach	62
2017, Andrews, Dorinda Carter & Gutwein, Melissa	Mixed methods Interviews in focus groups	50
2017, Zhu, Mingjing et al.	Quantitative This longitudinal study tracked upper graders in Chinese primary schools for one year	63
2018, De Boer, Hester et al.	Mixed methods Narrative review + meta-analysis of the effects of 19 teacher expectation interventions	84
2019, Ding, Hui & Rubie-Davies, Christine Margaret	Quantitative	12
2019, Johnston, Olivia et al.	Review (2008 to 2018) This literature review critically synthesises 10 years of international teacher expectations research = The synthesis of the literature	42

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