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**A study on the character development and education
of gifted pupils using a critical realist approach**

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**Thesis submitted in partial fulfilment of the requirements for the degree of
Doctor of Philosophy
2021**

ABSTRACT

This study offers an in-depth exploration of how teachers who work with gifted pupils in Turkey think about the character development and character education of gifted pupils. Considering the contextual conditions and relationships in which the study was conducted, helps to make sense more specifically and deeply, of the challenges and needs faced in character education of gifted pupils, and presents realistic and functional suggestions for policy and practice. It derives its theoretical foundation from critical realism, unusual in this field, to outline a stratified ontology for uncovering unobvious causal mechanisms. This study therefore offers explanations about the character development and character education of gifted pupils that are based on how causal mechanisms operating at a deeper level of reality (the domain of the *real*) by interacting with contextual conditions and relationships that may exist independently of what teachers say – or what we see, know, or believe – about the domains of the *actual* and *empirical*. To identify those causal mechanisms within the overarching framework of critical realism, the three-stage critical realist methodology of identification of demi-regularities, abduction, and retroduction, is employed.

In the stage of identification of demi-regularities, 10 focus group interviews – the main driver of the study – were conducted with 48 teachers who work with gifted pupils in science and art centers (SACs) in Turkey. The data of focus group interviews were analysed through identifying demi-regularities – which is analogous to thematic coding – within the overarching framework of critical realism. Then, the thematic categories – or demi-regularities – were transformed into a survey. This survey was actualized online with 105 teachers who work in the SACs but did not participate in the focus group interviews. The statistical analysis of the survey data was made through both descriptive analysis, to see the distribution of the teachers' responses, and correlation analysis, to see the relationship between the demi-regularities. In the stage of abduction, these demi-regularities are re-described using theoretical concepts. That is, by accepting the demi-regularities inferred from the accumulation of the teachers' experiences, beliefs, etc. related to phenomena, description must go beyond previously perceptions and conceptions in order to generate theoretical propositions in relation to possible causal mechanisms that lead to teachers' existing views. In the stage of retroduction – a critical realist analysis relies on this stage – the causal mechanisms that could lead to the demi-regularities about the teachers' views that are found by examining the powers and liabilities of macro, meso, and micro-level entities that enable

the causal mechanisms to be realised in the contextual conditions and relationships that surround the data.

Through this assessment, *integration of innate self into social context* was found to be the causal mechanism (at the real layer) shaping teachers' views (at the empirical layer) regarding the description of character; *the labelling ideology that ignores character development while focusing on the preservation of high potential* was found to be the causal mechanism shaping teachers' views regarding the character *development* of gifted pupils; and *the desire to transform individual potential into societal gain* was found to be the causal mechanism shaping teachers' views regarding character *education* of gifted pupils. The challenges and needs faced in actualizing character education of gifted pupils were identified in teacher training at the micro-level, family training at the meso-level, and policy and practices at the macro-level. Addressing these challenges and needs, the causal mechanisms identified, helped to uncover a number of realistic and functional implications for policy and practice by considering contextuality, relationality, and causality and digging deeper in the social context of the research area. Therefore, identifying causal mechanisms in a critical realist framework is useful, both in terms of providing an explanation of what drives beliefs and actions in contextually specific ways, and in providing effective avenues for intervening in policy and practice.

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LIST OF ABBREVIATIONS

ACCEL	Active Concerned Citizenship and Ethical Leadership
APA	American Psychological Association
BERA	British Educational Research Association
DIT	Defining Issues Test
DMGT	Differentiated Model of Giftedness and Talent
DNA	Deoxyribonucleic Acid
fMRI	Functional Magnetic Resonance Imaging
IQ	Intelligence Quotient
MEB	Ministry of National Education
SAC	Science and Art Center
TDK	Turkish Language Association
TTKB	Head Council of Education and Morality
TUBITAK	Science and Technological Research Council of Turkey
UK	United Kingdom
U.S.	United States
WICS	Wisdom-Intelligence-Creativity-Synthesized
WISC-R	Wechsler Intelligence Scale for Children-Revised

Declaration of originality

I hereby declare that all the work presented in this thesis is my own unless stated otherwise within the text or acknowledged accordingly within references. The data has not been submitted previously for any alternative degrees.

Kubra Kirca Demirbaga

August 2021

ACKNOWLEDGEMENTS

I believe that this doctoral process, occupying about 4 years of my life, will guide the rest of my life. With this belief, I am deeply indebted to the many people and institutions who have already involved themselves in the creation of this doctoral thesis.

I am very thankful to the Republic of Turkey Ministry of National Education for their financial and emotional support to complete my PhD.

I would like to express my deepest gratitude to Dr Laura Mazzoli Smith, for her exceptional support, encouragement, and immense knowledge throughout my PhD study. I am very grateful to give me the opportunity to be her student. I would also like to express sincere gratitude to Dr Stephanie Lichtenfeld as the second supervisor of my PhD, who facilitated my learning and gave very valuable comments. I would also like to thank to Dr Richard Parker for his guidance and support to my work during my first year of my PhD.

I would like to express my thanks to the DCAD (Durham Centre for Academic Development) Group within Durham University and the Research Training and Researcher Development Group within Newcastle University, who have contributed to the formation of my researcher identity by providing various workshops.

I would like to thank the participants who attended my study to share their views and experiences with me.

Furthermore, I would also like to express my deepest gratitude to my parents, Yadigar Kirca and Rabiye Kirca, and my siblings, Busra Kirca, Hayrun Nisa Kirca, and Muhammed Enes Kirca, who have supported me throughout this journey and have always believed in me.

I also would like to thank my lovely friends, Husne Ozkan, Ceyda Sari, and especially Tuba Karamolla for believing in my success from the beginning of my abroad journey.

And my biggest thanks to my loving husband, Umit Demirbaga, coauthor of my life, who was always with me to share my happiness, success, and sadness. I am grateful for his understanding, patience, support, and mostly for his love.

DEDICATION

To those who have committed and to those who will commit their lives to science and to all people who believe in the power of knowledge.

CHAPTER 1 INTRODUCTION

This introductory chapter first presents a brief background of this PhD research project explaining the starting point that inspired my interest. It then provides the goals and research questions guiding the study. Following this, the significance of the study and the scope of the study are explained. Lastly, the structure of the thesis is presented providing an overview of the chapters.

1.1 Background of the study: The starting point

This study in the field of gifted education specifically focuses on the character development and education of gifted¹ children. It is underpinned by a critical realist philosophy. My interest in this study initially arose from my previous work as a psychological counselor at a counselling and research center in Turkey. Secondarily both the complexity and dynamism in the relevant literature and my future position, which is to be expert/policy maker in the field of gifted education in the Turkish Ministry of National Education have served to guide me into this specific study area.

As a psychological counselor who worked in a counselling and research center, I was responsible for identifying gifted individuals and guiding them, informing their families' schools and teachers of available resources and services such as science and art centers and organizing educational programs in line with the needs of their families (MEB, 2020a). In Turkey, the official definition of giftedness and the educational practices for gifted pupils affirm a multifaceted phenomenon (or different academic and talent areas), however, the identification policy of gifted children is still highly based on intelligence tests (MEB, 2019a). That is, while the conceptual definition and educational practices are more parallel to contemporary giftedness approaches, the identification policy of gifted pupils is more congruent with mystery giftedness approaches (see Matthews & Foster, 2005). This creates an inconsistency in the education system of gifted pupils and indirectly, in viewpoints of their teachers and families towards giftedness. This will be explained in more detail in Chapter 5.

In this context, I worked three years with gifted children, their teachers, and families. In this process, I was exposed to the challenges and shortcomings experienced by teachers

¹ In this study, I use exclusively the term 'gifted' to provide international intelligibility. This term also refers to other interchangeably used terms such as 'talented' or 'highly able' or 'more able' or 'specially talented' or 'high achievement'.

and families in supporting the socio-emotional development of gifted children. Although there is a separate education policy and practice (e.g., special schools, special classes, and after-school programs (Gucyeter et al., 2017; MEB, 2007; MEB, 2017-2018) for gifted children in Turkey; these policies and practices are more oriented to cognitive and academic development. As will be explained in more detail in Chapter 5, the character development of gifted pupils in Turkey is relegated to the background in both policy and practice. However, high potential or cognitive superiority in moral² thought and action represent one side of a paradox. That is, a morally correct response, which requires a high level of abstract reasoning and causal thinking ability, to a theoretical hypothetical dilemma is not a guarantee of its translation into moral action (Teo & Cheng, 2009). In other words, moral feeling, thinking, and doing are not a certain outcome of great potential. The lack of institutional (primarily governmental) support in this area in Turkey has limited the guidance for teachers and families.

Secondly, the complexity and dynamism in the relevant literature regarding the character development and education of gifted pupils led me to study this topic. Although genetic studies regarding intelligence continue (e.g., Barbey et al., 2014; Hill et al., 2014; Zhao et al., 2014), giftedness definitions, theories, and models are being constantly extended by the development of ecological and system-based paradigms (e.g., Barab & Plucker, 2002; Eyre, 2007, 2011; Hymer, 2009, 2012; Renzulli, 2010; Sutherland, 2012; Ziegler, 2005), transaction paradigms (see Lo & Porath, 2017), and holistic paradigms (e.g., Sternberg 2003, 2005, 2017). This paradigmatic shift requires researchers to consider the social context that gifted pupils are situated in, to be able to contribute to their holistic development. Therefore, considering the complex and dynamic situation regarding the socio-emotional development of gifted pupils in the relevant literature, I focused on the assessment of the character development and education of gifted pupils by considering their contextual conditions and relationships. At this point, critical realism helped to identify key contextual factors that have an impact on the character development and education of gifted pupils, the relationships between factors, and to develop a contextual and sociological assessment of the character development and education of gifted pupils. It allowed me to see the contextual picture that contributes to the relevant policy and practices pertaining to the character development and education of gifted pupils.

² The concepts of character, morality, ethics, and values are used interchangeably in the educational framework in gifted and talented education literature. In this study, these concepts are therefore included depending on the relevant studies in the literature.

As a Turkish government's scholarship student, my goal is to contribute to the policy and practice for gifted education. Therefore, in this study, I aim to understand how the character development and education of gifted children are interpreted from the point of view of teachers in Turkey and to make realistic and functional contributions to relevant policy and practice. Accordingly, I decided to conduct this study using a critical realist approach by including teachers who work with gifted pupils in Turkey. I therefore aimed to explain the causality underlying teachers' views about the character development and education of gifted pupils by considering contextual conditions and relationships (i.e., knowledge of entities that play a role in the formation of implications about the phenomenon, their structures, powers, and liabilities) of Turkey, rather than focusing on falsifiable views of teachers since they are based on human perception and experience. Critical realist ontology and methodology allowed me to find causal or generative mechanisms that inform teachers' views about the phenomenon and to allow me to identify realistic and functional implications of causal mechanisms for policy and practice.

1.2 The goals and research questions guiding the study

Based on the starting point of the study and contextual conditions and relationships in which the study was conducted, the goals of the study were:

- To gain a more complex, sociological, and contextual understanding of the factors influencing teachers' views about the concepts of the character, character development and character education of gifted pupils in Turkey
- To explain what challenges and needs are faced in actualizing character education of gifted pupils in Turkey

The research questions, identified based on the literature review and research goals, which guided the study were:

1. How do teachers who work with gifted pupils in Turkey describe character?
2. How do teachers think about the character development of gifted pupils?
3. How do teachers think about character education of gifted pupils?
4. What are the teachers' perspectives on the challenges and needs in actualizing the character education of gifted pupils?

1.3 Significance of the study

The importance and originality of this study are that it provides sociological and contextual explanation and contributes to the understanding of the effects of causal mechanisms operating at a deeper level of reality on the character development and education of gifted pupils. These aspects have not been given much attention in the field of gifted education. Identifying causal mechanisms is useful, both in terms of providing an explanation of what drives beliefs and actions in contextually specific ways, and in providing effective avenues for intervening in policy and practice. At a practical level, it is therefore hoped that the stratified explanation of reality and the knowledge of causal mechanisms in this study will offer realistic implications about and suggestions for relevant policy and practice in the character development and education of gifted pupils. It is therefore possible that the findings of the study will be of great benefit to policy and practice in Turkey. However, people in other parts of the world, based on how they interpret the Turkish context in relation to their own, may also experience the findings as useful in understanding the character development and education of gifted pupils. It may also encourage questioning of the generally accepted world of beliefs, assumptions and theories in relation to the character development and education of gifted pupils. This research is an example of a critical realist approach in studying gifted education by outlining stratified ontology and uncovering causal mechanisms that reveals its importance for this field of study.

1.4 The scope of the study

This is the first nationwide study in the field of gifted education in Turkey to adopt a critical realist paradigm to investigate the causal mechanisms depending on contextual conditions and relationships that lead to teachers' views about the character development and education of gifted pupils. In this study, qualitative data (through the focus group interviews) was collected from 48 teachers who work with gifted pupils in the science and art centers (SACs), which are a kind of after school program exclusively for gifted pupils (explained in more detail in the next section and Chapter 5), in six geographical regions of Turkey. In selecting the SACs for the sample, the following criteria were applied: a broad geographical sampling spread and the presence of urban centers with a relatively large population of pupils and teachers. The teachers who had more experience in the SACs were recruited for the study. In the focus group interviews, ten semi-structured interview questions prepared by reviewing

the literature were formulated to allow discussion on key topics and issues (Hennink, 2007) were utilised.

The quantitative data (through the survey) was collected online from 105 teachers who were not taking part in the focus group interviews who work with gifted pupils in the SACs in seven geographical regions of Turkey. In the survey, 21 items, which were prepared by reviewing the qualitative data findings (demi-regularities – or categories in thematic coding), were presented for evaluation using a 6-point Likert scale from “strongly disagree” (1) to “strongly agree” (6). Including both qualitative and quantitative phases, a total of 153 teachers and 25 SACs in Turkey were included in this study. All teachers of both sample groups were working with only gifted pupils at primary, secondary, and high school levels (explained in more detail in Chapter 6).

1.5 Definition of key concepts

1.5.1 The concepts of giftedness and the gifted pupil

There is no agreed upon definition on the concept of giftedness, and even the definitions show difference according to the adopted paradigm such as demystification paradigms (e.g., Galton, 1869), identification-based paradigms (e.g., Terman, 1925), ecology- and system-based paradigms (e.g., Barab & Plucker, 2002; Eyre, 2007; Ziegler, 2005), transaction paradigms (e.g., Lo & Porath, 2017), and holistic paradigms (Sternberg, 2003, 2005, 2009a, 2017) – explained in more detail in Chapter 2. However, since this study was conducted by collecting data from Turkey, the officially accepted definition and educational practices in Turkey were taken into consideration.

In this study, from the viewpoints of the teachers, the gifted pupil therefore refers to “one who is quick in learning in comparison with his/her peers, is advanced in the capacity of creativity, art and leadership, possesses special academic ability, understands abstract ideas, loves to act independently in his/her interests and performs at a high level” (MEB, 2016, p. 450). Since identification of gifted individuals is done through group screening and individual intelligence tests (MEB, 2019a), an identification-based paradigm that focuses on categories of exceptionality related to general ability measured by intelligence tests, it purposes to serve the gifted by developing thinking and leadership qualities. From this follow developed programs assumed to be unique to the gifted (Dai & Chen, 2013). Hence the development of the capacity for understanding is dominant in the giftedness approach in Turkey (explained in more detail in Chapter 5).

1.5.2 The concept of character

There has never been a single, agreed-upon definition of character over the years. The concept of character has been also used interchangeably with other concepts such as morality, values, and ethics – although they are defined differently, but relatedly, in the relevant literature (see Walker & Lovat, 2017). However, in this study, the concept of character was particularly used since it refers to the whole of feeling, thinking, and doing habits of the individual (see Baehr, 2017; Jubilee Centre, 2017; Lewis, 2012; Lickona, 1989). In other words, character is related to the educable aspect of the individual based on a nurturist understanding through habits (habits of feeling, thinking, and doing) without reference to the individual's personal values.

Character education purposes to make the individual perfect for human and societal flourishing in the framework of virtues (intellectual, performance, moral, and civic virtues) by habitual practice (Jubilee Center, 2017; Walker & Lovat, 2017) – explained in more detail in Chapter 3. Hence, in this study, the concepts of character, character development, and character education are related to both the self-oriented or self-regarding and other-oriented or other-regarding virtues and refer to the educable or developable aspect of the individual. In the Turkish educational context, the concept of 'values' is used more than the concept of 'character.' The teaching of values is accepted as a complementary part of the curriculum for all educational levels rather than as a separate educational practice (TTKB, 2017). It is therefore based on mostly implicit learning. Providing values education for all pupils is accepted as a task for all teachers (TTKB, 2017). Correspondingly, SAC teachers are also responsible for integrating values education into the education of gifted pupils (MEB, 2016). This is explained in more detail in Chapter 5.

1.5.3 SAC teachers

This study was conducted with teachers who work with gifted pupils in the science and art centers (SACs). The SACs, one of the after-school programs in the ministry, are independent special education institutions that serve mostly elementary, secondary, and high school-age gifted students in painting, music, and general intellectual ability, with the aim of revealing students' abilities and developing their high potential without interrupting their formal education (MEB, 2017-2018). The educational and teaching activities in the SACs are carried out on weekdays and/or weekends outside of their hours of formal education. In this setting, gifted pupils study with their gifted peers, and are guided by their teachers. The SAC

education model relies on project or problem-based learning and the development of special talents, rather than following a specific curriculum (Baykoc Donmez, 2004; MEB, 2007). This will be explained in more detail in Chapter 5.

Regarding teachers, there is a different teacher assignment procedure for the SACs. This is conducted by the governorships, directed by the criteria determined by the General Directorate of Special Education and Guidance Services and the General Directorate of Human Resources within the ministry (MEB, 2018a). For example, the level of postgraduate attainment, projects, awards, publications, English language level, artistic activities, sport licencing, communication skills, reasoning ability, creativity, cooperativity, openness to scientific and technological developments of teachers (MEB, 2020a) from different disciplines are considered while assigning them to the SACs. In the SACs, teachers' competencies in their fields are important because project or problem-based learning and teaching is a requirement in the structure of the SACs and this is in the control of teachers. This will be explained in more detail in Chapter 5. Therefore, the participants of the study can be said to be teachers who are more advanced in terms of academic development and have experience in gifted education.

1.6 Structure of the thesis

This study is organized as follows:

Chapter 1 provides an overview of the research, and explains the starting point of the study, the goals and research questions guiding the study, the significance of the study, the scope of the study, the definitions of key concepts, and finally an outline of the thesis.

Chapter 2 discusses the existing literature in relation to giftedness and gifted education. First, the background of giftedness and the historical trajectory of giftedness from cultural and religious oriented explanations to scientific explanations based on empirical methods are presented. Secondly, the assumptions of the theories and models about giftedness and talent are examined and their similarities and differences are explained. Finally, the practices in gifted education and their relationship with theoretical models are discussed.

Chapter 3 discusses the existing literature on character. First, the concept of character and related concepts are defined. Then, a historical review of the theories about character

development is conducted and last, the main aspects of character education models covered in the existing literature are addressed.

Chapter 4 discusses the existing literature on the character development and education of gifted children. First, the main opinions and debates about the character development of gifted pupils and the effect of family on that development are explained. Then, the importance of character education both at the individual and societal level for gifted pupils and the effect of teacher training on that education are reviewed and notable existing gaps in the literature are identified and discussed.

Chapter 5 draws a contextual picture of gifted and character education in Turkey. First, the historical trajectory of the concept of giftedness in Turkey and its up-to-date definition are explained. Educational practices, particularly in SACs where this research is conducted, for gifted pupils are explained and the position of character education in these practices is discussed. After that, the process of being a teacher in the SAC – the participants of this research – and the needed competencies in teachers are explained. Finally, character education policy and the relevant practices that are valid for gifted education in Turkey are explained.

Chapter 6 details the study's adopted ontology and epistemology, the research design and methods applied to answer the research questions, the data analysis methods used, the validity and reliability of the research, and the relevant ethical considerations. The choices are justified and discussed employing a critical realist paradigm including the choice of qualitative and quantitative methods (mixed methods) and the types of both qualitative and quantitative analyses. The chapter provides the details of the choices and procedures used to answer the research questions.

Chapter 7 presents the findings and analyses of both focus group interviews and the survey, and discusses these findings for the four research questions separately and respectively. The analysis of each research question was carried out in three stages (except the last research question, since it has a more descriptive purpose (explained in more detail in Chapter 7) and is presented as follows: First, the demi-regularities or patterns relation to each research question in the focus group interview data are identified through thematic coding. Then, a statistical analysis related to these demi-regularities is made through descriptive analysis (to identify trends, variation, and significant features of the distribution of the teachers' responses about the demi-regularities) and Spearman's correlation analysis (to see

the relationship between the demi-regularities) is presented. Secondly, the stage of abduction (or theoretical redescription), which goes beyond the demi-regularities coming from both qualitative and quantitative data with the aim of arriving at new ideas, is presented. Lastly, the stage of retroduction (or finding causal mechanisms) is presented by signalling contextual conditions and relationships.

Chapter 8 summarizes the key findings of the study by considering the four research questions. Then, the implications or contributions of the key findings about the character development and education of gifted pupils for relevant policy and practice in Turkey are discussed. The implications are described through the causal mechanisms guided by the research questions, presented as contextual challenges and needs in actualising character education of gifted pupils, and possible future practice for policymakers are presented. Following this, the limitations of the study and recommendations for possible future research directions in the field are presented.

CHAPTER 2 EXISTING LITERATURE ON GIFTEDNESS

2.1 Introduction

This chapter presents a review of the literature about giftedness and gifted education. Firstly, a brief introduction to the background of giftedness and the historical development of the concept of giftedness from cultural and religious oriented explanations to scientific explanations based on empirical methods are presented. Secondly, the assumptions of the theories and models about giftedness and talent are examined and their similarities and differences are explained. Lastly, the practices in gifted education and their relationship with theoretical models are discussed.

2.2 The concept of giftedness

In the beginning stages of giftedness studies, the focus was mostly around these questions: Who is gifted? (e.g., Galton, 1869; Marland, 1972); What constitutes giftedness and/or talent in an individual? (e.g., Davis & Rimm, 1994; Shriner et al., 1993); How can this be measured? (e.g., Binet & Simon, 1916; Terman & Merrill, 1937); Are people gifted generally or in domain-specific areas? (e.g., Carroll, 1993; Gardner, 2011; Thurstone, 1938); What are the social, emotional, and behavioural traits of gifted individuals? (e.g., Garland & Zigler, 1999; Nail & Evans, 1997; Neihart et al., 2002; Richards et al., 2003); What percentage of the population may be considered gifted? (e.g., Freeman, 2005; Gagne, 2005; Gordon & Bridglall, 2005; Renzulli, 2005; Robinson, 2005); Which term exactly should be used to identify these individuals, for example, gifted, talented, highly able, more able, or high performance? (e.g., Eyre, 2007; Feldhusen, 1998; Gagne, 2004; Tannenbaum, 1983).

Over time, the focus in most of giftedness theories and models has shifted to the dynamism in giftedness (Matthews & Foster, 2005; Miller, 2013; Sutherland, 2012; Ziegler et al., 2012). In other words, the relevant literature has included the dynamic interplay of innate and environmental characteristics by approaching giftedness in a holistic and systematic way (e.g., Barab & Plucker, 2002; Dai, 2017; Dweck, 2006; Gagne, 2005; Hymer, 2012; Monks & Mason, 2000; Paik et al., 2019; Renzulli, 2012; Sternberg, 2009b, 2017; Stoeger et al., 2018; Subotnik, 2003; Tirri, 2016; Ziegler, 2005). In this way, non-intellectual skills (e.g., wisdom in Sternberg's (2009b) WISC model and task commitment in Renzulli's (2005) three-ring conception of giftedness), contextual conditions at the macro, meso and micro-levels (e.g., Ziegler's (2005) actiotope model of giftedness), opportunities and support

(e.g., Eyre’s (2016) high-performance learning pedagogy) have been included as components that have a role in gifted performance, apart from (average or above average) intelligence.

With the inclusion of these components in giftedness, the questions we are looking for answers today have shifted to: How can we teach individuals to become gifted and/or talented? (e.g., Dai, 2017); What factors contribute to the individual becoming gifted? (e.g., Paik et al., 2019; Ziegler, 2005); How can contextual conditions be extended/arranged for this? (e.g., Barab & Plucker, 2002). The reframed giftedness meaning has shifted the focus of gifted education from “giftedness identification” to “giftedness transaction” in this way (Lo & Porath, 2017, p. 352). Table 1 below summarizes the periodic tendencies for different time periods in giftedness approaches in more tangible ways in terms of conceptual, contextual, and epistemological/methodological positions.

Table 1: Periodic tendencies in giftedness approaches

Time period	Before the 21st century	During the 21st century
Conceptual	Intelligent, IQ (abstracting)	Intelligence, IQ, intellectual abilities, non-intellectual abilities, performance (more embodying)
	Personality traits	Performance status, achievement
Contextual	Static	Open system, lived process
	Spontaneous	Spontaneous and/or Systematic learning
	Disciplinary knowledge and skills	Disciplinary knowledge and skills, thinking skills, and creativity
	Innate and/or including contextual contingencies at the micro-level	Innate and/or including contextual contingencies at the macro-, meso-, and micro-level
Epistemological/Methodological	Simplicity	Complexity and diversity
	Limited disciplinary approach into giftedness (e.g., developmental psychology, educational science)	Multidisciplinary approach into giftedness (e.g., developmental psychology, educational science, sociology, ecological psychology, anthropology, biology, history)

Criterion-oriented approaches about what constitutes giftedness in an individual	Aspect-based approaches (e.g., intellectual giftedness, creative giftedness, productive giftedness, entrepreneurial giftedness)
Demystification paradigm and identification-based paradigm	Demystification paradigm, identification-based paradigm, ecology- and system-based paradigm, transaction paradigm, social constructionist paradigm, and holistic paradigm

This trajectory of giftedness studies shows that giftedness has become a more complex concept, moving from the reductionism of intelligence to more methodological approaches (Sak, 2007) with more systematic research agendas and well thought out pedagogy (Tannenbaum, 2000a), and awareness of the traces of cultural markers on giftedness (Sak, 2007; Ziegler & Heller, 2000). This section does not attempt to provide a comprehensive review of every theory and model about giftedness but discusses how giftedness has been interpreted historically until today and how today has become more complex. Before the interpretation of giftedness in a systematic way as we do today, it was considered as mystical divinity and was often connected with superstition and neuroses, which is called the “demystification paradigm” by Lo and Porath (2017). Here, a ‘paradigm’ refers to a pattern of thought or practice that dominates how people think, feel, and behave in a particular area (Kuhn, 1962). In the ancient world, giftedness and talents were interpreted through constructs coming from religion and mythology (Freeman, 1979; Jolly & Bruno, 2010; Robinson & Clinkenbeard, 2008). In Greek mythology, divine descent (Sisyphus, Achilles) or divine mercy (Odysseus, Tiresias) were often accepted to be the sources of heroism, intelligence, or prophetic abilities. Plato in Greece and Confucius in China have been called ‘heavenly children’ (Ziegler & Heller, 2000).

In the 4th century, exceptional achievement gradually started to be explained by individuality. However, in the age of Enlightenment and Romance, this individuality played a part in the centre of a metaphysically oriented explanation. For example, “Genius is another psycho-biological species, differing from man, in his mental and temperamental processes, as man differs from the ape” (Hirsch, 1931, p. 298). Similarly, Hollingworth, (1926, p. 3) states: “The contemplation of genius thus came to be accompanied by a kind of superstitious awe, and the notion gained currency that people of genius constitute a separate species”. This demystification paradigm traces back to the biological heredity and genetics studies on giftedness (Tannenbaum, 1958). For example, Galton (1869) claimed that giftedness is an inherited position that could be seen in only 250 persons per million. In his book “Hereditary

Genius” he classifies hereditary characteristics into two types, physical ability (e.g., for oarsmen) and intellectual ability (e.g., that of literary men). However, Galton’s work is considered unpleasant today because it is associated with racism, classism, and eugenics (Lo & Porath, 2017). Although the importance of genetic influences on intelligence has decreased in favour of environmental influences (Nisbett, 2009), today, modern quantitative genetic studies (Bouchard, 2009; Kendler et al., 2015) still support the major role of genes in explaining the variance of intelligence test scores among individuals. There are even newer findings about intelligence that may signal the discovery of specific genes and their effects (e.g., Barbey et al., 2014; Hill et al., 2014; Zhao et al., 2014).

Many studies (see Barbey et al., 2014; Hill et al., 2014; Zhao et al., 2014) utilize quantitative genetic research strategies and advanced DNA analyses applied to molecular genetic studies try to explain; how the genetic basis of intelligence is established, what are the specific intelligence-related genes, and how they work on a neurobiological level. On the other hand, some quantitative genetic studies (e.g., Hunt, 2011; Posthuma et al., 2003) accept the role of environmental variables, especially non-shared variables – experiences unique to each person such as different friends – on intelligence. However, according to these studies (see Hunt, 2011; Posthuma et al., 2003), by early in the tenth year of age, the role of environmental variables on intelligence is almost entirely gone. In the late 19th and early 20th centuries, scholars began to conceptualize and measure individual differences in intelligence. For example, Alfred Binet developed the first IQ (Intelligence Quotient) test that focuses on complex mental processes (e.g., reasoning and comprehension) and interpreted these mental processes as the main point of individual differences in intelligence (Robins, 2010; White, 2000). Then, Binet developed the Binet-Simon Scale (1904) in collaboration with Theophile Simon and brought in the idea of mental age to see a child’s intellectual progress compared to his or her peers (White, 2000). Although Binet’s tests were not proposed for gifted children, his contribution to the construct and measurement of intelligence was seen as epochal (Hollingworth, 1936).

Increasing psychometric studies on individual differences and a compulsory education movement accelerated formal gifted education (Borland, 2005). From this, an “identification paradigm” (Lo & Porath, 2017) period in giftedness has emerged. Terman’s systematic and empirical test study quickly changed the practice of education (Jolly, 2008; Stanley, 1976). That is, these tests were used by educators to determine and address their students’ learning needs that could not be satisfied through a regular curriculum. For many

decades, Terman's tests were "the standard for ascertaining the mental age and IQ of persons" (Stanley, 1976, p. 39). Accordingly, terms such as intelligence, IQ, and cognitive/mental abilities have taken their place as the main terms frequently used in definitions of giftedness. Although the balance between nature and nurture in the determination of intelligence has not yet been fully clarified, most of the giftedness theories and models are established on measures (least average and/or above etc.) of intelligence (see Eyre, 2011; Renzulli, 1978; Sternberg, 2009b). A definition of intelligence, widely accepted among researchers in certain sub-fields (e.g., psychology) is:

A very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings – 'catching on,' 'making sense' of things, or 'figuring out' what to do (Gottfredson, 1997, p. 13).

Also, From the American Psychological Association (APA) Task Force on intelligence:

Individuals differ from one another in their ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought (Neisser et al., 1996, p. 77).

Clearly, intelligence represents a general cognitive or mental ability related to responding to everyday problems and navigating the environment, rather than a specific extraordinary cognitive ability. An extraordinary specific cognitive ability is not evidence of intelligence. In other words, a narrow cognitive ability does not correspond to intelligence in the way that it is usually meant (Haier, 2017). On the other hand, IQ is "a test score based on a subset of the mental abilities that relate to everyday intelligence" (Haier, 2017, p. 11). IQ tests (e.g., the Stanford-Binet Test and the Wechsler Intelligence Scale for Children) show an individuals' scores relative to his or her peers. Therefore, all IQ test scores are "meaningful only relative to other people" and are not "absolute measures of a quantity" (Haier, 2017, p. 13). Turning back to the historical context of intelligence tests, Terman's belief that gifted children could be identified by intelligence testing had important educational ramifications and helped to establish gifted education in academia (Eyre, 2011; Jolly, 2008; Subotnik et al., 2011). Terman, Hollingworth, and their contemporaries' work attracted attention to the needs of developmentally advanced children (Keating, 1991), an attention that was primarily focused on the identification-based paradigm that dominated gifted education in the past century. Not long after, it was noticed that the IQ test-based giftedness approach was limited.

Hollingworth (1926) stated that giftedness could be possible in various areas. Then, Bentley (1937) called for a curriculum for students who had abilities in specific areas such as mathematics, art, and music.

In a more formal step, Witty (1958) in the annual yearbook of the National Society for the Study of Education in the United States, reported a definition that included specific talent areas (e.g., leadership, writing, and arts) as well as general intellectual ability. Moreover, creativity, a key component included in current giftedness definitions (e.g., Monks, 1992; Renzulli, 1978; Sternberg, 2005), started to attract attention in the field of gifted education (Guilford, 1950). In 1972, in the U.S. Congress, the U.S. Commissioner of Education S.P. Marland elucidated the first official (federal) definition of giftedness as:

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. General intellectual ability,
2. Specific academic aptitude,
3. Creative or productive thinking,
4. Leadership ability,
5. Visual and performing arts,
6. Psychomotor ability (Marland, 1972, p. 2)

In accordance with this conceptual movement of seeing intelligence as complex and multidimensional, Gardner (1983) focused on multi-dimensionality in intelligence and proposed Multiple Intelligence Theory which consists of seven intelligence types: verbal-linguistic, logical-mathematical, spatial, musical, bodily-kinaesthetic, interpersonal, and intrapersonal intelligence types. Gardner (2006) later added naturalistic and existential intelligence types, for a total of nine subtypes. Today, the development of different disciplines and the need for different skills have not kept this theory up to date and it has no exact equivalent in educational practices. Each type of intelligence is thought to represent a competency in the framework of its own developmental trajectory and neural architecture, as well as in the values and support offered by different cultures (Lo & Porath, 2017). White (2005) also criticizes Gardner because he restricted the types of human intelligence to a small number of categories. According to White (2005), there is a huge diversity in human intelligence as much as there are types of human goals. Supportively, Ryle (1949) notices that “the boxer, the surgeon, the poet, and the salesman engage in their own kinds of intelligent operation, applying their special criteria to the performance of their special tasks”

(p.48). However, White and Ryle make these claims based on adult intelligence, rather than childhood giftedness, which is the focus of this study.

Contemporary views of giftedness have increasingly become dynamic and socially constructed (Borland, 1997; Callahan & Hertberg-Davis, 2013; Miller, 2013; Sutherland, 2012; Ziegler et al., 2012). Matthews and Foster (2005) explain this notion as the paradigm shift, radical change in how an area is conceptualized (Kuhn, 1996), from mystery (nature focus, static, based on measurement, and categorical) to mastery (nurture focus, changing over time, based on high-ceiling academic reasoning with ongoing dynamic classroom assessment, and non-categorical) in giftedness approaches. Hence, the definition(s) of giftedness has moved from a narrow perspective (i.e., seeing giftedness as a stable and unchangeable trait) to a more expansive perspective in which giftedness is seen as multiple in form and developing over time (Morelock, 1996).

Although theoretical models have shifted to a more expansive perspective, they have developmental issues (e.g., Feldhusen, 1998, 2005; Gagne, 2004, 2005, 2015; Renzulli, 1978, 2005; Tannenbaum, 2003). Whilst these models approach giftedness in terms of development, they mostly reflect an identification-based ideology (Lo & Porath, 2017). For example, Gagne (2004, 2005, 2015) proposed a Differentiated Model of Giftedness and Talent (DMGT) that consists of five major components: (1) natural abilities (including intellectual, creative, social, perceptual, muscular, motor control), (2) intrapersonal (including physical, mental, awareness, motivation, volition), (3) environmental (including, milieu, individuals, resources), (4) developmental process (activities, investment, progress) and (5) competencies (academic, technical, science and technology, arts, social service, administration/sales, business operations, games, sport and athletics). Here, Gagne emphasizes the significance of combination of these components and change in a gifted individual's optimal development. On the other hand, he propounds "a precise threshold of 10% prevalence to separate those who should be labeled from those who should not" (Porath, 2004, p. 154), categorizing into various levels from mild to extreme. The concepts of giftedness and talent were separately defined in the DMGT model of Gagne (2015) as "outstanding natural abilities, the gifts, and systematically developed high-level competencies, the talents..." (p. 282).

Whilst the identification-based paradigm in giftedness is still common in gifted education practices, an ecology and system-based paradigm that focuses on contextual

contingencies and networks in the building giftedness has arisen in recent years (e.g., Barab & Plucker, 2002; Eyre, 2007, 2011; Hymer, 2009, 2012; Renzulli, 2010; Sutherland, 2012; Ziegler, 2005). This paradigm accepts giftedness as an endpoint rather than a starting point. It focuses on the context and relationships in the context that transform potential into giftedness. This approach also brings forward the transaction giftedness paradigm that sees giftedness as a process and focuses more on the establishment of environments that foster giftedness rather than on the gifted per se (see Lo & Porath, 2017). As should be clear, Barab and Plucker (2002) describe giftedness and talents as “a set of functional relations distributed across person and context, and through which the person-in-situation appears knowledgeably skillful” (p. 174). That is, giftedness and talents are seen as “dynamic transactions among the individual, the physical environment, and the sociocultural context” (Barab & Plucker, 2002, p. 174). Here, a dynamic proposition in giftedness clearly differs from an identification-based proposition (Coleman, 2013).

According to Gibson (1977), a specific combination of properties of an environment, taken with reference to an individual, can provide an opportunity for the actualization of possible action or challenge it. In other words, a person gifted in one culture may not be seen as gifted in another culture since certain qualities may be valued and accentuated in one culture while these qualities may be downplayed in another culture (Sternberg, 2007a). Considering this, giftedness and talent are seen as sociocultural constructed values. This shifts the direction of gifted education into creating diverse affordances to meet students’ effectivity profiles (Lo & Porath, 2017). Therefore, sociological theory on high ability has been key in criticizing the reductionism of ‘IQism’ and the associated conception of intelligence as mostly inherent and fixed, as well as in drawing attention to the socio-economically stratified nature of what are typically referred to as gifted cohorts (Mazzoli Smith, 2014). Particularly, in terms of revealing how specific discourses and socio-historical contingencies combine and are justified in over-arching hegemonic discourses that form practice and belief, social constructionist analysis is effective (Mazzoli Smith, 2014).

Thus far, the paradigms (*demystification, identification, ecology- and system-based, transaction, and social constructionist paradigm*) shaping definitions – although there is no agreed upon definitions of them –, theories and practices were explained through historical context, educational and academic theories, models, and movements within the field. However, it can be said that there is one more major paradigm in the background of giftedness and talent, a *holistic paradigm*. More specifically, Sternberg’s (2003, 2005,

2009b) WICS (wisdom-intelligence-creativity-synthesized) model for giftedness draws attention to the importance of interactive relationship between wisdom and intelligence, creativity, and knowledge and wisdom to moderate them. Intelligence and creativity do not guarantee wisdom (Sternberg, 2005). Here wisdom, which means “to ensure that decisions and their implementation is for the common good of all stakeholders” (Sternberg, 2009b, p. 255), functions as a balance theory between the individual’s own interests and others’ interests (Sternberg, 2003). In other words, wisdom is important for (gifted) individuals to be able to manage himself/herself and consider others at the same time. This is among the aims of character education (see *A Neo-Aristotelian Model of Moral Development* by the Jubilee Center, 2017) that will be explained in the next chapter.

Similarly, Sternberg’s (2017) ACCEL (Active Concerned Citizenship and Ethical Leadership) model for identifying the gifted, focuses on gifted individuals to behave in ethical ways to achieve, over the long term as well as the short term, a common good for all by considering the effect of their potential on real-world problems that require a depth of thinking that goes beyond characteristics needed to solve IQ test problems (Sternberg, 2017). This is a holistic paradigm in the field that focuses on the development of the whole person and that considers the interaction between the cognitive and emotional aspects of the individual. It, therefore, considering the binary relationship between performance and emotion, includes non-intellectual traits, that guide intelligence, creativity, performance, and knowledge, into giftedness.

The main point here is rather than justifying a sociological or IQism-based explanation of giftedness, to demonstrate the inclusion of non-intellectual traits in giftedness approaches and therefore approaching psychologically, sociologically, anthropologically, and critical theoretically to giftedness. In other words, these approaches show that there is a multi-disciplinary shift in the field that requires more complex and comprehensive research – which is what my research addresses. At the same time, these shifts and diversity in giftedness paradigms provides to create more healthy evaluations by broadening our understanding about what giftedness are and/or what constitutes giftedness. A better understanding of paradigm shifts (or a multi-disciplinary shift) in the field of giftedness will enable policy makers and practices to develop more appropriate pathways by considering broader educational and societal contexts, and to develop meaningful goals and productive actions on a philosophical and theoretical basis.

2.3 Gifted education

The field of gifted education has frequently been perceived as elitist and a burr in the side of educators who support egalitarian practices such as common curriculum for all (VanTassel-Baska, 2009). Therefore, the education of gifted students has had “. . . a highly problematic history, having been judged as conceptually confused, socially and ethnically discriminatory, and educationally exclusive” (Mazzoli Simith & Campbell, 2016, p. 255). Based on Ambrose et al.’s (2010) assessment, the field of gifted education does not have a consistent conceptual structure in theory and research. There is also no coherent relationship between research and practice. Educators have adopted different visions of what or how gifted education is for or should be (Dai, 2010). They are concerned with a variety of educational, ethical, pragmatic, and social-political issues surrounding whether or not and how we can offer services to a select group of students.

Dai and Chen (2013, 2014) claimed three major gifted education approaches, deeply analysing paradigm shifts in gifted education: (1) a gifted child approach, (2) a talent development approach, and (3) a differentiation approach. The first one, a gifted child paradigm, which is the equivalent in practice of the demystification and identification-based paradigms, focuses on exceptionality identified in categories by general ability assumed through intelligence tests. It purposes to serve the gifted students’ thinking and leadership qualities by following programs assumed as unique or exclusive to them (Dai & Chen, 2013). The gifted education policy of Turkey, which is explained in more detail in the next chapter, is congruent to this approach. Secondly, talent development approaches in gifted education see giftedness as developmental, diverse, and differentiated aptitudes for particular domains. They select the gifted based on abilities in specific domains, and purpose to supporting domain excellence and creativity and offer various enrichments, authentic learning, and mentorship across school, home, and community (Dai & Chen, 2013). Lastly, a differentiation approach in gifted education determines a child’s educational needs as seen in a classroom setting rather than identifying whether a child is ‘gifted.’ It aims to serve manifested individual needs within the borders of schooling and follows appropriate pacing of learning progression, school-based curriculum and instructional adaptations (Dai & Chen, 2013). There is no consistency in formulations about how gifted education is for or should be.

The importance of gifted education is emphasized by many scholars. For example, Eyre (2004) says that “Today’s gifted pupils are tomorrow’s social intellectual economic and cultural leaders, and their development cannot be left to chance” (as cited in Campbell et al., 2007, p. 48). Renzulli (2002) highlights that “the history and culture of humankind can be charted to a large extent by the creative contributions of the world’s most gifted and talented men and women” (p.57). Gibson and Landwehr-Brown (2009) take these views one step further and give importance to global citizenship (explained in more detail in the next chapter) of gifted children.

These opinions, which reference the importance of the social position of gifted individuals, have also included the purposes of gifted education. For example, from Roeper’s (1996) viewpoint, gifted education should be related to “the growth of the individual as well as his/her responsible membership in the world community” (p. 18). According to Renzulli (2012), there are three purposes for providing special education for gifted individuals: (1) to provide maximum opportunities for self-fulfilment through the development and expression in one or more performance areas, (2) to increase the number of persons who are capable of solving problems of contemporary civilization by becoming producers of knowledge and art in the society and (3) to show sensibility in modelling special programs and services to the modus operandi of these persons rather than after those perceived as good lesson learners. The first two purposes are generally accepted in providing special education for gifted individuals. The combination of the first two purposes produces the third purpose, which is related to the conception of giftedness.

In the educational practices for gifted individuals, more than 90% of the funds allocated for gifted education are transferred into the following strategies: scholarships that aim to support students’ financial independence during their studies, ability grouping (e.g., schools or classes for gifted individuals) that aim to protect gifted individuals from lagging behind by being among individuals with average ability, accelerated programs that aim to prevent gifted individuals from being held back by the lower learning speeds of their peers, enrichment programs that aim to add breadth and depth to the learning experience, and pull-out programs that aim to present special instruction to gifted individuals by combining ability grouping, acceleration, and enrichment (Ziegler & Stoeger, 2004). These strategies in gifted education practice are also criticised because they do not focus on learning competencies or the motivation of individuals. They instead aim to eliminate the deficiencies in the learning environment (Ziegler & Philipson, 2012).

Although developmental or transactional and multi-factorial theories have become increasingly dominant, this trend has not been seen much in gifted education implementations. Similarly, while current relevant theoretical perspectives approach giftedness in a more holistic manner (e.g., including non-intellectual traits and contextual conditions), gifted education usually does not include implementations appropriate for this holistic understanding. If we conceptualise giftedness based on gifted education implementations (above mentioned), and not on giftedness theories, giftedness would still be presumed a personal trait that requires identification before implementing support measures (Ziegler & Phillipson, 2012). Therefore, there is also a need for a paradigm shift in gifted education implementation, as well as in giftedness approaches. For this, methodological pluralism may be one way to move us towards more progressive educational practices. For example, practice may focus away from measurable levels of potential, ability, and attainment, towards creating more optimal learning contexts by taking a more holistic approach to educational quality (Mazzoli Smith, 2021). ‘When one expands their unit of analysis to consider person-in-situation, much of the knowing that was traditionally in the head of the learner can now be found in the interaction’ (Barab & Plucker, 2002, p. 169). At the same time, this has been a part of the discussion for some time in gifted education implementations since meeting children’s needs requires some equality, in terms of the quality of their experience in school (Winstanley, 2004). School service should be fair to all students, including gifted ones, who need challenges beyond the official curriculum, the main point that should be applied is equality of quality of challenge (Winstanley, 2004).

Foregrounding the relational and contextual in conceptualising gifted education practices (e.g., Ziegler & Philipson, 2012) will help to draw parallels with the developing giftedness theories. In other words, while there is an expanding contextual explanation in contemporary giftedness theories and models, missing and/or ignoring the contextual and relational explanations in gifted education practices does not seem to close this gap and may result in superficial or ineffective intervention in gifted education practices. By targeting this gap, this study provides a contextual and relational explanation of gifted education practices by considering contextual theoretical explanations for gifted education policy in Turkey, in order to present more effective suggestions and solutions to the policy and practice related to the character development and education of gifted pupils.

CHAPTER 3 EXISTING LITERATURE ON CHARACTER

3.1 Introduction

This chapter presents a review of the concepts of character, character development, and character education in the relevant literature. Firstly, it explains the definitions and differences of the relevant concepts often used interchangeably with the concept of character in the educational framework and indicates why this study chose the term ‘character.’ Then, a historical review of the theories about character development is presented and the neural basis of moral cognition is explained. Lastly, the main aspects of character education models in the existing literature are reviewed.

3.2 Definition of character and related concepts

Although the concepts of *morality*, *ethics*, *character*, *values*, and *virtues* imply different meanings, they are interchangeably used in the educational framework (Kohlberg, 1963; Raulo, 2000). According to moral philosophy, the definition of morality is hidden in the answers to the questions “What should I do?” or “How should I act?” as well as the form of Socrates, “How should I live?” (Walker & Lovat, 2017, p.436), which implies an awareness of others’ viewpoints by going beyond the ego. However, in the latter 20th century, the responses to these questions were accepted as ‘moral sensitivity’ (Bebeau et al., 1999). Bebeau and colleagues (1999) explain morality with four basic components: moral sensitivity, moral judgment, moral motivation, and moral character. Moral sensitivity is seen as the first step for morality and defined as

It is the awareness of how our actions affect other people. It involves being aware of the different possible lines of action and how each line of action could affect the parties involved (including oneself). Moral sensitivity involves imaginatively constructing possible scenarios (often from limited cues and partial information), knowing cause-consequent chains of events in the real world, and having empathy and role-taking skills (Bebeau et al., 1999, p.22).

To be able to respond to a situation in a moral way, firstly, a person must perceive and interpret events in a way that lead to moral action. It appears that this process requires critical thinking to be able to analyse a situation and behave morally.

Morality may refer to standards conducting human behaviour that apply to all within a society. However, this definition is minimalist and therefore deficient as a descriptor (Strawson, 1961). It is variously described as: the perspective that considers others (Frankena, 1980), common social norms related to actions are right or wrong (Kerridge et al.,

2013), a behaviour code that is put forward by a society (Gert & Gert, 2016), “choosing to behave in appropriate ways towards others” (Jewell, 2001, p. 3), and “a holistic response to life” (Hague, 1998, p. 17). Morality does not have the same meaning as etiquette, law and religion (Gert & Gert, 2016). Etiquette is occasionally involved as apart from morality by applying to norms that are thought less serious than the types of norms for behaviour that are more pivotal to morality (Walker & Lovat, 2017). Law is distinguished from morality by having clear rules, penalties, and officers who interpret the laws and apply the penalties, and religion is always more than a guide to conduct (Walker & Lovat, 2017).

One of the terms frequently used in the education world instead of morality is *ethics*. Walker & Lovat (2017) describe ethics and morality as separate from each other. Ethics is related to “how people should act in their own lives, in order to live a good life from the perspective of their own values”, whereas morality is related to “how people should act together, in order to share a good life from their different but necessarily coexisting value perspectives” (p. 437). However, there is no order of importance between ethics and morality. Hence, ethical decision-making and acting are not the same as moral decision-making and acting. Ethical decision-making and acting have a subjective monologue in the person’s own values system, while moral decision-making and acting are a communal process that involves the monologue among those affected (Walker & Lovat, 2017). Reducing ethics to personal decision making and defining morality as socially based does not separate them with sharp boundaries, rather, they are related to each other considering ethical considerations are socially determined in practice. However, just as every personal decision may not be moral, not every moral action may be personally adopted, therefore it is not clear which the subset is of which although there is a relationship between them.

Ethics has been defined as a personal disposition (Onions, 1966), one’s personal worldview (Ormerod & Ulrich, 2013), or the right and wrong understanding of individuals or organizations (Kerridge et al, 2013). Strawson (1961) describes it as “a region in which there are truths which are incompatible with each other. . . the region where there are truths but no truth. . .” (p. 3-4). In other words, while ethics refers to a more personal assessment of values as being relatively good or relatively bad or self-regarding, morality implies a more shared, intersubjective assessment of what is right or wrong, or others-regarding – which is a result of coexistence (Harper, 2009). Habermas (1990) portrayed this coexistence as a “densely woven fabric of mutual . . . exposedness and vulnerability” (p. 199). In this portrayal, he draws attention to both the individual aspect and the collective aspect of a shared lifeworld.

That is, the moral system simultaneously emphasizes the inviolability of the individual and defends the web of intersubjective relations of society. Hence, ethical decision making may be accepted as a relativistic and subjective monologue conducted in one's personal value system, while moral decision making is a communal dialogue process which includes multiple truths and the different perspectives of those who are most affected by the decision; in other words 'dialogic consensus' (Walker & Lovat, 2017). Therefore, there is no possibility of presenting an ethical framework which involves all societies.

As for *values*, the literature reveals that 'value' is a fluid concept according to different subjects and interpretations. Value is defined as "beliefs held by individuals to which they attach special priority or worth, and by which they tend to order their lives" (Hill 1991, as cited in Green, 2004, p. 108), "judgments based on a notion of what is good or bad; they refer to concepts of a just life" (Veugelers, 2000, p. 37), "principles and convictions which act as general guides to behaviour, the standards by which particular actions may be judged to be good or bad" (Halstead & Taylor, 1996, p.2), and "preferences for a certain form of conduct" (Levy 1993, as cited in Solomons & Fataar, 2011, p. 225), and rules and principles that guide social life through values (Morrow, 1989). As seen, there is no common understanding of what values are in the literature (Green, 2004). Brich and Rasmussen (1989) state that values may be moral, non-moral, or immoral because it is possible to say that there still happen situations where people differ about whether particular social issues derive from moral, or social conventions (as cited in Solomons & Fataar, 2011).

Values occur in the light of the complex reorientations of societies and their traditions within a global context (Macintyre, 1981). Hence, values such as religious values, cultural values so on are context-based and are not necessarily morally desirable. In addition, there is no consistent distinction between values and virtues in the literature; even more often, they are used interchangeably. However, Williams (1995) advocates that values and virtues are not synonyms and explains values as valuing qualities of persons and things that make them desirable, so values are not necessarily moral (Veugelers, 2000). On the other hand, *virtues* are good habits and dispositions of the will towards goodness, and are as such moral (Williams, 1995).

Aristotle explains in books II-IV of the Nicomachean Ethics that *character* is comprised of dispositions of the person to feel, think, and act (Baehr, 2017). Similarly, Lickona (1989) defines character as:

Character . . . has three interrelated parts: moral knowing, moral feeling, and moral behaviour. Good character consists of knowing the good, desiring the good, and doing the good – habits of the mind, habits of the heart, and habits of action (p. 51).

In other words, good character is a result of a professional decision-making process. The Jubilee Centre (2017) that is an interdisciplinary research centre interested in character education in the UK gives a definition: “Character is a set of personal traits and dispositions that produce specific moral emotions, inform motivation and guide conduct” (p. 2). As seen in the definitions, character is synchronously related to thought, emotion, and action. Hence, character education must address these three dimensions in the individual. Aristotle attributed ‘character’ in his ethos as deriving from ‘habits’ in the singular, thus he advocated that an individual’s virtue is perfected in him/her by habitual practice (Walker & Lovat, 2017). Similarly, according to the approach provided by Plato, character occurs through habits (Walker & Lovat, 2017). In other words, character education is habituation engineering that purposes to make the individual perfect for human and societal flourishing in the framework of societal virtues; intellectual, performance, moral, and civic (this will be explained in more detail in the next section). Hence, the main material of character education, which is engineered as a habituation system for virtues and morality, is a type of virtue. Lickona (2014) notes that:

. . . character education isn’t just about helping students become kind, honest, and fair. It’s also about teaching them to work hard, develop their talents, and strive for excellence so that they are equipped to make a positive difference in the world (p. 11).

In this perspective, multidimensional character education compatible with contemporary giftedness approaches that aim to develop non-intellective traits. That is, the mostly self-oriented or regarding part and partly others-oriented or regarding parts of character are embedded in contemporary giftedness approaches. In the extended giftedness definitions, theories, and models with ecological and system-based paradigms, and/or holistic paradigms, the different aspects of character, for example wisdom (Sternberg, 2003, 2005, 2009b), ethical leadership (Sternberg, 2017), task commitment (Renzulli, 1978, 2005), motivation (Eyre, 2007, 2016), transformational giftedness (Sternberg, 2020) are included in the explanations of giftedness or in the related concepts that carry the same meanings with giftedness. In this study, there are two reasons why the term ‘character’ is used. The first one is that character is related to both human and societal flourishing, which is emphasized in recent giftedness theories and models in varying form. The second one is that character

focuses on the educable aspect of the individual based on a nurturist understanding through inculcating habits (habits of feeling, thinking, and acting) without interfering with the individual's personal values.

Personality traits are the outcomes of a macro-analytical process (Geukes et al., 2018). Geukes and colleagues (2018) report personality incorporates “. . . biological structures (e.g., gene expression, hormonal levels, physical abilities), environmental structures (e.g., probabilities of certain situational contexts, types of interaction partners etc.), social roles (e.g., being a mother, friend, or employee), age, and life events (e.g., marriage and divorce, the birth of a child, accidents etc.) ...” (p. 43). Personality traits refer to the dynamic integration of an individual's conscious and unconsciousness behaviour patterns and subjective experience, that includes habitual behaviours, habitual desires and fears, explicit psychic thinking, and experiences of the self (Kernberg, 2016; Posner et al., 2003). This dynamic integration is an outcome of the coordination of multiple traits that affect each other. In this integrated view of personality, the genetic process of neurotransmitters that activate and regulate diverse affective states, the interaction between baby and caregiver from birth on, and psychological functioning throughout early development and into adulthood are determinants of the integrated view of personality (Kernberg, 2016). In other words, personality traits are major reflections of ‘causal agency’ embedded in humans by evolutionary processes that are influenced, triggered, and moderated by proximal internal and external stimuli (Dennett, 1995).

In process-oriented models of personality, traits are described as individual differences in state processes; the dynamic patterns of how people think, feel, make an effort, and behave in specific situations (Cervone, 2005; Robinson, 2007, Wood et al., 2015). Kernberg (2016) accepts that character and identity are only two components of personality, they do not correspond to the same thing in personality. Kernberg (2016) describes the relationship between character and identity as follows: “character as the objective, individualized integration of habitual behaviour patterns, and identity as the subjective correspondent of character in terms of the integration of self-perception and experience and the experience of significant others. Identity and character are mutually complementary expressions of the organization of psychic life” (p. 148). That is, identity is more in touch with and informed by ethics and values.

As seen, although these concepts are interchangeably used in the education context, they do not correspond to the same aspect of the individual. In this study, the concept of character in particular is used, since it covers both self-directed habits and habitual relationships with others by focusing on the educable aspect of the individual rather than interfering with the individual's personal values. Character, which is defined as an educable aspect of the individual, is the most useful concept for the research questions of this study. This is because character development and education are a multifaceted processes in which contextual conditions and relationships play a role. Accordingly, my research questions are focused on determining causal explanations that consider contextual conditions and relationships. This research is purposed to investigate how teachers think about the character development and education of gifted pupils instead of applying other concepts that are used interchangeably with the general idea of character.

3.3 Neural basis of moral cognition

Over the centuries, philosophers have discussed whether moral judgments are a result of active deliberation or that intuitive aspect of our decisions about right and wrong. However, in the last decade, some cognitive neuroscientists have been involved in this debate by scanning people's brains when they make judgments about scenarios or scenes. This attempt has effectively proven that there are neural mechanisms that affect moral decision making. Studies of humans with focal brain damage and experimental injuries in monkeys have revealed that "a relationship between the prefrontal cortex (PFC) and planning, decision-making, emotion, attention, memory for spatiotemporal patterns, and recognition of a mismatch between intention and execution" (Casebeer, 2003, p. 843). However, there are still uncertainties about the network level properties of this area because of the limited temporal and spatial resolution of functional magnetic resonance imaging (fMRI) (Casebeer, 2003).

Churchland (2011) highlights the role of the hormone and neuromodulator oxytocin as one of the endocrinological foundations of 'brain-based values' such as self-welfare and the welfare of relatives and friends. According to Churchland (2011) "oxytocin plays a central role in caring for others by mediating attachment as the 'neural platform for morality'" (p. 98). She believes that "our values – at least, in their most basic form – are in the world, more specifically in the brain. Thus, morality is rooted in our animal nature" (p. 99). In contrast with classical Darwinians, their present-day successors Richard Dawkins or Thomas Henry

Huxley accept morality as a part of our animal nature rather than a cultural structuring keeping the animal nature of humanity under control (Churcland, 2011). According to them, “altruism, empathy, cooperation and care for others are not a thin cultural veneer hiding an otherwise selfish and brutish life form but are key to our biological makeup and survival as a species” (Churcland, 2011, p. 99).

Today, modern biology portrays humans as basically emotional and social creatures (Immordino-Yang & Damasio, 2007). As Immordino-Yang (2011) indicate that “Social emotions and their associated thoughts and actions are biologically built but culturally shaped; they reflect our neuropsychological propensity to internalize the actions of others, but interpreted in light of our own social, emotional and cognitive experiences” (p. 100). Educators are long aware of “thinking and learning, as simultaneously cognitive and emotional processes that are not carried out in a vacuum, but in social and cultural contexts” (Immordino-Yang, 2011, p.99). This natural overlapping between cognition and emotion emphasizes the processes relevant to education (Immordino-Yang & Damasio, 2007). In other words, the human has a biological mechanism in the brain, which functions to organize socio-emotional aspects of the individual (i.e., character formation). However, the operability of this mechanism is related to the experiences and habits of the individual gained in social and cultural contexts, rather than being purely a-priori. From this viewpoint, rather than making an assessment that focuses on only the effect of intelligence or high potential on character development or moral maturity, making an assessment considering the ‘acquirability’ feature of character and taking into account the effect of the contextual conditions and relationships in the character development and character education of gifted children, may provide more effective suggestions and solutions for the field. This study therefore proposes to perform a socially and contextually situated investigation of character development and education for gifted pupils.

3.4 Character development

Character development is an issue on which there has been no clear consensus throughout history. Whilst some of moral development theories focus on all the habits of thinking, feeling, and doing, some moral development theories have alternated between thought and action. For example, according to Aristotle, who is not only a ‘naturalist’ regarding the excellence life as the completing of human nature, but also a ‘nurturist’ who takes the awareness of the virtues as an accomplishment of pedagogy and practice (Langlitz, 2012),

character develops by learning virtues through habits of thinking, feeling, and doing. Here, practicing over the course of a lifetime, imitating models (see Bandura, 1986), and responding to directions of tutors are important to be successful in judgments and actions (Sherman, 1989). Aristotle ([1558] 1986) emphasizes that the virtues – which are explained in more detail in next section – do not develop automatically; the development of them requires time. According to him, “the virtues are implanted in us neither by nature nor contrary to nature: we are equipped by nature with the ability to receive them and habit brings this ability to completion and fulfilment” (Aristotle, [1558] 1986, p. 33).

Aristotle’s approach overlaps Goldberg’s (2005) neural solution of wisdom, in which Goldberg (2005) discusses how repeated use means that brain areas allocated to some skill expand or colonise other parts of the cortex. In brief, experience shapes neural pathways that constitute a link between brain development and the habituation, which explains Aristotle’s approach to character development from the neural dimension. This explanation also clarifies how persons use particular virtues automatically without deliberation or conscious (Lewis, 2012). Today, many other research (e.g., Casebeer, 2003; Churcland, 2011) – which are explained in more detail in the previous section – have claimed that there is an explicit connection between the neurologic structure of the brain and the moral dimension of the human being. Aristotle ([1558] 1986) also draws attention to the effect of external factors such as luck, experience and a certain level of material comfort, and internal factors such as moral weakness (which means that moral convictions are overcome by pleasures and later regret). In short, Aristotle’s character development is built on the following assertions:

(1) moral and intellectual virtues are learned habits of feeling, thinking and doing, orchestrated by practical wisdom; (2) these virtues are learned over the course of a lifetime; (3) they are learned largely by imitation of exemplars; and (4) they enable persons to live authentically human ways (Lewis, 2012, p. 158).

Aristotle’s theory is not only about how we can behave well but also how we can feel well, the right kinds of actions are important as well as the right kinds of emotions. From this aspect, both cognitive and emotional education is required for moral development (Kosman, 1980). It can be said that defending a nurturist understanding – transforming virtues into habits – based on knowing, feeling, and doing; relying on the exercise of reason rather than defending a universal certain moral principles when taking into consideration the post-modernist era we live in (see Ward, 2003); and the developments about the connection between the neurologic structure of the brain and the moral dimension of the human being

are among the reasons why today Aristotelian approach is used still in education and moral philosophy.

Similarly, Sternberg (1998) also works on wisdom that relocates the habituation to the central as parallel to Aristotle and defines it with six components: (1) knowledge (including an understanding of presuppositions, meaning and limits), (2) processes (including discernment of problems that should be solved automatically or should not be so solved), (3) a judicial thinking style (including the underlying reasons of the appearance, how and why things happen as they do), (4) personality (including tolerance of ambiguity), (5) motivation (to understand and evaluate what it is known and what it means), (6) environmental context (including possible various kinds of thoughts and actions in a specific context). Specifically, wisdom is a kind of practical intelligence in that it draws on tacit (implicit) knowledge, but it is not just any type of practical intelligence (Sternberg, 2001). “Wisdom is not simply about maximizing one’s own or someone else’s self-interest, but about balancing of various self-interests (intrapersonal) with the interests of others (interpersonal) and of other aspects of the context in which one lives (extrapersonal), such as one’s city or country or environment or even God” (Sternberg, 2001, p. 231). From this point of view, someone who is academically intelligent may be practically intelligent, but (s)he may not be wise.

On the other hand, Lewis (2012) criticizes the Aristotelian approach in terms of five aspects: (1) the emphasis of the habit in character education motivates a kind of inflexibility or rigidity that is opposite to morality, (2) character education does not sufficiently interest in the position of rules in the moral life, (3) recommending that traditional pedagogies which require rigidity, authority, and punitive, rather than modern pedagogical implications of character education, (4) virtue is a praiseworthy characteristic that occurs as a result of a society’s consensus, and (5) Aristotle has also been criticised by contemporary thinkers for his teleological dedications to a normative account of human existence. However, today, the developments in the neurosciences and psychology about brain structure and areas make Aristotle’s approach even more significant. That is, there is a biological mechanism in the human brain that deals with social emotions and their associated thoughts and actions, but it is socially and culturally shaped (Immordino-Yang, 2011). The experience builds neural connections that serve as a link between brain development and habituation (Goldberg, 2005). Hence, there is need for understanding the effect of contextual conditions and relations to understand how character is shaped. This study therefore presents contextual and relational explanation of the character development and education of gifted pupils.

According to Piaget (1997), another pioneer of this field, moral action precedes and guides to moral thought in the Law of Conscious Realization. Locke (1983) expressed this approach as “the Action/Thought Problem [:] . . . the question is not how thought gets translated into action, but how action gets taken up into thought” (p. 160). Moral development, evaluated in the framework of two components (moral thought and moral action) with Piaget, expands its borders with Kohlberg. According to Kohlberg (1981), there is no single causal direction from moral action to moral thought, new probabilities in thinking produce new chances for action. Kohlberg’s (1981) moral theory consists of five developmental stages: the avoidance of punishment (stage 1), the avoidance of obtaining of rewards (stage 2), the avoidance of disapproval and dislike (stage 3), the avoidance of censure by legitimate authorities (stage 4), and the maintenance of respect from the community (stage 5). In the beginning, Kohlberg (1969) focused on obtaining an ethical decision using objective reasoning in moral dilemmas. Subsequently Kohlberg (1981), acknowledged that moral questions could not be answered without considering ‘reasons of the heart’ and added a higher final stage in his theory that requires affective as well as cognitive response (Hague, 1998). In other words, there is a need of a wise heart for moral action.

For Kohlberg, the nature of moral thought or judgement is of two kinds: (1) deontic judgements and (2) responsibility judgements. The previous “is a judgement that an act is right or obligatory, typically derive(s) from a rule or principle and can be called first-order”, however, the next one “is a second-order affirmation of the will to act in terms of that [first-order deontic] judgement” (Bergman, 2002, p. 107). Responsibility judgement is essential for the self, and the task of that is to decide as to what extent some thought or action is morally good or right (Kohlberg & Candee, 1984). Whilst the psychological function is important to implement a moral judgement, situational factors are important for moral action. As has been seen, insofar as both Piaget and Kohlberg focus on moral cognition, they do not explicitly indicate moral motivation. In this regard, Straughan (1983) and Gilligan (1976) lay strong emphasis on feeling or affect and draw attention to moral motivation through shame and guilt.

There is a considerable similarity between Kohlberg’s approach and Rest’s (1984) four component model. According to Rest (1984), Kohlberg’s approach addresses only one or two components of his more comprehensive model. In Rest’s model, the first component is interpretation; the perceptions of persons must be open so as to be able to read clues in the

environment such as the emotional statements, both to estimate/evaluate possible actions and their possible consequences. Secondly, willingness and the ability to judge an action as morally right must be present in persons. Thirdly, moral values are prioritised over other concerns. Finally, persons must have a strong self-identity and the skills and motivation to implement an action (Narvaez, 2005; Rest, 1986).

Rest's model is more relevant to motivational factors beyond moral rationality, whereas Kohlberg's model is relevant to cognitive determination. Straughan (1983) notes that 'extreme internalism', which refers to moral knowledge, is both necessary and sufficient for moral action. With Kohlberg, 'moderate internalism', which refers to the knowledge of the good, is necessary but sufficient only when there are no other 'countervailing factors' at stake. This means Kohlberg's model is more cognitive, whereas Rest's model is social. Narvaez further develops Rest's model by expressing moral development as the development of a special kind of expertise and explains the difference between experts and novices in three categories. Firstly, experts have a richer well-grounded and procedural knowledge and develop schemas for managing knowledge. Secondly, this knowledge provides experts the ability to see differences so that they are better at identifying relevant information than novices. Lastly, experts demonstrate more developed skills in reasoning (Narvaez & Lapsley, 2005). Another related approach is Blasi's (1983) Moral-Self Model that focuses on the transition from moral cognition to moral action and on the issue of judgment-behaviour consistency. According to this model, moral understanding shapes personal identity, moral motivation to act is a result of one's moral identity, not to behave morally is to betray the self. In contrast, for Kohlberg, not to behave morally is about one's lack of fidelity to moral principles (Lapsley, 1996). Hence, the general view is that moral development in an individual cannot culminate without them knowing, desiring, and doing the good.

Berkowitz and colleagues (2006) develop a system of 'moral anatomy' based on skills and traits that characterise the moral flourishing of an agent. In this anatomy, which consists of seven steps, behaviour is the first step; people demonstrate behaviour that is personal and pro-social responsible. The second step is that things that they do turn into habits over time. The third step is emotional competency; the ability to understand both self and others while exhibiting emotional self-control. The self-commitment of such people to pro-social values and attitudes is the fourth step. Fifth, they are expert at moral reasoning, and they are skilful in wrestling with the complex situations found in real life. Sixth, they have put morality at the centre of their self-identity. Finally, they demonstrate several skills

that are fundamental to character, such as empathy, loyalty, courage and the ability to take into consideration the perspectives of others (Berkowitz et al., 2006). Overall, whilst some theories (e.g., Aristotle, [1558] 1986; Kohlberg, 1981; Sternberg, 1998) care for the parallel development of cognition and the heart, some theories (e.g., Piaget, 1997) alternate between thought and action. Overall character development has been increasingly focused on inculcating a professional choice and decision-making skill/process.

3.5 Character education

Character education can be said to be both old and new; old because it has been included in different forms of education since the time of Socrates, Plato, and Aristotle; such as in Socratic questioning, moral dilemmas, and ethics. It is also new, as its position in today's contemporary education models is questioned (Gibson & Landwehr-Brown, 2009; Grant, 2009). However, over the years, as in the definition of the concept of character, there has never been a single, agreed-upon definition of character education and there has been much debate over nomenclature and terminology (Berkowitz, 1997). The dynamism in this notion of character, used interchangeably with the concept of morality in the relevant literature (in moral philosophy, moral customs, and moral beliefs), has impacted on differences and/or changes in character education. A number of paradigms and theoretical positions have and still do influence the current understanding of character education: Kantian/Rawlsian ethics encourages development of moral reasoning capacities and having principles that can be applied to different moral dilemmas or decisions; Virtue Ethics values inculcating a good character through specific habitual virtues; Communitarianism values acquiring a deep emotional understanding related to the good and harmful effects of actions on the lives of other people as well as caring for one's own lives in the ethics of care (Noddings & Slote, 2003).

Kantian ethics (1785) focuses on certain universal moral principles, deriving from the practical side of pure reason, as applying a more or less conscious effect on morally decent individuals, to be able to live morally, fulfilling one's moral tasks. Alternatively, Rawls (1993) stresses very general moral principles in parallel with Kantian ethics, however, using the idea of a social contract rather than pure reason. By contrast to this general Kantian paradigm of morality and of moral education, the communitarian moral approach points to the moral centrality of communities by considering social contexts, values, religions, cultures, and good habits acquired in our context so that we can become morally virtuous.

According to Aristotle, who is the greatest influence today on contemporary character education models, “to be a person of character is to be a person who, over the course of a lifetime, cultivates the virtues, i.e., those habits of thinking, feeling and doing that enable persons to flourish” (Lewis, 2012, p. 156). The Aristotelian approach therefore associates moral life with the exercise of reason, rather than defending only a universal concern for other human beings. Aristotle both considers the individual in society, which in a sense he has a common point with the communitarians, and he focuses on the individual development of the individual with an individualistic approach, so he approaches as both individual and societal aspects.

From an Aristotelian perspective, character education can be defined as transforming virtues into habits, by approaching a nurturist understanding. In the philosophical and psychological literature up to the late 20th century, virtues were described as moral (acting well in situations that require an ethical response, for example, kindness and compassion) and civic (engaging with responsible citizenship and contributing to the common good, for example, civility and community awareness) (Baehr, 2017). However, today, philosophers, psychologists, and education theorists have drawn attention to two more types of virtues, in parallel with Aristotelian understanding: intellectual (comprising discernment, right action and the pursuit of knowledge, truth, and the understanding of the person in an epistemic context, for example, curiosity and reasoning) and performance (enabling the moral, civic, and intellectual virtues, for example, perseverance and self-discipline) (e.g., Davidson, 2004; Roberts & Wood, 2007). These four type virtues constitute A Neo-Aristotelian Model of Moral Development, which is developed by the Jubilee Centre (2017). When the individual has these virtues, he/she will acquire practical wisdom that is the master and integrative virtue. According to Aristotle, “it is impossible to be good in the full sense of the word without practical wisdom or to be a man of practical wisdom without moral excellence or virtue” (Aristotle, [1558] 1986, p. 172). The practically wise person develops both appropriate passions that are truly good regarding a specific set of circumstances and sound reasoning in order to reach an excellent life in a community with others (Aristotle, [1558] 1986). This will ensure the flourishing both individuals and society (Jubilee Centre for Character and Virtues, 2017).

This model addresses three major areas in the individual: (1) the cognitive-developmental approach which purposes to “knowing good”, (2) the caring approach which purposes “desiring the good”, and (3) traditional character education which purposes “doing

the good” (Howard et al., 2004). A Neo-Aristotelian model of moral development claims that moral education is only a part of character education, and that character education requires more than morality. The Jubilee Centre likes about Aristotle’s theory since it focuses on the educable side of the person through (gaining) habits in the formation of an individual’s character. In addition to that, the neurological findings (e.g., Immordino-Yang & Damasio, 2007) draw attention to the roles of the experiences and habits of the individual gained in social and cultural contexts in the formation of an individual’s character, which supports Aristotle’s approach.

The ultimate aim of character education is human and societal flourishing (Jubilee Centre for Character and Virtues, 2017). Human flourishing requires the acquirement and development of intellect, morality, civic virtues, and performance virtues of self-management. Character education aims to sustain a well-rounded life and to develop society through these virtues. Character development includes not only caring for and respecting oneself, but also caring for and respecting others (Jubilee Centre for Character and Virtues, 2017). Therefore, the aim is to help students comprehend what is ethically significant in situations and how to act for the right reasons, such that they become autonomous decision-makers and reflective in the practice of virtue. At this point, with regards to societal flourishing, Aristotelian character education is connected with ethics of care, which is based mostly on a constructivist paradigm deriving from our situation vis-à-vis others, from facts about how we are connected to others and our ability to help or hurt them (Noddings & Slote, 2003). The act of care considered natural (or spontaneous) in Kantian ethics is transformed here into a conscientious appeal (feeling and desire) to caring as an ideal, and a moral universality is seen in the desire to respond with caring.

Micheal Hand (2014) offers an applicable theory with pragmatic relevance to save teachers/parents/policy makers the trouble of deliberating about their practice in the area of moral education. According to Hand (2017), the society-centred theory of morality contains the seeds of a solution to the problem of moral education. With this approach, Hand (2014), who bases on Copp’s (1995) theory in his approach, divides the messy genus of real-world moral standards into three distinct species and assigning to each a particular pedagogical approach: (1) Justified moral standards that clearly contribute to stability and cooperation (e.g., do not steal), (2) unjustified moral standards that, on closer inspection, have an illusory connection to stability and cooperation (e.g., do not masturbate), and (3) moral standards whose contribution to stability and cooperation is a matter of reasonable disagreement (e.g.,

vote in elections). For the first two, Hand (2017) refers to ‘directive moral inquiry’, which depends on adult-led examination of the justification of the moral standard in question in order to show whether the standard is justified, as the case may be. For the third one, Hand() refers to ‘nondirective moral inquiry’, which depends on an open-ended justificatory investigation that the adult enters into with no persuasive intent. In other words, directive moral education can be fully rational as long as it is restricted to the approval of the problem-of-sociality justification for moral standards that sustain cooperation and prevent conflict.

A more positivist paradigm to moral education derived from Piaget (1971) and Kohlberg (1981), focuses on moral reasoning by associating the moral development of the individual with increasing cognitive age-appropriate development in the individual. The moral development process is at the forefront here, rather than actual moral content. These paradigmatic divides are also seen in differences among current character education description of purpose (goals). For example, preparing individuals to make ethical judgments and acting on them (Howard et al., 2004); developing desirable individual qualities (Hoge, 2002); raising individuals who can think about what ought to do through ethical judgements and action (Howard et al., 2014); a conscious personal growth system/process that constructs a community of trust and respect (Schultz, 2002); describing and prescribing right and wrong (Wiley, 2002); shaping fundamental aspects of personhood such as right and wrong perception (Grant, 2009); and raising global citizens (Gibson & Landwehr-Brown, 2009), which are all identified as among the purposes of character education.

Similarly, it is seen that these differences reflect on character education models, illustrated in Table 2 below. Following the Neo-Aristotelian Model is the Character Education Partnership model that states the widely distributed ‘Eleven Principles of Effective Character Education’ (Lickona et al., 2002). This model similar to the Neo-Aristotelian Model includes cognitive, emotional, and behavioural aspects of moral life; the significance of intrinsic motivation; the need for providing opportunities for moral behaviour; and the need for a meaningful and challenging academic curriculum. Character education promotes explicitly endorsed values (which are caring, honesty, fairness/justice, responsibility, respect for self and others, civility, cooperation, obedience to authority, nonviolence, abstinence, and a meaningful and challenging academic curriculum valuing the importance of knowledge) and implicitly endorsed values (which are individualism, human dignity, common good, constitutional rights, citizenship responsibilities, involvement/participation, inclusiveness, diversity, communicativeness, trust, leadership, and appreciation of community) as the basis

of good individual character (Lickona et al., 2002). “Character education is viewed as something that must (a) be actively done, (b) to individuals, (c) for the good of society” (Hoge, 2002, p. 104). This review brings citizenship education, which is also a part of the Neo-Aristotelian Model, into the foreground. This means a conscious effort to develop pupils’ knowledge of government, law, and politics as evolving through history and presently operating in the society (Hoge, 2002).

Table 2: An overview of different character education models

Character education model	Main aspects of the model
A Neo-Aristotelian Model	<ul style="list-style-type: none"> ● consists of four types of virtues: <ol style="list-style-type: none"> 1. Intellectual virtues (e.g., curiosity and reasoning) 2. Performance virtues (e.g., perseverance and self-discipline) 3. Moral virtues (e.g., kindness and compassion) 4. Civic virtues (e.g., civility and community awareness) ● aims for individual and societal flourishing through practical wisdom ● addresses the cognitive, emotional, and behavioural aspects of the individual (Jubilee Centre for Character and Virtues, 2017).
Character Education Partnership’s Eleven Principles	<ul style="list-style-type: none"> ● includes the following 11 principles: <ol style="list-style-type: none"> 1. Promoting core ethical values (e.g., caring, honesty, and fairness) and supportive performance values (e.g., diligence, a strong work ethic, and perseverance). 2. Defining “character” comprehensively to include thinking, feeling, and behaviour. 3. Using a comprehensive, intentional, and proactive approach to character development. 4. Creating a caring school community. 5. Providing students with opportunities for moral development 6. Including a meaningful and challenging academic curriculum that respects all learners, develops their character, and helps them to succeed. 7. Striving to foster students’ self-motivation. 8. Engaging the school staff as a learning and moral community that shares responsibility for character education and attempts to adhere to the same core values that guide the education of students. 9. Fostering shared moral leadership and long-range support of the character education initiative. 10. Engaging families and community members as partners in the character-building effort. 11. Assessing the character of the school, the school staffs’ functioning as character educators, and the extent to which students manifest good character (Lickona et al., 2007).
Citizenship Education	<ul style="list-style-type: none"> ● includes core values about citizenship education: justice, equality, authority, truth, patriotism, participation, diversity,

freedom, privacy, and property and human rights (Butts, 1988).

- expanded by Bahmuller and Patrick (1999) by adding character virtues and dispositions (e.g., recognizing the equal moral worth for each person and taking responsibility for government) for democratic citizenship.

Global Citizenship

- constitutes three stages:
 1. Knowledge (e.g., understanding of culture and possible future scenarios for an equitable and sustainable world)
 2. Attitudes and Values (e.g., respecting diversity and appreciation of human dignity)
 3. Skills (e.g., research and inquiry skills, interpersonal skills, and critical thinking skill) (Gibson & Landwehr-Brown, 2009).

Both Aristotelian character education and the model of the Character Education Partnership are associated with citizenship education because both accept civic virtues (e.g., citizenship, civility, service, and community awareness) and/or endorsed values (eg., common good, constitutional rights, citizenship responsibilities, and involvement/participation) as part of character education. Looking at citizenship education, Butts (1988) presents a prominent listing of core values related to citizenship education as: justice, equality, authority, truth, patriotism, participation, diversity, freedom, privacy, and property and human rights. Bahmuller and Patrick (1999) expand this list by offering a list of character virtues and dispositions for democratic citizenship: (1) promoting the general welfare or common good of the community, (2) recognizing the equal moral worth and dignity of each person, (3) respecting and protecting rights possessed equally by each person, (4) participating responsibly and effectively in political and civil life, (5) taking responsibility for government by consent of the governed, (6) becoming a self-governing person by practicing civic virtues, and (7) supporting and maintaining democratic principles and practices. Since citizenship education focuses on the individual's social life and responsibility in society, it is closely related to the others-oriented or -regarding part of character.

In the 21st century, social and technological change and multiple global challenges have changed the content of moral action and ethical decision making (Ambrose, 2007). Today, ethics and moral action are needed for global citizenship (Gibson & Landwehr-Brown, 2009). In the relevant literature, global citizenship is the understanding of the interconnectedness and interdependence of humanity and an acceptance of universal

responsibility leading to global consciousness (Bah'a'I, 1993; Frey, 2003). In other words, global citizenship is an extension of citizenship from the national level to the global level. This implies stewardship of humanity and the global environment. Hence, it does not replace national citizenship but does in concept supersede it, much like as when a soldier goes to war his national responsibility supersedes his familial obligations. Gibson and Landwehr-Brown (2009) present the details of the global citizen in three stages: (1) Knowledge; understanding of culture, awareness of the interconnectedness and interdependence of humanity and the world, peace and conflict, nature and environment, and possible future scenarios for an equitable and sustainable world, (2) Attitudes and Values; appreciation of human dignity, respecting diversity with empathy toward other cultures and perspectives, caring, tolerance, compassion, valuing justice, trustworthiness, fairness, curiosity about global issues and conditions, willingness to sacrifice for the common good, and a sense of universal responsibility, (3) Skills; research and inquiry skills, interpersonal skills, intrapersonal skills, non-adversarial decision-making, conflict resolution, collaboration, theory testing, leadership, critical thinking skills, communication skills and political skills essential for civic engagement.

On one hand, character education models supporting human and societal development from different aspects are proposed, on the other hand, character education programs are discussed in terms of the responsibility of the educational system towards; teaching ethics, how ethics should be taught, which values should be taught, and whether values are universal or not (Gibson & Landwehr-Brown, 2009). Furthermore, character education programs are criticized in terms of five aspects: (1) instrumental (the most common justification), which is fixing problems in school and society or preparing students for life in a democracy; (2) essentialist, which is that teaching and schooling by their very nature shape character; (3) historical, which is fulfilling the historical mission of schools; (4) moralist, which is teaching the right and wrong; and (5) universalist (that is closely related to moralist), which is teaching universal values that are standards that hold for everyone. These are all held to be problematic in that achieving consensus on any of these subjective views/values is uncertain or even impossible (Grant, 2009).

Overall, contemporary character education models take into account feelings (including motivation) alongside knowing/thought and doing/behaviour. Therefore, character education programs are expected to address consciousness, emotions, and action. Although the names of the models vary, the awareness and fulfilling of a universal responsibility for

societal flourishing is the common goal of all. Therefore, knowledge, values, or virtues posited in the centre of character education, rely on universal perspectives rather than on specific national, cultural, or religious perspectives. However, the possibility that universal virtues are formed in the individual through contextual conditions remains present in concept. This review shows that character education considers societal virtues or values in which the individual lives as well as self-oriented or self-regarding virtues. Therefore, both character education and character building bear traces of the context in which the individual lives. From this aspect, character education is important (as well as the concept of character and character development) for my research questions that purpose a contextual assessment. A critical realist approach built on contextuality, is therefore an important tool for explaining how contextual conditions and relationships; affect how the gifted individual's character interacts, how they reflect on the gifted individual's character, and how they impact the gifted individual's character education.

CHAPTER 4 EXISTING LITERATURE ON THE POSITION OF CHARACTER IN GIFTEDNESS

4.1 Introduction

The relevant literature is limited in terms of the character development and education of gifted pupils because researchers focus on moral development and education – a subset of character development and education – and examine the relationship between moral reasoning and IQ score/intelligence, the relationship between moral judgment and high intellectual ability/academic talent, and the levels of moral sensitivity, moral intensity, and moral concern (explained in more detail below). Also, very little sociological and contextual assessment in the topic area. This chapter initially explains opinions and debates about the character development of gifted children and the effect of family on that development. Then, the importance of character education both at the individual and societal level for gifted children and the importance of teacher training in education area is discussed. Before moving on to the relevant literature, it will be useful to indicate that the concepts of character, morality, ethics, and values are interchangeably used in the educational framework in gifted education literature, as it is in the general education literature (Raulo, 2000); although they imply different but related meanings. Why this study specifically used the term/concept of character is explained in the previous chapters. These concepts are also included in this chapter depending on the studies discussed. A review was made on what the current studies focus on regarding the character development and education of gifted children and on how they evaluate them even if they use different terms/concepts with similar purposes. Lastly, the role of teachers is explained in the character development and education of gifted pupils.

4.2 Character development of gifted children

Scientists in the fields of gifted education and creative studies often emphasize the nature and importance of the moral dimensions of high potential (broadly defined here as any combination of gifted, talented, more able, high ability, high performance, and intelligence) (see Ambrose 2000, 2008, 2009; Csikszentmihalyi & Nakamura, 2007; Folsom, 1998; Gardner, 2007; Gibson et al., 2008; Hague, 1998; Lee & Olszowski-Kubilius, 2006; Lovecky, 1997; Michaelson, 2001; Piechowski, 2003; Roeper, 2008; Silverman, 1993a; Sternberg, 2001, 2005; Tannenbaum, 2000b; Tirri & Nokelainen, 2007). The question of “what makes giftedness” has also been considered with the inclusion of non-intellectual

characteristics, such as moral or ethical sensitivity (Lee & Olszewski-Kubilius, 2006), wisdom (Sternberg, 2009b), and task commitment (Renzulli, 1978, 2012). In other words, the moral dimension of giftedness has been gaining importance (see Ambrose 2000, 2009; Folsom, 1998; Hague, 1998; Lovecky, 1997; Michaelson, 2001; Sternberg, 2001, 2005; Tannenbaum, 2001). Today, neurological studies claim that morality is not merely a subset of intelligence, but that it has a biological foundation (e.g., Casebeer, 2003; Churcland, 2007; Immordino-Yang, 2011); this has been explained broadly in the previous chapter. In giftedness literature, a number of studies explain the moral development of gifted children based on intelligence tests.

Many claim that gifted children have a privileged position in moral development and moral reasoning because of their precocious intellectual development (e.g., Andreani & Pagnin, 1993; Berkowitz & Hoppe, 2009; Folsom, 1998; Howard-Hamilton, 1994; Karnes & Brown, 1981; Silverman, 1994; Terman, 1925; Tirri & Nokelainen, 2007). For example, Terman (1925), one of the pioneers of intelligence testing, found superior maturity in the moral development of gifted children in a study of choosing socially constructive activities and in rating misbehaviours. This view is supported by Karnes and Brown (1981), who conducted an investigation about the moral development of gifted students by using Rest's DIT (Defining Issues Test) and WISC-R (Wechsler Intelligence Scale for Children-Revised, which is used to measure the students' intellectual performance). According to the result of the research, there is a positive correlation between the DIT and WISC-R. That is, intellectually gifted children are more advanced development in moral reasoning than their less gifted chronological peers.

In parallel to that, Hollingworth (1942) claims that individuals with IQs over 180 were more concerned with ethical issues than their less gifted peers. Similarly, Janos and colleagues (1989) found that the moral reasoning level on Rest's (1979) DIT of accelerated gifted adolescents is similar to graduate students on the same test. In the same vein, Narvaez (1993) conducted research on the relationship between apparent academic talent and moral judgment by using the DIT. The results showed that high achievers have above average moral judgment scores, whereas low achievers seldom reached high scores in moral judgment. Besides a high-level moral judgement and/or moral reasoning, gifted children are often described as more sensitive (having high awareness across others' feelings and needs), more intense (feeling emotions deeply), and having better behavioural self-regulation than

average children (Calero et al., 2007; Lovecky, 2004; Piechowski, 2006; Roeper, 1982; Silverman, 1993b).

As seen, most research has evaluated the level of the moral development of gifted children in terms of moral reasoning and/or moral judgement. Moral reasoning requires a high level of abstract reasoning and causal thinking ability. It shows competency in a kind of thinking skill. However, the morally correct response to a hypothetical dilemma is not a guarantee of its translation into moral action (Teo & Cheng, 2009). Tasks designed to measure moral reasoning levels are based on either Piaget's (1965) moral tasks or Kohlberg's (1984) moral dilemmas. Rest's (1979, 1986) DIT is also a measure of moral judgement that has been used all over the world to find the connection between morality and giftedness (see Rasanen et al., 2006; Tirri & Pohkenon, 2002). However, the moral dilemmas asked to be evaluated by gifted children are criticised in terms of a lack of diversity (Yussen, 1977), being too outdated (see Tirri et al., 2012) and being too abstract (Straughan, 1975). Today, research demonstrates that the actual dilemmas (interpersonal relations) formulated by young people are very different from the hypothetical dilemmas (ownership, public welfare, and life-and-death) used by Kohlberg and colleagues to assess moral reasoning (Colengelo, 1982; Yussen, 1977). Therefore, it is worth asking to what extent the arguments about the moral development of gifted children that rely on these moral dilemmas represent modern-day context.

In contrast to studies which argue for a linear relationship between high intellectual development and moral development, a number of studies also reject this linear relationship. For example, Brooks (1985) and Gath and et al. (1971) state that there is no necessary relationship between intelligence and morality. Similarly, Sternberg (2009) says that such an approach, thinking that a gifted person can or will do anything in a moral way due to his/her intelligence, is an unrealistic optimism, which can even lead to egocentrism in gifted children. Pyryt (2008) states that gifted individuals are no more or less likely than others to experience problems related to social and emotional dimensions. Teo (2002) highlights that the knowledge and reasoning of morality creates awareness for choice or volition but does not guarantee moral action. In parallel to that, Abrams's (1985) study showed that although the moral reasoning scores of gifted children was higher than average, their playground behaviours did not reflect that.

Similarly, Tirri and Pohkenon (2002) revealed that high intellectual ability does not guarantee mature moral judgment and the judgment of moral dilemmas in science requires moral motivation and moral sensitivity. Oliner and Oliner (1988), Colby and Damon (1992) claim that complex moral reasoning skills do not necessarily correlate with prosocial behaviour. In view of all that has been mentioned so far, it is clear that the relationship between giftedness and moral development is complex rather than linear and there is no consensus among scholars about what kind of a relationship this is. It does not mean that the morally correct response to a hypothetical dilemma will definitely lead to moral action. There is no need to be gifted to be moral, and gifted individuals may not necessarily be moral ones.

Rothman (1992) says that intellectually gifted children most probably know how they should answer questions on the morality tests and their special social relationships with adults influences them to get higher scores in morality tests. Therefore, while examining the character development of gifted children, parent-child interaction must be considered as one of the most effective factors (Coon, 2004; May, 1994). Parent and child behaviours mutually affect each other, but parent behaviours are also affected by parental beliefs (Sameroff & Fiese, 2000). When a family has a gifted child, parental roles change to deal with giftedness and parenting responsibility (Schader, 2008). Since giftedness is a stressor that both affects and is affected by the family (May, 1994).

Parenting the gifted child relates to the giftedness perception of parents. That is, based on how parents think about giftedness (Ogurlu & Kahraman, 2018; Robinson, 1989; Solow, 2001) biases and high expectations (e.g., gifted children are successful in all areas, gifted children's intellectual development is in line with their emotional development) influence parenting practices (Shore et al., 1991). When a family has a gifted child, parental roles change to deal with giftedness and parenting responsibility (Schader, 2008). This situation highlights the importance of family training, guidance, and support about parenting the gifted in gifted education (Colangelo & Davis, 2003; Fornia & Frame, 2001; Rotigel, 2003; Silverman & Golon, 2008; Silverman, 2013). However, parent training in the field of gifted education is still lacking and that more scientific research is needed in this field (Jolly & Matthews, 2012; Morawska & Sanders, 2009; Reichenberg & Landau, 2009).

In regard to parental roles changing with giftedness, it requires to examine the effect of labelling on the character development of gifted individuals. The relevant literature says that there are both positive (i.e., the privileges of learning, special experiences, offered great

opportunities, having different curriculum, a non-boring classroom environment, and better teachers) and negative aspects (i.e., internal pressure, family pressure, teachers' prejudices and unreasonably high expectations by people) of labelling (Berlin, 2009; Feldhusen & Dai, 1997; Moulton et al., 1998). Becker (1963), who was one of the first to put forward labelling theory, states that labelling creates serious changes both in the child's behaviour and the behaviour of society and the social environment towards the child.

Labelling is a very powerful and effective application. Children can experience the complex emotional, social, and academic effects of being labelled as gifted (Hobbs, 1975). Labelling formed by diagnosis may negatively affect the child's self-perception, such as social isolation, egocentric attitudes and selfish behaviour (Heller, 2004). Perspectives towards giftedness and the meanings attributed to the gifted label in the cultural, contextual, and political dimensions, are important in terms of finding how the label occurs and is shaped. Aside from a cognitive basis, the family/environment and labelling are also seen effective in the moral development of gifted children in that it is multifaceted. There are also gifted pupils with dual or multiple exceptionalities, IQ tests and teacher assessments frequently fail to identify them, and these pupils are overlooked for gifted education provisions. There are a range of risk factors functioning in the individual, in the home, and in the school environments which can predispose (gifted) pupils to underfunction and underachieve. As the risk factors increasing, (gifted) pupils cause a progressive deterioration in motivation that can lead to dissatisfaction and alienation from school and any learning environments (Montgomery, 2004). For example, stereotypic views of the "able child" or "good pupil" can also cause some pupil's abilities to be overlooked and cause to underfunctioning as expectations are lowered (Montgomery, 2004). That brings up other factors that need to be examined in the character development of (undiagnosed) gifted pupils.

4.3 Character education of gifted children

Not all gifted people behave morally, and a conscientious action does not require high intelligence (Roeper & Silverman, 2009), notwithstanding the claim of some theorists that there is a linear relationship between moral sensitivity and intelligence (as explained in the previous section). Cognitive superiority and personality traits of gifted children can facilitate awareness and sensitivity to moral issues (Silverman, 1994), but they do not guarantee appropriate behaviour due solely to intelligence (Sternberg, 2009a; Teo, 2002) or to

experience greater or fewer socio-emotional problems (Pyryt, 2008). High potential or cognitive superiority for moral thought and action represent only one side of the issue.

The capability of high moral development can also create moral dilemmas when gifted children mature and pursue adult careers (Ambrose, 2000). For example, beneficial discoveries of yesterday's gifted children in the field of biotechnology have led to long-term ethical problems and environmental hazards today (Kitcher, 1996; Rifkin, 1998). Those of exceptional intelligence can use their gifts and talents for good or ill (Tannenbaum, 2000b); so extraordinary ability and creativity present opportunities for both improvement and corrosion of the human condition (Ambrose & Cross, 2009). However, successful integration of high cognitive ability/potential, creativity and high sensitivities raise wise leaders who are capable of choosing long and short term goals for the common good in various settings (Craft et al., 2008; Sternberg, 2007b). Hence, a global moral perspective must be a part of the education of potential leaders of the future. Without having a sense of global citizenship, the individual is less likely to contribute to a global community (Osler & Vincent, 2002). In this vein, Gibson & Landwehr-Brown (2009) say that:

Gifted students have the potential to become tomorrow's world leaders with a strong grasp of the ethics and morality of issues related to global politics, economics, health, religions, and the environment. The heightened sensitivity of the gifted to justice, fairness, honesty, and a sense of responsibility to act on such ideals, accelerates the development of knowledge, attitudes and skills needed for global citizenship in the twenty-first century (p. 301).

Similarly, Jewell (2001) says that "Gifted persons have a moral duty to be morally developed, to refine their leadership skills and to make an especial contribution to society and the solution of social problems" (p. 3). Tannenbaum (2001) argues that giftedness can be used for great good or great evil and makes a plea to "make moral education an integral part of enrichment for the gifted" (p. 115). Sisk (1982) says "Moral education is particularly essential for gifted students in order for them to further develop and utilise their capacities to reason" (p. 221). Toe and Cheng (2009) state that gifted children must be taught morality in order to convert their intelligence into wisdom. Piirto (2005) indicates that "If . . . (gifted children) . . . are to be our future leaders. . . the values they hold are important because they will influence . . . future decisions and actions needed to do good works of global importance" (p. 116).

From these viewpoints, character education (broadly defined here as any combination of moral education, ethics education, values education, and global citizenship) functions as a mechanism that channels high potential in the beneficial direction, considering possible

expectations related to high potential at both the individual and societal levels. However, in these viewpoints, in Freeman's (2009) words, the importance of character or moral education for gifted children has been evaluated mostly in terms of 'cultural morality.' This refers to the everyday conduct and expectations of a society and constitutes a big part of the relevant literature. Freeman (2009) also draws attention to the importance of moral education for gifted children in terms of 'personal morality'. Personal morality refers to a more holistic development including the physical, psychological, social, and spiritual domains of gifted individuals (Freeman, 2009).

Holistic education aims to identify the meaning and purpose in life through connections with the society, the natural world, and virtues such as compassion and peace, and to instil in students an intrinsic reverence for life and passionate love of learning (Bhatta, 2009). Global success, which is a complex reflection of personal excellence, is also based on the holistic appraisal of high ability characteristics (Cretu, 2009). Global success is a combination of values, attitudes, emotional development, healthy self-image along with abilities, creativity, and motivation (Cretu, 2009). Hence, a holistic education approach aims to contribute to both the explicitly subjective and communal well-being. Thus far, the relevant literature shows that there is a general consensus, regarding the importance of character education of gifted children even if scholars conceive of it and evaluate it in different ways, in the approaches and/or theories around character education of gifted children. However, the position of character education – or strategies for character education – in gifted education is not clear; rather, this concern shows itself in the more theoretical giftedness approaches and models. That is to say, character education is often presented in an embedded form in gifted education.

There is a tendency to include thinking skills and/or non-intellectual traits that make it easier to behave morally in giftedness theories and models. Two examples are: wisdom (Sternberg, 2005, 2009) and task commitment (Renzulli, 2012), both are related to the virtues that establish character from different aspects. Also, character has found inclusion in the extension of the concept of giftedness (Lee & Olszewski-Kubilius, 2006) by adding new dimensions such as moral behaviour and global civic responsibility to the concept of giftedness, terming such as 'ethical giftedness' (Sternberg, 2009a) and 'transformational giftedness' (Sternberg, 2020).

The WICS model of Sternberg (2005, 2009) is one of these models. Wisdom, intelligence, creativity, and synthesis (the combination of wisdom, intelligence, and creativity) are the basic components of the model. Here, wisdom, which functions “to ensure that the decisions and their implementation is for the common good of all stakeholders” (p. 255), is included among the characteristics of the ideal gifted individual. Wisdom acts as a balance theory (Sternberg, 2001), according to which, the wise individual is able to successfully use his/her intelligence, creativity, and knowledge by following the values: “(a) to seek to reach a common good, (b) by balancing intrapersonal (one’s own), interpersonal (others’) and extrapersonal (organizational/institutional/spiritual) interests, (c) over the short and long term, to (d) adapt to, shape, and select environments” (p.260). In other words, wisdom is seen as a capability to make intelligence, creativity, and knowledge usable for both the individual himself/herself and his/her around. It is not enough just to have these abilities them and they do not guarantee wisdom.

For the construction of wisdom, which is modifiable (Sternberg & Grigorenko, 1999), the acquisition of virtues is necessary. This indicates the importance of character education when considering the ultimate aim (*practical wisdom*) of the Aristotelian approach. In this study, character means “habits of the mind, habits of the heart, and habits of action” (Lickona, 1989, p. 51). That is, character is the whole of habits of thinking, feeling, and doing of an individual. Character education hence aims for “knowing the good, desiring the good, and doing the good” (Lickona, 1989, p. 51). The description or direction of ‘good’ is also determined through virtues (Williams, 1995). These were explained in the first chapter as intellectual, moral, civic, and performance virtues.

Another model is Sternberg’s (2017) ACCEL (Active Concerned Citizenship and Ethical Leadership) model, which aims to better prepare gifted children for the world of the future, by emphasizing that IQ is insufficient to solve the problems the world faces today. The ACCEL model states that the cause of the greatest problems in societies is a lack of transformational leaders who behave ethically over the long term and short term and aim for the common good of all. The ethical leaders purposed by the model are “people who will make a positive, meaningful, and enduring difference to the world at some level” (Sternberg, 2017, p. 158). The ethical here refers to the thinking, reasoning, and belief process based on an ethical code, such as how problems are solved, how decisions are made, what the right thing is to do, and who will benefit from the solutions. For gifted people to be able to achieve this process, there is a need for critical thinking, creativity, common sense (practical

intelligence), wisdom and ethics (Sternberg, 2017). This corresponds to intellectual, civic, and moral virtues in the Aristotelian character education approach.

In the same vein, Renzulli's (1978, 2012) Three-Ring Conception of Giftedness Model accepts "task commitment" as one of the main components of giftedness alongside "above average ability" and "creativity". Task commitment, which is contextual, situational, and temporal, refers to "energy brought to bear on a particular problem or specific performance area" (Renzulli, 2012, p. 153). This model also parallels the performance virtues of the Aristotelian character education approach. Besides these giftedness models in which different aspects of character education are embedded, there are more specific or dimensional giftedness approaches that correspond to character education in some sense. For example, transformational and transactional giftedness (Sternberg, 2020), which are very new concepts in the relevant literature. Transformational giftedness refers to "giftedness that is transformative – that by its nature seeks positively to change the world at some level – to make the world a better place" (Sternberg, 2020, p. 231). It requires global moral thinking, feeling, and acting. On the other hand, transactional giftedness refers to "giftedness that is tit-for-tat in nature – an individual is identified as gifted and then is expected to do something in return, usually, to perform well in academic coursework, perhaps coursework specifically targeted at the gifted" (Sternberg, 2020, p. 231). Both giftedness types do not result from someone being born in a particular way, rather they result from interaction, instruction, mentorship, role-modelling, and socialization (Sternberg, 2020). Sternberg (2020) suggests that schools should focus more on the development of transformationally gifted students and less on the development of merely transactionally gifted ones.

Similarly, ethical giftedness (see Sternberg, 2009a) is another multi-dimensional approach that signals moral intelligence – which mostly corresponds to moral virtue in the Aristotelian character education approach. Ethical giftedness is not some kind of characteristic intrinsic to gifted children; it is a developable kind of trait (Sternberg, 2009a). This means that gifted children may differ in their ability to behave ethically. Therefore, gifted children need to be taught ethical thinking and to struggle against both internal and external pressures that lead to unethical behaviour (Sternberg, 2009a). This means that it is important to include character education in gifted education and even integrate it into their teachers' education instead of assuming a greater propensity for moral development/behaviour in gifted children. Another perspective is related to preparing gifted students for global citizenship (see Gibson & Landwehr-Brown's (2009) the Global Learning

Curriculum Development Model). The knowledge, attitudes and values, and skills of a global citizen are necessary for developing reasonable solutions to global concerns such as environmental destruction, accessibility of natural resources, economic disparity, political conflicts, terrorism, and violation of human rights (Merryfield, 2002; Noddings, 2005). Therefore, gifted individuals that act with global citizen awareness is expected from their moral training and development; this mostly corresponds to the civic virtues in Aristotelian character education approach.

Today's giftedness approaches show that giftedness is not composed of only cognitive or intellectual abilities, rather, giftedness is conceived more holistically. In other words, both other-transformational dimensions of giftedness, which refers to "the direction of one's giftedness toward making a transformative difference with respect to others; making a positive, meaningful, and possibly enduring difference to the world", and self-transformational dimensions of giftedness, which refer to "the direction of one's giftedness toward making a transformative difference with respect to oneself; that is to making a positive, meaningful, and possibly enduring difference within oneself" (Sternberg et al., 2021, p. 4), are considered in contemporary giftedness approaches. Aside from technological developments today, there is a range of challenges that the world faces (see Ambrose, 2016; Ambrose & Sternberg, 2016a, 2016b), which are said to not be ones that cognitive ability can directly address (Sternberg, 2017). Examples are: climate change, looming resource shortages, the erosion of democracy, and severe inequality in a globalized socioeconomic system increasingly driven by dogmatic market-fundamentalist ideology (Ambrose, 2009; Ambrose & Sternberg, 2012). Hence, what we need are the analytical skills that supplement intelligence by applying a broader range of skills and attitudes such as those that are: practical (common sense), ethical, wisdom-based, and creative (Sternberg, 2005). This draws attention to the importance and necessity of character education for gifted pupils.

4.4 The role of teachers

Character development is not independent from cognitive development; yet it is not solely an outcome of cognitive development. It is also a result of the reflection of contextual conditions and relationships at the macro, meso, and micro-levels. In this study, the thoughts and beliefs of teachers working with gifted pupils were very important in the research questions, since they interact with all contextual levels connected to the gifted child. For example, meeting with the family of the gifted pupil, observing the relationships of the gifted

pupil with his/her peers in the school environment, being aware of other people's approaches towards the gifted child as a teacher in the SAC, and becoming responsible for fulfilling the implementations of the gifted education policy, are experienced by teachers working with gifted pupils in the SACs.

The fact that teachers are so central, requires reconsidering teacher education and training for gifted education. The issue of 'who is to teach the gifted' has been at the focus of many teacher-training programs in many different countries and discussions regarding the required or ideal traits of a teacher in gifted education. To be able to purposefully educate gifted pupils, teachers also need a clear goals and training related to their chosen task (Hansen & Feldhusen, 1994). That is, there is need for a parallelism between gifted education policy and teacher education policy. The success of educational programs of gifted students depends on a range of competencies in their teachers (Hansen & Feldhusen, 1994). Many authorities agree that teachers working with gifted students must receive adequate training in the field of gifted education to best satisfy the characteristics and special needs of gifted students (Copenhaver & McIntyre, 1992; Feldhusen, 1997; Gallagher, 2000; Hansen & Feldhusen, 1990; Hansen & Feldhusen, 1994; Toll, 2000). If teachers do not have a professional education in gifted education, the needs of gifted students may not be fully met (Archambault et al., 1993; Westberg et al., 1993a; Westberg & Daoust, 2003).

This shortcoming could be minimised if preservice teachers receive coursework in the field of gifted education in their undergraduate programs (Bangel et al., 2010; Moon & Rosselli, 2000) and are given the opportunity for practical practice/training (Feldhusen, 1985, 1997; Whitlock & DuCette, 1989). The position of gifted education in teacher training policy is crucial for both teachers and gifted pupils. However, the most neglected part of gifted education, which is developing gradually and gaining different dimensions, is in teacher education (Reid & Horvathova, 2016).

CHAPTER 5 THE CONTEXT OF THE STUDY: TURKEY

5.1 Introduction

This chapter draws a picture of gifted education and character education in Turkey, where the research was conducted. It starts with explaining the historical development of the concept of giftedness in Turkey. Here the official definitions of giftedness and/or the terms/concepts interchangeably used, are presented in historical context. Secondly, the historical progression of educational practices for gifted pupils is outlined. Then, the Science and Art Centers (SACs), established in practice for gifted pupils and where this research is conducted, are introduced. After that, the process of being a teacher in the SAC, the participants of this research, and their needed professional competencies in are explained. Lastly, character education policy and the relevant gifted educational practices in Turkey are presented.

5.2 Gifted education in Turkey

5.2.1 The historical trajectory of the concept of giftedness in Turkey

The geographical position of Turkey, which can be defined as transcontinental between Asia and Europe, has been effective in the transmission of various modalities of culture. This cultural interaction has shaped the social-cultural structure of Turkey over the years in the contexts of history, religion, philosophy, literature, folklore, etc. The perspectives towards giftedness have also developed cumulatively during this history and have affected the views of Turkish people on the nature of giftedness. Historically, it can be said that Turkish culture has a long and deep relationship with the term gifted. Survival ability, combat skills, and leadership were seen to be prominent characteristics of exceptional individuals for the Turkish people who led a nomadic life in the past (Gucyeter et al., 2017). There are many epic stores and folktales such as the Oguz Kaan, Manas, and Bozkurt epics which reveal the importance of the characteristics of these exceptional people (Gucyeter et al., 2017).

The schemas of exceptional people changed with the migration from Central Asia to Anatolia and the acceptance of Islam. Wisdom, humor, problem-solving and spiritual abilities began to be emphasized more. In the Ottoman period, for six centuries, there was significant focus on the education of exceptional people. Enderun Mektebi (Palace School) a special school that served only minority groups (non-Muslim, non-Turkish) children was founded by the Ottomans to bring up the future's political and military leaders (Sak, 2007). It has been asserted that these schools were founded by Murat II and later modified by Sultan

Mehmet in the mid 15th century (Miller, 1921). The selection criteria in the Palace School were based on intellectual precocity and/or physical development (Miller, 1921). While including the subjects of Turkish, Arabic, Persian, the religion of Islam, Turkish culture, Ottoman history, rules of courtesy and morals, music, arithmetic, and geometry in the school, there was a strong emphasis on the cultivation of practical abilities and physical attributes through instructions such as horseback riding, leather working, weight lifting, archery, wrestling, sword practice, sewing, calligraphy, bookbinding, and cooking (Miller, 1921).

In 1923, The Republic of Turkey was founded. The Republic was established following a Western secular, nationalist model. Hence, this reflected on the policies and definitions regarding gifted education (Gucyeter et al., 2017). In the 20th century, the mental testing movement also affected Turkey's understanding of intelligence and giftedness. Accordingly, educational policy makers, psychologists, and educators have been intensively involved in the process of this movement (Sak, 2007). As a result, a period of use of an "identification paradigm" (Lo & Porath, 2017) in giftedness started in Turkey.

In 1974, the first official definition of giftedness was made by the Turkish Ministry of National Education and intelligence was accepted as a general ability. Giftedness necessitated having a score of more than 130 in an intelligence test and talented necessitated having a score of more than 120 (MEB, 1974). Afterward, these definitions were revised in 1991, 2006, and most recently in 2013 (MEB, 1991, 2006, 2013). In 1991, the concept of "highly talented" was used in identifying gifted children and was defined as those who demonstrate high performance in general ability or possess special talents compared to their peers (MEB, 1991). Here, the term IQ was not used. Rather, general intelligence and talent were emphasized. But this is still an understanding based on an identification paradigm of giftedness (Lo & Porath, 2017).

In 2006, performing better than his/her peers in performance fields such as intelligence, creativity, leadership capacity, art, sports, or specific academic fields was a condition for identification as gifted or talented (MEB, 2006). However, in this definition, intelligence was accepted as a performance area. Here there is a contradiction in the definition in that if we accept giftedness as performance based then the definition of intelligence as a generalized multiplicity of potentials is weakened. Finally, in 2013, the terms of 'gifted' and 'highly talented' were given up and a new term 'specially talented' was developed to avoid evoking elitism (MEB, 2013). The specially talented individual is defined

as “one who is quick in learning in comparison with his/her peers, is advanced in the capacity of creativity, art, leadership, possesses special academic ability, understands abstract ideas, loves to act independently in his/her interests and performs at a high level” (MEB, 2016, p. 450). Different from the previous definitions, quick learning, understanding abstract ideas, and loving to act independently in his/her interests were added as a criterion and the definition was extended. As seen, the official definitions of giftedness in Turkey have evolved from “an intelligence-based conception to a talent-based conception over time” (Sak et al., 2018, p. 494).

Later in the 21st century, the Turkish Ministry of National Education accepted the multiple intelligence theory as the only truth (Sak, 2011). That is, intelligence is seen multidimensional and more complex (see Gardner 1983, 2006). There are many factors that led to such a great change in so short a time. However, the redesigning of all undergraduate programs in faculties of education by the Ministry of National Education in accordance with multiple intelligences theory, led to the adoption of the theory by society, and teachers (Eryilmaz, 2011; Sak, 2011). This approach resulted in the opening of social sciences high schools and sports high schools in Turkey (Sak et al., 2018). Figure 1 below, historically illustrates the areas considered important in the official definitions of giftedness and in concepts corresponding to it.

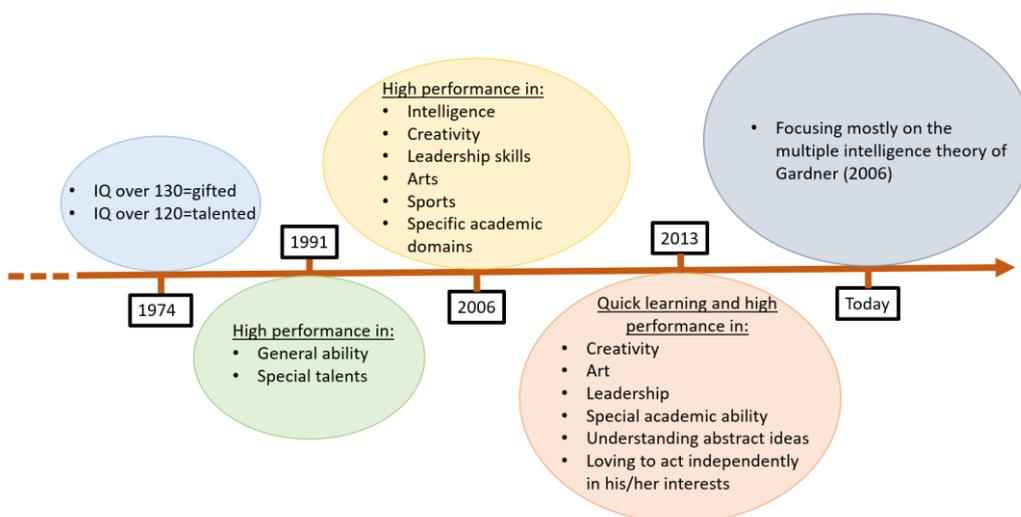


Figure 1 Historical taxonomy of the areas in the official giftedness definitions in Turkey

To sum up, today, the multiple intelligence approach, which has become well established in the national education system (to be explained in more detail in the next section), is in place in the perspective of the ministry towards giftedness and in the official. The perception that people can be gifted in more than one field is very common among Turkish educators and in Turkish society (Sak, 2011). However, the identification policy and educational practices of the ministry for gifted pupils do not coincide well with this popular definition of giftedness or talented. The contradiction between the identification policy and educational practices are explained by giving more detailed information about the educational practices in the field of gifted education in the next section.

5.2.2 Educational practices for gifted pupils in Turkey

Gifted education strategies are influenced by political, economic, global reforms and goals of countries (Borland, 2003). In the history of the Republic of Turkey, since its founding in 1923, new strategies in gifted education have emerged and been shaped by the country's political, economic, and global goals and by universal competition (Sak et al., 2015). The emergence of new movements in the education of gifted pupils in very critical global periods indicates that special education opportunities are for the 'state' rather than the 'individual' (Sak et al., 2015). The most important first strategy of the Republic in the field of gifted education is Law No. 1416 titled 'The Law on Students to be Sent to Foreign Countries' (MEB, 2014).

Within the framework of this law, which is still valid today, the Turkish Ministry of National Education awards scholarships to reputable universities abroad (Levent, 2011). This law aims to produce experts, –a need of the state with the goal of industrialization, to transfer knowledge and innovations in the West to the country through these experts (Kulac & Calhan, 2013). Over the years, the scope of this law has changed parallel to changes in national goals and needs. For instance, graduate scholarships have started to be awarded mainly in the fields of science and arts. Similarly, in 1948, a special law, İdil Biret-Suna Kan Law, was established to raise talented artists in the country. Children and young people with potential in the fields of arts such as music were sent abroad (Ataman, 2004). In addition, the foundation of the first science high school in 1964, the establishment of the Science and Technological Research Council of Turkey (TUBITAK) in the same period, and then the creation of special classes for gifted students in public schools are among the steps taken in the field of gifted education (Sak et al., 2015). In the 2000s, a new era began in the education

of gifted students. One of the main reason was 2023 vision of the government that came to power in these years, at the 100th anniversary of the establishment of the Republic of Turkey (TUBITAK, 2004).

The increased awareness, after the 2000s, of the education of the gifted attracted the attention of the private sector, resulting in the opening of special classrooms in private schools for gifted students. With the vision 2023 of the government (MEB, 2019b; Sak et al., 2015), the opportunities and implementations in gifted education have expanded by cooperating with the universities and different institutions, such as TUBITAK. Between the years 2009 and 2013, the Ministry of Education worked on a national strategic plan in cooperation with TUBITAK and the universities in Turkey. In this plan, the implementation of multiple models (rather than just one type of program), which focuses on more individualized, differentiated, enriched, and intensive programs, depending on the interests, skills, potential, and needs of gifted children, is emphasized (TUBITAK, 2013). This private sector awareness of gifted education continues to be discussed in social platforms, such as national TV channels and in newspapers. As a consequence of this increasing awareness, the private sector has started to increase investment in the education of gifted students.

In the light of all these developments, the existing educational practices for individuals identified as gifted – or specially talented – can be examined in three basic categories: Special schools, special classes, and after-school programs (Gucyeter et al., 2017; Sak et al., 2015); see Table 3 below. Special schools include science high schools, social science high schools, conservatories, fine arts and sports high schools; all of which are schools that use the academic and special talent exams results of the individuals as their selection basis. The resource rooms for special classes are open in schools that have gifted pupils. The rooms are established to provide individual curriculum to only identified students as gifted through the individual intelligence tests. After-school programs include SACs – this study concentrates on them, so they will be explained in more detail in the next section – and child universities (Gucyeter et al., 2017).

Child universities are offered by some universities as after-school and summer programs for gifted learners, mostly aged between 10-17 (Gucyeter et al., 2017). Courses that gifted students can choose from, according to their interests, are offered and academicians (including professors) from different disciplines (e.g., genetics, physics, linguistics, archaeology, etc.) give the courses. In addition, in public schools at all education levels,

which include all pupils gifted or not, education services are conducted for gifted pupils along with their formal education according to an individualized education plan (MEB, 2016). This plan is prepared in accordance with the performance and needs of the gifted pupil by his/her teacher(s). The plan includes all developmental areas of gifted pupils, is prepared as consistent with their formal training, and conducted as student-centred (MEB, 2016).

Table 3: Educational practices in gifted education in Turkey

Practice type	Educational practices	Education level
Special classes	Resource Rooms	Primary and secondary school level
Special schools	Science High Schools	High school level
	Social Science High Schools	High school level
	Fine Arts High Schools	High school level
	Sport High Schools	High school level
	AR-GE (Research Development Application Center)	Secondary and high school level
	Conservatories	Undergraduate level
	Fine Arts Faculties	Undergraduate level
After school programs	Sport Sciences Faculties	Undergraduate level
	SACs (Science and Art Centres)	Pre-primary, primary, secondary, and high school level
	Child Universities	Pre-primary, primary, secondary, and high school level (up to the university's preference)

Although the educational practices and the official definition of giftedness or specially talented affirms a multifaceted phenomenon, the identification policy of gifted children is still highly based on an “identification paradigm” (see Lo & Porath, 2017). For example, on the one hand, while accepting in the official definition that a child may be talented in specific performance areas and providing educational opportunities according to academic and talent areas, on the other hand, IQ scores acquired from individual intelligence tests (MEB, 2019a) are used in the last stage of selecting gifted pupils for the SACs. That is, while the conceptual definition and educational practices are more parallel to the progressive orientation of contemporary research, the policy for the identification of gifted pupils is still attached to the mystery models of giftedness (see Matthews & Foster, 2005). The

practicalities of gifted education programs are intertwined with the theoretical arguments and cannot be considered or formulated separately from these theoretical issues (Mazzoli Smith, 2013). In Turkey, there is no specifically clear identification and education policy for gifted pupils with dual/twice or multiple exceptionalities in all educational levels, there is a lack of attention to this field. In policy, it is aimed to determine and meet the educational needs of all gifted pupils through and individualised education plan by teachers.

If only the currently existing educational practices are considered (ignoring more politically correct definitions), we would conclude that in the Turkish context, giftedness is associated with innate (or genetic) aspects of the individual and that an individual's scores are relative to his or her peers, or "meaningful only relative to other people" (Haier, 2017, p. 13) This is an indicator of the inconsistency in the education system of gifted pupils in the context of Turkey. For example, the study of Sak (2011), which is about misconceptions, dogmas and popular views about giftedness and intelligence among 812 lay people in Turkey (41.6% male and 58.4% female), shows that 52.1 % of the participants believe that individuals have more than one intellect (the trendy view) and 74.1 % of the participants believed that skills and talents have divine or metaphysical origins. Thus, genetic determinants are not important (the gift belief). These attitudes intertwined with the theoretical arguments also have an effect (Ziegler, 2005); along with culture (Gucyeter et al., 2017; Sak, 2007), religious beliefs, and political views (Sak, 2007), in shaping beliefs about gifted individuals in Turkey; since giftedness is a social construct as well as a psychological one (Sternberg, 2007c; Subotnik et al., 2011).

5.2.3 Science and art centers (SACs)

In the SACs where this study was carried out, one of the after school programs, are independent special education institutions that serve mostly elementary, secondary, and high school-age gifted students in painting, music and general intellectual ability; with the aim of revealing students' abilities and developing their high potential without interrupting their formal education (MEB, 2017-2018). The first SACs were established in 1995 by the Directorate General for Special Education and Guidance Services within the Ministry of National Education (Sak et al., 2018). Today, there are around 164 SACs and 63,000 gifted pupils in Turkey (Bilgili 2019, as cited in Kahveci & Akgul, 2019). The student selection process for these centers, which is actualized by the General Directorate of Special Education and Guidance Services within the ministry each year, for elementary and secondary school

age students consists of three stages: (1) filling of observation forms by teachers recording their students' abilities and performances, (2) group testing with tablet computers, and (3) individually administered IQ tests (MEB, 2017-2018). Pupils identified as gifted in secondary school also continue to go to the SACs during their high school period. There is no separate identification process for high school pupils (MEB, 2017-2018).

The educational and teaching activities in the SACs are carried out on weekdays and/or weekends, outside of the hours of formal education, and gifted students study with their peers, guided by their teachers. The SAC education model relies on project- or problem-based learning and the developing of special talents, rather than on using a specific curriculum (Baykoc Donmez, 2004; MEB, 2007). This education model consists of a five-phase education program: orientation, support education (which includes problem-solving techniques, scientific research techniques, social skills, group study techniques, and social activities), the discovery of personal skills, development of specific talents, and project work (Sak et al., 2015; MEB, 2017-2018). The most important stage of the SAC education model is project studies. This stage aims to improve pupils' ability to work independently and develop their creativity and productivity (Sak et al., 2015). Pupils mostly work on social and scientific projects to find solutions to real life problems. In addition, in the implementation of the education programs, they collaborate with universities, institutions, and organizations on scientific, artistic, and cultural issues (MEB, 2016). Students and teachers decide together the content of the courses, and generally, the project-oriented process is monitored by teachers. Higher levels of thinking, open-endedness, discovery and invention, freedom of choice, and cooperative learning are the components of this process (Sak, 2010). The studies are conducted as individual or group education, and the education program's evaluation notes are prepared by teachers according to the performances of the students (MEB, 2016).

Although these centres are the most prominent government institutions for gifted pupils, there are also several problems with them. One of these is that the mission of the SACs, which is to develop special talents in students, does not match the tools and processes for identifying gifted students (Ozer Keskin et al., 2013; Sak et al., 2018). Another problem is that SACs do not have a standard curriculum, which brings teachers' preferences to the fore but causes a great discrepancy in quality between the SACs. (Sak et al., 2015; Shaughnessy & Sak, 2013). Another major problem is the disconnection between school programs and the SAC programs, which makes transferring knowledge from the school programs to the SAC programs and vice versa difficult for students (Sak et al., 2015; Sak et

al., 2018). Additionally, inadequacies of physical environment and teaching equipment, ambiguities about the selection of pupils and their assignment to special projects/programs by teachers, and absenteeism concerns of pupils (pupils are concerned about absenteeism, because the total period of absence of the student in the SAC cannot exceed 30% of the education period. If it exceeds this period, the right to receive education in this center is lost (MEB, 2016)) because of the situation of SACs and their rules, are among the various problems reported (Ozer Keskin et al., 2013).

5.2.4 Teachers in SACs

There is a different teacher assignment procedure for the SACs, which is conducted by the governorships, determined by criteria from the General Directorate of Special Education and Guidance Services and the General Directorate of Human Resources within the Turkish Ministry of National Education (MEB, 2018a). There are special requirements in the assignment of teachers to the SACs. The assignment process consists of a two stages. The first stage is an evaluation, which is mostly related to the academic background of the teacher, and the second one is the oral examination (MEB, 2018b). In both stages, it is focused on their level of postgraduate study, projects, awards, publications, English language level, artistic activities, sport licences, communication skills, reasoning ability, creativity, enthusiasm, openness to scientific and technological skills (MEB, 2020b). Teachers are assigned in the following fields: information technologies, biology, geography, philosophy, physics, science, mathematics, English, chemistry, music, painting, visual arts, history, Turkish language and literature, technology and design, social studies, and classroom teaching (MEB, 2018b).

In-service training, seminars or courses are given to teachers according to their fields (e.g., information technologies, biology, etc.) by the Turkish Ministry of National Education at least one or two times in every education year in order to increase the quality and productivity in the SACs (MEB, 2016). In the SACs, teachers' competencies in their fields are important because project- or problem-based learning and teaching, a requirement of the structure of the SACs, is in the control of teachers. There is no specific curriculum and education is based mostly on project and problem-based learning (MEB, 2007). Therefore, SAC teachers prepare an education plan in conformity with the aims of the SAC education model, determine the strong and weak sides of the plan, share it with colleagues, and submit prepared plans to the management of the SAC (MEB, 2016).

Thus far, it is seen that there is no specific qualification required and/or provided by the ministry for SAC teachers in the field of gifted education, the field adequacy of teachers is determined on a case by case basis and can be influenced by factors such as teacher availability and the subjective mindset of evaluators. To be able to purposefully educate gifted pupils, teachers also need clear goals and training related to gifted education (Hansen & Feldhusen, 1994). In other words, parallelism between gifted education policy and teacher education policy is a significant need. Researchers note that gifted students have unique characteristics and special needs; such as learning activities that involve a depth of inquiry and to incorporate opportunities to develop higher products that address real-world issues (e.g., Feldhusen, 1991; Feldhusen & Ruckman, 1988; Vantassel-Baska, 2003); and note as well that meeting such needs is possible with appropriately educated teachers (Feldhusen, 1997; Hanninen, 1988; Hansen & Feldhusen, 1994). Therefore, the importance of teacher training in the field of gifted education is emphasized to best satisfy the characteristics and special needs of gifted students (Copenhaver & McIntyre, 1992; Feldhusen, 1997; Gallagher, 2000; Hansen & Feldhusen, 1990; Toll, 2000). Although the success of educational programs of gifted pupils depends on a range of competencies in the teachers of gifted students (Hansen & Feldhusen, 1994), this is among the most neglected elements in the field of gifted education in Turkey.

Focusing on the teacher education policy of Turkey in gifted education, we see that there is no teacher education department at the undergraduate level that has a specific program for gifted education (Higher Education Council, 2018). However, there are postgraduate studies about gifted education and masters and doctoral programs in this field have been established in some universities, such as Istanbul University, Hacettepe University, and Anadolu University. In addition, special education centres for gifted children at some universities (e.g., Hacettepe University) have started to open. In the interest of the social and emotional development of gifted students, teachers and psychological counsellors in the SAC and parents of students work in collaboration (MEB, 2016). However, the study of Ozer Keskin and colleagues (2013), done by using interview and survey methods with a total of 75 teachers (n=60) and administrators (n=15) working in seven SACs from seven different geographical regions of Turkey, shows that parents have a lack of information about the tasks and responsibilities of the SACs. This has caused parents to misunderstand the functions of the SACs and may create unrealistic expectations from parents regarding the centers. This study shows that there is a need for better information about the SACs for

parents. In addition, the participants think that the selection of teachers for the SACs is only partly sufficient for gifted education. Most of the participants (72%) agree that the quality and duration of the training they received was insufficient and there is a need for longer and more need-based training programs.

From the viewpoints of the administrators, temporary assignment of the teachers in the SACs causes problems. When there are not enough teachers in the SACs, teachers from regular schools are appointed temporarily by the ministry to fill shortages until teachers who pass their evaluations are appointed. The lack of enough knowledge and experience of temporary appointed teachers regarding the SACs causes problems such as the inability of teachers to adapt to the SACs or the inability of teachers to conduct their classes in line with the mission of the SACs. These issues can lead teachers to inefficiency and an unwillingness to work in the SACs (Ozer Keskin et al., 2013). Therefore, according to the administrators, teachers who will work in the SACs should have training in gifted education, master's degrees or doctoral degrees, and experience in project design and management (Ozer Keskin et al., 2013). Consequently, although the field of gifted education has been expanded, there are problems and shortcomings resulting from policies, educational programs, and staff development, which are connected to each other. A problem in one area triggers the formation of another problem in another area since all areas are interrelated and sometimes interdependent. For instance, insufficient policy on gifted education may weaken staff development, and insufficient staff development will weaken the quality of educational practice and outcomes.

5.3 Character education in Turkey

The concepts of morality, ethics, character, values, and virtue are often used interchangeably in the educational framework although they imply different meanings (Kohlberg, 1963; Raulo, 2000). In Turkey, the concept of values and then the concept of morality are often used in the educational framework (see MEB 2017, 2018c, 2018d, 2018e; TTKB, 2013, 2016). In the dictionary of the Turkish Language Association (TDK), the official regulatory body of the Turkish Language, the concept of value is described as “the whole of the material and spiritual elements that cover the social, cultural, economic and scientific values of a nation” (TDK, 2018). In the same dictionary, the concept of morality is described as “behaviour patterns, rules, and ethics that people in a society have to comply with” (TDK, 2018). In both definitions, ‘nation’ and ‘society’ are in the foreground, there is an others-

oriented or -regarding approach. This reflects on the determined values in the context of values education and moral education.

Similarly, in the relevant literature, the definition of morality is hidden in the answers to the questions; ‘What should I do?’ or ‘How should I act?’ as well as the form of Socrates, ‘How should I live?’ (Walker & Lovat, 2017), which implies an awareness of others’ viewpoints by going beyond of ego. Morality refers to standards conducting human behaviour that apply to all within a society (Strawson, 1961), the perspective that considers others (Frankena, 1980), common social norms related to actions that are right or wrong (Kerridge et al., 2013), a behaviour code that is put forward by a society (Gert & Gert, 2016), and exhibiting appropriate behaviour towards others (Jewell, 2001). However, the concept of value is a more flexible and fluid concept according to different interpretations and varying by subject. There is no common understanding of what values are in the literature (Green, 2004). Values occur in the light of the complex reorientations of societies and their traditions within a global context (Macintyre 1981). Hence, the values education policy of Turkey also bears the traces of the social, cultural, economic, and scientific values of the Turkish nation. However, these values only address a part of character education, that is, they cannot fully meet the character education requirements that this study refers to.

Turning to the concept of character in Turkish context, it is described in the same dictionary as “an individual’s unique structure, the main symptoms that distinguish the person from others and determines the individual’s behaviour patterns, superior main traits, and self-structure” (TDK, 2018). That is, the unique and self-regarding aspects of the individual are emphasized. However, in books II-IV of the Nicomachean Ethics of Aristotle, the concept of character is described as dispositions of the person to feel, think, and act (Baehr, 2017). That is, character is synchronously associated with thought, emotion, and action. From the viewpoints of Aristotle and Plato, character occurs through habits and the individual’s character is perfected by habitual practice of virtues or good habits and dispositions of the will towards both self-regarding and others-regarding goodness (Walker & Lovat, 2017). Therefore, character is the educable side of an individual and character education is the process of transforming virtues into habits.

In the Turkish context, it is seen that values education has been implemented consciously in different intensities in the national education system of Turkey since 2003 and that these implementations have gained momentum from 2010 onward (Meydan, 2014). In

Turkey, values education is mostly seen as a complementary part of the curriculum rather than as separate educational program. The Turkish Ministry of National Education tries to provide both curricular and extracurricular activities needed to teach values at all levels of education by considering the holistic development of the individual.

Provisions related to learning and teaching values are included in the Basic Education Law and the objectives of the Ministry of National Education (see MEB, 1973). Although the content of some courses specifically includes values, value education has been accepted as the duty of all teachers. The aim is to teach values to students through reasoning, inquiry, research, drama, and role playing, etc. rather than by lecturing (TTKB, 2017). Therefore, values education is mostly based on implicit learning. There is a section called “values education” in the introduction of all curricula, with information for teachers about; why the values are placed in the curricula, how they are included, how they can be taught to the students during the teaching and learning process, and which teaching methods and techniques should be used while teaching values (TTKB, 2017).

There are some compulsory and optional courses connected with character education for primary, secondary, and high school educational levels, except pre-primary educational level that includes values as a subject. For example, religious culture and moral knowledge (compulsory); human rights, civilization, and democracy (optional); law and justice (optional); thinking education (optional); and democracy and human rights (optional) (MEB, 2018-2019) (see Table 4 below). The courses related to values education and their contents for pre-primary schools (4-5 and 5-6 age groups) are determined by the school administrations (MEB, 2018-2019).

Table 4: Courses and their contents corresponding to the character education in Turkey

Module type	Courses	Values	Educational level
Compulsory module	Religious Culture and Moral Knowledge Course	justice, friendship, honesty, self-control, patience, respect, love, responsibility, patriotism, and helpfulness.	Primary School 4 th Grades, Secondary Schools, and High Schools
Optional modules	Human Rights, Civilization, and Democracy Course	open-mindedness, justice, friendship, equality, sharing, love, paying attention to the unity of family, sensitivity, trust, patience, responsibility, respect, and freedom.	Primary School 4 th Grades
	Social Science: Law and Justice Course	justice, independence, peace, scientificness, courage, solidarity, sensitivity, honesty, equality, trust, compassion, freedom, patience, respect, love, responsibility, objectivity, conscientiousness, and helpfulness.	Secondary Schools
	Social Science: Thinking Education Course	being interrogator, productivity, openness to development, sense of responsibility, sensitivity to the physical, cultural, and social environment, respect to belief, respect to history, originality, optimism, self-confident, freedom, being creative, being critical, being flexible, being consistent, being logical, being polite, justice, believing in the sustainability of the development, self-inquiry, temperance, tolerance, giving meaning and value to the life, and paying attention to relationships with others.	Secondary Schools
	Democracy and Human Rights Course	equality, freedom, justice, tolerance, respect to differences, adherence to ethical values, responsibility, self-respect, peace, love, human dignity, helpfulness, patriotism, sensitivity to national and moral values, and sensitivity to global values.	High Schools

Note: This table adapted from MEB (2017, 2018c, 2018d, 2018e) and TTKB (2013, 2016).

Although the values are specified according to the courses, there are 10 general key values determined by the Head Council of Education and Morality (TTKB) within the ministry (MEB, 2017) to teach to all students in all curriculums: (1) justice, (2) friendship (including altruism, trust, understanding, solidarity), (3) honesty, (4) self-control, (5) patient, (6) respect, (7) love, (8) responsibility, (9) patriotism (including industriousness, collaboration, compliance with rules and laws, being sensitive to historical and natural heritage, caring society), and (10) helpfulness (including generous, cooperation, mercifulness, hospitality, sharing). It is aimed to teach students these values by associating them with learning outcomes (or educational objectives) in each discipline in an implicit way

(TTKB, 2017). Most of these key values focus on others-regarding rather than self-regarding concepts. The ethics of care based mostly on a constructivist paradigm (Noddings & Slote, 2003) represents the foundation of values education understanding in the context of Turkey. That is, it cares about how we are connected to others and about our ability to help or hurt them (Noddings & Slote, 2003).

These 10 key values are also included in gifted education, and it is aimed to teach these values in an implicit way. However, there is no informational section related to values and values education for SAC teachers since the SACs are based on project production and development rather than following a specific curriculum. But still, the SAC teachers are expected to integrate values education – the 10 key values stated above – at every stage of the education programs that will be implemented for gifted pupils (MEB, 2016). SAC teachers are required to prepare a plan for social and personality development within the individualized development plan of gifted pupils and to present it to the management of the SAC where they work (MEB, 2016). Although there are expectations of the SAC teachers about values education of gifted pupils from the ministry, it is seen that the socio-emotional development of gifted pupils in Turkey context is in the background. Overall, in Turkey, the concept of character mostly refers to the unique and/or self-regarding aspect of the individual. That is, the concept of character in the Turkish context does not address the educable aspect of the individual, which includes the habits of the individual, as expressed in the literature. Therefore, the concepts of morality, values, and citizenship are focused on, rather than the concept of character, in the educational framework in Turkey. These types of education (moral, values, and citizenship) also aim, in terms of content, to flourish more in societal life.

CHAPTER 6 RESEARCH DESIGN AND METHODOLOGY

6.1 Introduction

This chapter gives information about the language of the research to be able to understand and interpret it (Cohen et al., 2007). In other words, it provides the details of the ontology and epistemology adopted, the research design and methods applied to answer the research questions, the data analysis process and methods, the validity and reliability of the research, and the relevant ethical considerations. In the current study, all the decisions related to the research paradigm, design, and methods were based on the research questions to ensure that they can be answered adequately (De Vaus & De Vaus, 2001; Gorard, 2013). However, other considerations such as accessible resources, time, and ethical issues, were contemplated from the planning stage of the research.

6.2 Critical realist ontology and epistemology

This study is based on a critical realist ontology (the nature of reality) and epistemology (the nature of knowledge). My study is concerned with explaining deep-seated causes underpinning teachers' views about character; character development and education of gifted pupils; and challenges and needs in actualizing character education of such pupils. I wanted to understand "what leads teachers to think like that (as they stated)" and was concerned with exploring at the level of reality. A critical realist approach is key here because it enables systematic research in the context of the teachers' views on phenomena by focusing on the mechanisms that lead to them through the contextual entities located in contextual conditions, cultural beliefs, and political and educational implementations. That is, it helps to deeply understand teachers' views about the phenomena by considering contextual conditions and relationships.

Bhaskar, the pioneer of critical realism, asks "what must be true about reality for scientific experiments to be intelligible" (Steinmetz, 1998, p. 176) and as such, "distinguishes what exists (ontology) from what we know about its existence (epistemology)" (O'Mahoney, 2011, p. 725). According to Bhaskar, scientists use experiments as a means of creating closed systems, by isolating causal mechanisms in open systems. Therefore, he suggests a different ontological approach in critical realism, whereby reality consists of three layers (Archer, 1995; Bhaskar, 1979, 2011; Collier, 1994). This stratified reality structure of critical realism is illustrated in Figure 2 below.

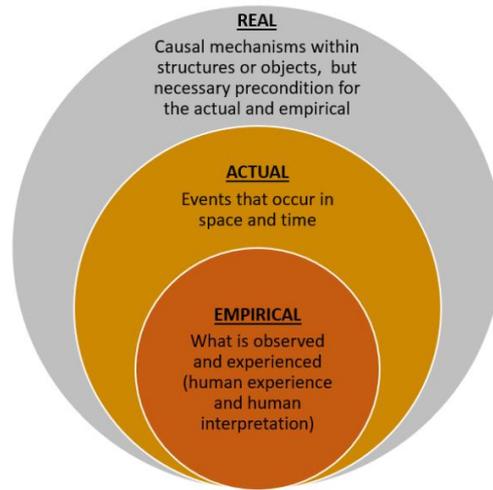


Figure 2: Stratified reality structure of critical realism

The first and most superficial layer is the *empirical*, including what is observed and experienced. In this layer, there are empirical measurements and explanations that depend on human sensory perception. In other words, there is filtering based on human experience and interpretation. The second layer is the *actual*, including the events independent from human perception, occurring in space and time, which is outside the empirical layer and which is not the same as what we perceive to be the case. The last layer is the *real*, which contains the mechanisms and structures that cause the actual and the empirical layers together. In this layer, there are observable or unobservable causal mechanisms that contribute to our knowledge of the actual. The primary purpose of critical realism is to explain social events by referencing these causal mechanisms and their possible effects.

This stratified structure does not claim that one layer is more real than the other, rather it claims what the layers have in their interaction. This allows for the fact that just because something cannot be seen in research, it does not mean it does not exist, but we can infer it from other layers. In social explanation, if reality is equated only with the perceptions we have access to, there is a certain level of sophistication that cannot be reached (O'Mahoney, 2011). Critical realism therefore does not occupy the same conceptual space of either positivism and/or interpretivism as it does not hold to the idea of a transparent reality. A critical realist approach aims to identify the cause that sits behind social events, but not with an analogous understanding of causality as in positivism, and addresses these causes and effects by helping to find realistic solutions, making critical realism not just descriptive, but also practically beneficial.

According to critical realist ontology, teachers' views about the phenomena in this research, the concepts of character and character development and the education of gifted pupils, can be fallible. Therefore, taking a critical realist approach will make it possible to separate people's beliefs from the reality they represent, rather than acknowledging the truthfulness of widely accepted, socially constructed versions of reality related to the phenomena. This reality, independent of our perception, is an open and complex system, where other mechanisms and conditions exist. Therefore, while exploring the mechanisms that underpin teachers' views on the phenomena, the conditions in which causal mechanisms are experienced will be identified. This means that social phenomena cannot be fully explained with reference just to one level. This point offers an antireductionist account of social phenomena separating critical realism from other paradigms (Zachariadis et al., 2013).

Causal/generative mechanisms in a critical realist approach can be defined as “ways in which structured entities by means of their powers and liabilities act and cause particular events” (Easton, 2010, p. 122). Causal mechanisms are the heart of the research for the critical realist investigator since it gives information about what caused event(s) to happen; much more than discovering empirical fact. In other words, critical realist research changes the focus from the events that can be empirically observed to the causal mechanisms that enable them to occur. Causal mechanisms do not need to be empirically observable, even if they are hidden, their effects are felt on the event (Bhaskar, 1979). Different contexts can prevent or facilitate the actualization of causal mechanisms, which themselves can be identified as operating at different levels, e.g at the micro level of emergent behaviour, or the macro level of structural constraints/enablers. Therefore, in this study, ontology is based on a stratified reality, while epistemology, which is determined by ontology, is based on the knowledge of the causal mechanisms that play a role in the formation of teachers' views about the phenomena in the study. Taking a critical realist approach here helps to identify the current causal entities (their powers and liabilities) – explained in more detail in the heading of retrodiction in data analysis methods – in the social context in which this paradigm is applied.

6.3 Critical realist mixed methods research design

Research design refers to “a framework for collection and analysis of data” (Bryman, 2004, p. 27). In this study based on critical realism, a mixed methods research design, which provides for working with different types of data (Brannen, 2005), was used in collecting the

data considered necessary for the objective of the study (Sayer, 2000). Mixed methods research designs are useful, for the researcher, in revealing different features in the same layer of reality and in revealing causal mechanisms for constructing claims (Downward & Mearman, 2007). Within critical realism-guided research, the aim of the research method is to establish a connection between the inner world of ideas and the outer world of observable events (Ackroyd & Karlsson, 2009). Therefore, there is flexibility in research methods in comparison to other paradigms. Critical realism does not keep to a single type of research method, rather it supports a diversity of intensive (or qualitative) and extensive (or quantitative) research methods. This critical methodological pluralism is applied to the ontological and epistemological basis of critical realism, thus there is a strong connection between method and meta-theory (broad theoretical perspectives) (Danermark et al., 2002).

Extensive methods search “. . . large numbers of observations that can give significant relationships (i.e. quantitatively) and are, in Sayer’s eyes, used purely for taxonomic purposes” (Hurrell, 2009, p. 243). Intensive methods search for “what makes things happen in specific circumstances” (Sayer, 2000, p. 20). The extensive research methods alone do not uncover causal mechanisms. From a critical realist perspective, statistical descriptions are regarded as useful simplifications, which serve as “a quantitative measure of the numbers of the objects belonging to some class or a statement about certain common properties of objects” (Sayer, 1992, p. 100). Even if they suggest an essential correlation, they do not tell anything about the generative mechanisms of the correlation (if any). Thus, statistical descriptions should be understood as descriptive summaries rather than predictive tools (Fletwood, 1999; Lawson, 1997; Sayer, 1992).

In contrast to extensive research methods, intensive methods have a more profound role within critical realism. The reason is that intensive methods are “epistemologically valid” (Tsoukas, 1989, p. 556), more capable of defining a phenomenon, hypothesizing, identifying structures and relations between complex mechanisms (Sayer, 2000; Volkoff et al., 2007), discovering generative mechanisms (Ackroyd & Karlsson, 2009), and revealing contextual factors/conditions (Zachariadis et al., 2013). Therefore, the choice of methods depends on “capability and complementarity of different methods to convey different kinds of knowledge about generative mechanisms” (Zachariadis et al., 2013, p. 864) and will be ultimately detected by the research questions formulated in consideration of the studied phenomena (Downward & Mearman, 2007).

Taking power from this approach, a mixed methods research design was used in this study. Each method served to complement the other reciprocally using a critical realist perspective, while seeking the underlying causal mechanisms for teachers' views about the concept of character, character development and education of gifted pupils, and challenges and needs in actualizing character education of gifted pupils in Turkey. This study was actualized in two stages by following Sayer's (1992, 2000) intensive and extensive distinction. A brief outline of the research design is illustrated in Figure 3 below.

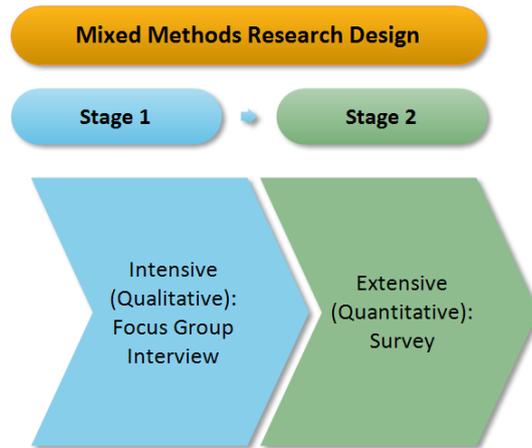


Figure 3: Overview of mixed methods research design

In the first stage, focus group interviews – the main driver of this study – were performed in order to understand and interpret the effects and actions of social structures. This is essential in identifying causal mechanisms and is required to be able to consider the contextual status of inherently interactive and open social structures (Mingers, 2000). In the second stage, a survey was used in order to gain a descriptive picture of the general trends of teachers' views about the concept of character; character development and education of gifted pupils; and challenges and needs in actualizing character education of gifted pupils in Turkey. In this way, the scope of the study was also moved from a relatively small number of personal narratives to statistics on the phenomenon through the survey.

6.4 Research methods

Research method refers to “simply a technique for collecting data” (Brayman, 2004, p. 27). A researcher decides the method(s) to use depend(s) on “the nature of the object of study and what one wants to learn about it” (Sayer, 2000, p. 19). Basically, exploring deep-seated causes of events and experiences is the task of critical realist studies (Bhaskar, 2011; Collier, 1994; Easton, 2010; Sayer, 2000). In this study, considering that my research questions

address a causal explanation of contextuality, I chose focus group interview and survey as research methods. They allowed me a deeper understanding of the operation of the underlying causal mechanisms at the real level. How the research questions are aimed to be answered is shown in Table 5 below. In the sections that follow, the details of the specific methods used in the research are provided.

Table 5: Location of the research questions in the research methods

Research Questions	Research Methods	
	Focus group interview	Survey
1. How do teachers who work with gifted pupils describe character?	Question 2 and 3	Part 2 (including Item 1, 2, 3, 4, and 5)
2. How do teachers think about the character development of gifted pupils?	Question 4 and 5	Part 3 (including Item 6, 7, and 8)
3. How do teachers think about character education of gifted pupils?	Question 6 and 7	Part 4 (including Item 9, 10, 11, 12, and 13)
4. What are the challenges and needs in terms of teachers' perspective in actualizing character education of gifted pupils?	Question 8, 9, and 10	Part 5 (including Item 14, 15, 16, 17, 18, 19, 20, and 21. Also, Item 6 and 7 are related to this question.)
Demographic information of participants	Question 1	Part 1 (including Question 1, 2, 3, 4, and 5)

6.4.1 Focus group interview

The focus group method has been used in various contexts and differing purposes by academic and applied researchers and is considered a very innovative research method (Acocella, 2011). “A focus group study is a carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment” (Krueger & Casey, 2009, p. 2). The discussion occurs in the presence of a moderator who gives direction to the discussion according to replies of the participants and focuses on a topic chosen by the researcher, whose goal is to analyse it in detail (Acocella, 2011). The size of a focus group needs to be “. . . small enough for everyone to have an opportunity to share insights and yet large enough to provide diversity of perceptions” (Krueger & Casey, 2000, p. 10). In other words, the number of participants for group discussion changes according to the aim of the research, topic of discussion, the level of detail required of participants, and the kind of participants involved (Hennink, 2007; Stewart et al., 2007).

In this technique, the informative source is the group and the heuristic value of this method depends on the interaction that emerges during the discussion (Acocella, 2011). Therefore, there are two main aims: “(1) to facilitate interaction among participants and (2) to maximise the collection of high-quality information in the limited time available” (Acocella, 2011, p. 1127). The quality of the information obtained from the interaction is directly related to the moderator’s ability to manage the discussion and the participants; therefore, the moderator has a critical and challenging task (Hennink, 2007). There are strengths and limitations of focus group interviews. For example, allowing arising inter-subjective representations through interaction among participants; providing sufficiently detailed information in a short time and at a low cost (Acocella, 2011); providing access to participants’ meanings and conceptualizations while they are interrogating and debating about the phenomenon (Barbour, 2007) are strengths. On the other hand, coordination problems among participants, the justification of the answer given by other participants, giving a more socially desirable response (Acocella, 2011; Carey, 1995) are limitations of focus group interviews. Considering these strengths and limitations, the method ideally suited to the aims of this study was considered to be focus group interviews. Accordingly, the research process began with these interviews.

For the focus group, ten semi-structured interview questions (illustrated in Appendix 1), were prepared by reviewing the literature and receiving the view of my academic supervisor, to allow discussion on key topics and issues (Hennink, 2007; Parr, 2013) and a pilot focus group was held to ascertain a shared understanding of the issues. The data for this study was collected in six different geographical regions of Turkey, and from ten different SACs: The Eastern Anatolia Region (SAC 1), the Aegean Region (SAC 2 and 3), the Marmara Region (SAC 4, 5, 6, and 8), the Black Sea Region (SAC 7), the Central Anatolia Region (SAC 9), and the South-eastern Anatolia Region (SAC 10). In selecting the SACs for the sample, considerations were the the location of the cities in different regions, the specific regions for geographical spread, and choosing SACs with a high number of students and teachers available for the sample. The geographical distribution map of the data collection in Turkey is demonstrated in Figure 4 below.

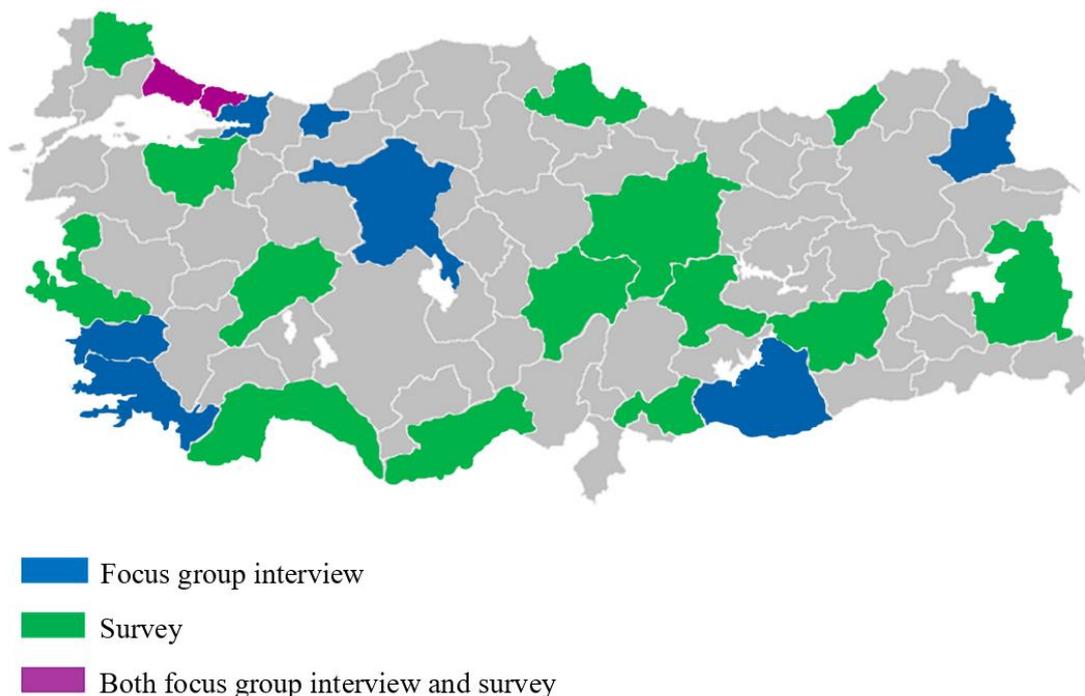


Figure 4: Geographical distribution map of the data collection in Turkey

6.4.1.1 Procedure of data collection in focus group interviews

After deciding on the SACs from which data was to be collected, the processes below were carried out step by step:

- The ethics approvals of the study, received from both Durham University and the Ministry of National Education were sent to the selected SACs through the Ministry of National Education network by the staff of the ministry.
- Before going to the SACs, appointments were made at ten different SACs by calling the head teachers of the SACs to establish appropriate dates and to give information about the study (Krueger & Casey, 2000).
- On the dates of the appointment, the head teachers arranged a short meeting with teachers for me to give information about my study and choose from among the volunteering teachers. After a presentation about the study, some teachers were asked to volunteer for the focus group interview. I contacted them by telephone to decide day, place, and time for the group discussion (Krueger & Casey, 2000). In the case that there were more than five volunteers, the teachers who had more experience were given priority.

- Then, information sheets including the information that video recording would also take place in the group discussion and consent forms were distributed to the volunteer participants (Hennink, 2007).
- On the meeting date and time, the researcher and voluntary participants came together in the meeting room of each SAC, designed to create a comfortable environment for the participants to feel free and express their opinions (Acocella, 2011). During the focus group interviews, a PowerPoint presentation which includes the interview questions was presented by computer to prevent skipping away from the question. In addition, the name-tags were used to identify the participants (Hennink, 2007).
- I introduced myself as a moderator, and then gave information about the purpose of the study, the outline of the group discussion, and requested from the participants that they introduce themselves in the framework of the first introductory question. Afterward, I moved to the key questions which address the aim of the study. At the end the participants were asked if they wanted to add any topics to the discussion (Hennink, 2007).
- During the group discussion, I encouraged all participants to share their views so as to stimulate a dynamic group discussion and to clarify some of their more complex ideas (Hennink, 2007).
- The duration was set up to allow the participants to answer all the questions. Each focus group interview lasted an average of one hour (Rabiee, 2004).
- During the focus group interviews, video recordings were used to be able to follow each participant's speech. These records were kept in an encrypted computer (Barbour, 2007).
- A verbatim transcript was done, that is, an exact word-for-word record of the discussion as it is spoken on the video-recording (Hennink, 2007). In this process, a software programme (Speechnotes) was used to convert the visual video records into text, and the text versions of the records were verified twice.
- Later, transcript conventions were used in the texts (see Appendix 2) by listening to all records again (Davidson, 2009).
- The transcripts were translated from Turkish to English according to the order of the questions. After translation, it was reviewed by an expert to check the English translations of the data (Hennink, 2007).

- Then, the translations of all SACs were grouped according to the interview questions in order to answer the research questions more easily.
- Once the data were ready for analysis, the first initial codes were created manually. Later, in the secondary and tertiary coding, the NVivo 12 software programme was used (Bazeley & Jackson, 2013).
- After coding, the categories at the macro, meso, and micro-levels (within a critical realist approach) were constituted, and then the themes were identified. This part is discussed in more detail in this chapter's section on data analysis.

6.4.1.2 Focus group interview participants

The available teachers who had the most experience in the SACs were recruited for the study. Ten focus groups were created, one group consisting of three teachers, and nine groups with five teachers, for a total of 48 teachers that were interviewed. Although each focus group consisted of teachers in different domains (science, social science, language, music and arts, computer science, primary school teacher, and psychological counselor), they all work exclusively with gifted pupils at the primary, secondary, and high school levels. There was no difference in terms of hierarchy between them. This homogeneity improved the dynamics of the focus group since they did not have to deal with the dynamic of the presence of a supervisor (Dornyei, 2007). The fact that all the teachers had an experience of gifted education motivated them to take part in the focus groups and to interact with each other in dialogue to discuss the various topics (Cote-Arsenault & Morrison, 1999). The demographic data of the participating teachers is illustrated in Table 6 below.

Table 6: Demographic characteristics of the teacher sample in the focus group interviews

Characteristics	Teacher participants
	N=48 n (% of total)
Gender	
Male	17 (35)
Female	31 (65)
Graduation degree	
Bachelor's degree	30 (63)
Master's student	2 (4)
Master's degree	7 (15)
Doctoral student	9 (19)
Years of teaching experience in gifted education	
1-3	36 (75)
4-6	9 (19)
7-10	3 (6)
Subject areas of teachers	
Sciences (including maths, science, chemistry, and biology)	16 (33)
Social sciences (including philosophy and history)	3 (6)
Linguistic sciences (Turkish and English)	7 (15)
Music and Arts	11 (23)
Computer Sciences (including software and information technologies)	2 (4)
Primary school teacher	4 (8)
Psychological counsellor	5 (10)

6.4.2 Survey

An extensive survey method was used with the aim of identifying data patterns and their correlations and presenting them descriptively so as to provide a complementary role in the analysis. Since quantitative summaries and correlations between variables alone cannot uncover evidence on the causal mechanisms that generate events at the actual level and observation and experience at the empirical level (Downward & Mearman, 2007; Zachariadis et al., 2013). Accepting a critical theorist view of generalization changes the role of quantitative approaches which generally theorize on measured events based on the regularity and degree of correlation between variables (Lawson, 1994). From a critical realist perspective, statistical descriptions are accepted as complementary/helpful simplifications and descriptive summaries rather than predictive tools (Fleetwood 1999; Lawson 1997; Sayer 1992).

In parallel with this approach, the qualitative analysis results of the focus group interviews were transformed into a survey called *Character Education in Gifted Education* – which is presented in Appendix 3. The content of this survey was developed based on the macro, meso, and micro-level categories in the thematic analysis of the focus group interviews. However, the wording of the scale anchors in the survey was formed based on an

example survey used in similar research (see Cross et al., 2018). This survey was carried out with the aim of reaching a large number of participants to increase the generalisability of its results and provide descriptive information about the items. The instrument was made available online through a software package (Google Forms).

The first part of the survey consisting of 5 parts in total, included questions about the demographic information of participants (e.g., gender, age, teaching experience in gifted education, graduation degree, and subject of teachers). The other four parts that involves a total of 21 items were related to: (1) description of character (5-items), (2) character development of gifted pupils (3-items), (3) character education of gifted pupils (5-items), and (4) challenges and needs in actualizing character education of gifted pupils (8- items, but Items 6 and 7 are also related to this question, so overall 10-items). The stem of each item in the part of description of character for teachers was “As a teacher, I think, character. . .” For example, “As a teacher, I think, character is innate”. In the other three parts (Part 3, 4, and 5), the statements were written directly as sentence. Respondents were asked how much they agree on a 6-point Likert scale from “strongly disagree” (1) to “strongly agree” (6) in all parts.

6.4.2.1 Procedure of the data collection in survey

Ethics approvals for the research were obtained firstly from the Ethics Advisory Committee of Durham University and then the Ethics Review Board of the Republic of Turkey Ministry of National Education. After getting the ethics approvals, contact was established with the managers of the pre-determined SACs by phone; the managers were informed about the research, and the online link of the survey was shared with them via e-mail. The managers were requested to share the online link of the survey with the teachers who work in their SACs. The study was run in line with the regulations of the British Educational Research Association (BERA, 2018) and teachers were asked for consent. An information sheet and consent form were presented at the beginning of the online survey. This survey was developed and implemented in Turkish, which is the native language of participants. The data for this study was collected from seven different geographical regions of Turkey, and in fifteen different Science and Art Centers (SACs): The Marmara Region (3 SAC), the Black Sea Region (2 SAC), the Eastern Anatolia Region (2 SAC), the South-eastern Anatolia Region (2 SAC), the Aegean Region (2 SAC), the Mediterranean Region (2 SAC) and the

Central Anatolia Region (2 SAC) – see Figure 4 above for the geographical distribution map of the data collection in Turkey.

6.4.2.2 Survey participants

In selecting the SACs for the sample, SACs with a larger number of students and teachers were preferred. The teachers who had more experience in the SACs were requested to recruit for the study. The survey was carried out online to 105 teachers who work with gifted pupils in the SACs, who were not taking part in the focus group interviews. The demographic data of participating teachers are illustrated in Table 7 below.

Table 7: Demographic characteristics of the teacher sample in the survey

Characteristic	Teacher participants
	N=105 n (% of total)
Gender	
Male	59 (56.2)
Female	46 (43.8)
Age (years)	
25-29	5 (4.8)
30-39	49 (46.7)
40-49	43 (40.9)
50+	8 (7.6)
Years of teaching experience in gifted education	
0-5	75 (71.4)
6-10	18 (17.1)
11-15	8 (7.6)
16-20	2 (1.9)
21-30	2 (1.9)
Graduation degree	
Bachelor's degree	40 (38.1)
Master's student	12 (11.4)
Master's degree	35 (33.3)
Doctoral student	13 (12.4)
Doctoral degree	5 (4.8)
Subject areas of teachers	
Sciences (including maths, physics, chemistry, and biology)	34 (32.4)
Social sciences (including history, geography, and philosophy)	14 (13.3)
Linguistic sciences (including Turkish, English, French, German, and Spanish)	15 (14.3)
Music and Arts	19 (18.1)
Computer Sciences (including software and information technologies)	3 (2.9)
Physical Education	3 (2.9)
Primary School Teacher	11 (10.5)
Psychological Counsellor	4 (3.8)

6.5 Data analysis process and methods

To answer the research questions posed in this study, I applied thematic analysis for the qualitative data and statistical analysis for the quantitative data. Both thematic and statistical analyses in a critical realist background were used to answer all the four research questions of the study. The stages of the data analysis process were illustrated in Figure 5 below.

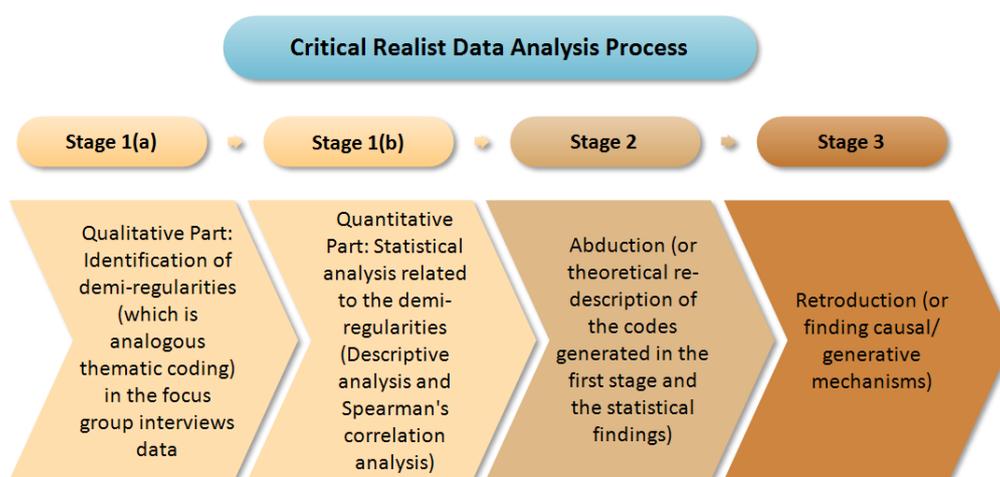


Figure 5: Stages of the data analysis process

The data analysis process was actualized in 3 stages within the overarching framework of critical realism: (1a) identification of demi-regularities (which is analogous to thematic coding) in the focus group data, (1b) statistical analysis related to the demi-regularities, through descriptive analysis and Spearman's correlation analysis (2) abduction (or theoretical redescription of the codes generated in the first stage and the statistical findings), and (3) retrodution (or finding causal/generative mechanisms). The first stage of the data analysis consists of two parts, the qualitative (intensive) and quantitative (extensive) parts of the study. Both qualitative findings (the demi-regularities derived from thematic codes), which are the main driver of study, and quantitative findings (statistical analysis results related to the demi-regularities), which have a complementary role in the study, were discussed together in Stage 2 and 3 and are explained in more detail in the next chapter. The detailed explanations of the data analysis stages are presented in the corresponding text.

6.5.1 Qualitative part: Identification of demi-regularities

In conformity with critical realist ontology, data analysis begins with the search for ‘demi-regularities’ at the empirical level of reality (O’Mahoney & Vincent, 2009). Lawson (1997) defines

a demi-regularity is precisely a partial event regularity which prima-facie indicates the occasional, but less than universal, actualisation of a mechanism or tendency, over a definite region of time-space . . . where demi-regs are observed there is evidence of relatively enduring and identifiable tendencies at play. (p. 224).

The demi-regularities, or patterns, in the empirical data can be understood as partial (non universal) regularities indicating the actualization of a mechanism in a specific context. This context determines how and whether they are actualized and so full regularity in terms of their actualization is meaningless here; it will always be a partial actualization that is in evidence. Here, whilst the themes are more general patterns that have a semantic relationship with the categories and involve them, the demi-regularities are categories defined as partial events. This is important because I focused on all the data rather than focusing on only themes, there is no missing or unfocused data in this way.

In other words, demi regularities are patterns/tendencies, which are identified by thematically coding the empirical data. In this stage, all the data were coded thematically by using a data-driven inductive approach. The codes, derived from the data content itself, are gradually refined to a finely detailed level (Boyatzis, 1998; Braun & Clarke, 2006). Using this method, these provisional codes were gradually reduced during the second coding cycle, as they were re-organized and combined into the framework of a macro, meso, and micro conceptual map, informed by critical realism (Blom & Moren, 2011). This leads to discovery of the demi-regularities (or patterns) as conceptualised in a critical realist approach. All codes were considered important; however, the most dominant codes were used as a starting point to identify ‘demi-regularities’ at the empirical level of reality (O’Mahoney & Vincent, 2009). Identification of demi-regularities is the beginning of abduction and retroduction. The demi-regularities generated are explained in more detail in the next chapter.

6.5.2 Quantitative part: Statistical analysis related to the demi-regularities

In the quantitative data from teachers via the survey, a descriptive analysis first was done using IBM SPSS Statistics Version 26 (a software package) in order to identify trends, variation, and significant features of the distribution of the teachers’ responses to the research phenomena (the concept of character, character development and education of gifted pupils,

and challenges and needs in actualizing character education of gifted pupils) in a meaningful way (Howitt & Cramer, 2020). The descriptive analysis identified each item of the survey in terms of mean, standard deviation, skewness, and kurtosis. Here, kurtosis and skewedness, usually not appropriate for ordinal data, were used to see if the data distribution was normal and could therefore be correlated with the demographic data.

Item responses were from 1 = Strongly Disagree to 6 = Strongly Agree. Participants' responses were classified by their mean scores as high (> 4), moderate (≥ 3 and < 4), or low (< 3). Then, to see the relationship between the items (overall 21 items) within the same construct/part (overall 4 constructs), the Spearman Correlation Test was used considering that the data collected was ordinal data and were not normally distributed (Krehbiel, 2004; Schober, 2018). The correlation's magnitude was interpreted within cut-off points, as suggested by Spearman, considering a low correlation when $0 < r < .40$, a moderate when $.40 < r < .70$, and a high when $.70 < r < 1.00$ (Schober, 2018). To conclude the statistical analysis, a level of significance of 5% ($p < .05$) was used. The results of descriptive and correlation analyses of the items of each part were presented separately under the relevant research question.

6.5.3 Abduction

After the demi-regularities are identified through thematic coding, the next step is the process of abduction in which empirical data are re-described using theoretical concepts. Abduction has been defined as a process of "inference or thought operation, implying that a particular phenomenon or event is interpreted from a set of general ideas or concepts" (Danermark et al., 2002, p. 205). The notion of abduction was introduced by Pierce (1931), who proposed it as the underlying logic of pragmatism. Pierce talked about abduction as hypothesis-constructing, to account for the empirical observation of facts, in order to reach new ideas by going beyond what had previously been thought.

The best way to understand abduction is by comparing it to deduction and induction. In contrast to deduction that starts with a claim/rule, induction and abduction start with an observation. However, with induction, observation is a case, while with abduction, the observation is a result (Shank, 1987). Rather than going from the rule to the result (as in deduction), or from the case to the rule (as in induction), we move from the result to the case in abduction. That is, the observed fact has been accepted as a result of an accumulation of experiences, beliefs, etc. related to phenomena in abduction. In other words, abduction

occurs when we have a theory-laden observation, but we have doubts about what the theory actually is (Shank, 1987). Therefore, “Abduction merely suggests that something *may* be” (Fann, 2012, p.51), and aims to find the best explanation through logical inference (Mazzoli Smith & Todd, 2019). It does not aim to defend or justify any of the demi-regularities or theories linked to them. Rather it is inference to the best explanation.

6.5.4 Retroduction

The last step is retroduction, which critical realist analysis relies on; a particular form of inference (Blom & Moren, 2011). Retroduction aims to identify causal mechanisms that result in the empirical findings observed and the necessary contextual conditions for these causal mechanisms to take effect (Fletcher, 2017). Causal mechanisms “exist only in virtue of the activities they govern and cannot be empirically identified independently of them” (Bhaskar, 1979, p. 48). This means that causal mechanisms are social products that can be understood as existing within phenomena at the empirical level (e.g., human actions and ideas that are generated by these mechanisms) (Fletcher, 2017). Causal mechanisms exist and activate through the powers and liabilities of entities. Powers and liabilities are “potentialities” inherent in a structure or object that enable or restrict it from acting in certain ways (Psillos, 2007). Entities are “things which ‘make a difference’ in their own right, rather than as mere sums of their parts” (Fleetwood, 2005, p.199). In a critical realist explanation, entities provide basic theoretical building blocks and can be tangible or intangible, dormant or active, social or physical (Easton, 2010).

This stage of the analysis can therefore be thought of as directed towards the abstraction and analysis of entities in terms of their constitutive structures, powers, and liabilities. Conditions in the open social context can prevent or facilitate the actualization of powers and liabilities that lead to the causal mechanism, meaning it may or may not have an observable impact at the empirical level. Therefore, the process of retroduction investigates particular social conditions under which a causal mechanism takes effect in a specific social context. Therefore, retroduction is used to find and posit the mechanism that could lead to the demi-regularities about teachers’ views on the phenomena and the contextual conditions that enabled them to be realised. However, retroduction to causal mechanisms is not intended to defend or justify any of the demi-regularities, or the theories to which they are linked.

6.6 Validity and reliability

Bell (2010) states that “whatever procedure for collecting data is selected, it should always be examined critically to assess to what extent it is likely to be reliable and valid” (p. 119). Reliability refers to the extent to which the applied procedures can produce a similar result when practiced at a different time and validity refers to the extent to which the research design can provide credible results (Bell, 2010). The reliability and validity of the study were provided following the trustworthiness criteria of Lincoln and Guba (1985): (1) credibility, the “fit” between respondents’ views and the researcher’s representation of them (Tobin & Begley, 2004); (2) transferability, the generalizability of inquiry (Nowell et al., 2017); (3) dependability, documenting the research process logically, as traceable, and clearly (Tobin & Begley, 2004); and (4) confirmability, demonstrating how conclusions and interpretations have been reached from the data (Tobin & Begley, 2004).

To ensure these criteria were well implemented in this study, the validity of our concepts in the interview questions was provided by reviewing the relevant literature and then piloting testing them. All focus group interviews were audio and video recorded to ensure that the data was captured accurately; to avoid misrepresenting my research participants and confusing their answers. The data codes were reviewed by colleagues not involved in the study and limiting the study to one data source was avoided by using the survey. In this way, the scope of the study was widened and the possibility of producing unbiased findings was increased. In other words, I exercised methodological reflexivity (Coghlan & Brannick, 2010), which was important in that the research process and conclusions were not significantly affected by my potential biases and predispositions as a researcher (Johnson & Christensen, 2007). My role as the researcher was as the moderator in the focus group interviews; having the same native language and cultural background as the participants ensured the focus group interview questions would be understood by the participants. The reasons – how and why – for theoretical, methodological, and analytical choices throughout the whole study have been explained in detail (Koch, 1994). Finally, my interpretations and conclusions were examined and discussed with my supervisors.

Regarding the quantitative (survey) part of the study, content validity, which means that the survey comprehensively covers the topics under research, was ensured by developing the survey items based on the focus group interview results (Bryman, 2004; Cohen et al., 2000). The clarity of the survey in terms of wording, items, instructions, and format was

checked by consulting my supervisor, practicing it on five teachers and receiving feedback from them. The survey was practiced in seven regions across Turkey for a broad geographical sample, rather than focusing on only few regions (see Figure 4 above). Hence, it can be argued that the survey is externally valid.

6.7 Ethical considerations

During the process of planning and conducting the data collection and analysis for this study, it was ensured that the study followed the ethical guidelines described by the British Educational Research Association (BERA, 2018). The ethical form was therefore completed where all ethical considerations were concerned, and the form was approved by the Durham University Ethics Committee. A copy of the ethics approval forms for both the focus group interview and survey can be seen in Appendix 4 and 5. Similarly, the ethics application forms for both the focus group interview and survey were completed and sent to the Turkish Ministry of National Education by email and the ethics approvals were received (presented in Appendix 6 and 7). Information sheets and consent forms were used both in the focus group interviews, which are presented in Appendix 8 and 9, and in the survey, which is presented in Appendix 10. In order to keep the anonymity of the participants' information, I have included a blank consent form used to get the approval of participants in Appendix 9 (Brayman, 2004).

The participants were given the complete details of the focus group interview and were told that if they decided to participate, they would be free to withdraw at any time without any negative consequences. It was also indicated that all responses would be kept in confidentiality and that in any research report that may be published, no information would be included that would make it possible to identify them individually. There would be no way to connect their names to their responses at any time during or after the study. This made easy the views and beliefs of participants to express without hesitating. Similarly, the same information was given to the participants who participated in the survey. In keeping participants and SACs anonymous when reporting the data, I have simply referred to them as SAC 1, SAC 2, SAC 3, etc., in the study. Similarly, when sharing the sample of one of the focus group transcripts in Appendix 11, I have not used the participants' names but simply referred to them as T1, T2, T3. In keeping data confidential, I have put all audio and video records and online survey responses in one secure folder on my device which is accessible only through a password not known by anyone else.

CHAPTER 7 FINDINGS, ANALYSES, AND DISCUSSION

7.1 Introduction

In this chapter of the thesis, the data obtained from both the focus group interviews and survey are presented, analysed, and discussed. It explains in detail, considering the contextual conditions and relationships, how the causal mechanisms that lead to the teachers' views and beliefs about the phenomena are found. Within the overarching framework of critical realism, this process was actualized in 3 stages: (1a) identification of demi-regularities through thematic coding of focus group discussion data, (1b) statistical analysis through descriptive analysis and Spearman's correlation test of survey data; (2) abduction; and (3) retroduction.

In the stage of identification of demi-regularities, the findings of both focus group interviews and the survey are presented. First it is shown how the demi-regularities are derived from thematic codes, then statistical findings from the survey are presented. In the stage of abduction, empirical data (the demi-regularities and statistical findings related to the demi-regularities) are re-described using theoretical concepts with the aim of inferencing to the best explanation, rather than simply defending or justifying any particular theoretical position and/or perceived causal effect of the demi-regularities that support such positions. In the stage of retroduction, causal mechanisms and the necessary contextual conditions for these causal mechanisms to take effect and to result in the empirical findings observed (i.e., the demi-regularities) are identified. All these stages are actualized sequentially for each research question. In the last research question, only the first two stages (identification of demi-regularities and abduction) are actualized since it addresses a more descriptive purpose rather than of finding a causal mechanism.

7.2 Research Question 1

How do teachers who work with gifted pupils describe character?

7.2.1 Qualitative part: Identification of demi-regularities

Data collected were first coded. This leads to the discovery of demi-regularities (or patterns) as conceptualised in a critical realist approach. All the data was coded thematically using a data-driven inductive approach. The codes, derived from the data content itself, are gradually refined to a finely detailed level (Boyatzis, 1998; Braun & Clarke, 2006) and 34 provisional codes (see the provisional codes column on Table 8 below), which explain how teachers described character, were generated. Important criteria for this stage of initial coding that had

been identified in the literature review were: consideration of teacher beliefs and experiences, realities as defined by the participants, and the cultural effects of discourses about character description (Braun & Clarke, 2006). Following a critical realist methodology, these 34 codes were gradually reduced during the second coding cycle by their re-organization and combination into a meso and micro conceptual map framework, (Blom & Moren, 2011). These critical realism inspired categories were: (1) self-oriented at the micro level, including the categories of *mostly innate, unique personality traits, ability to recognise and manage own traits, structure that develops over time*; (2) others-oriented at the meso level, including the category of *reactions towards others and events*. These are illustrated in Table 8 below.

Table 8: Critical realism-informed codes and categories about character description

Theme	Conceptual map levels	Categories	Provisional codes
Description of character	Micro-level (self-oriented)	Mostly innate	Genetic heritage, Fingerprint, Mostly innate, Mostly disposition
		Unique personality traits	Personal habits, Set of personal features, A capsule including personal perspective, Unique aspect, Distinctive characteristics, Standardized personal behaviour patterns
		Ability to recognize and manage own traits	Self-consciousness, A tool to achieve personal goals, Ability of self-recognition and self-management, Recognising and nurturing potential
		Structure that develops and changes over time	Educable and developable aspect, Affected by family discipline, Acquired identity, Changeable aspect, Teachable aspect, Time-developing, Flexible, Affected by life events, Result of interaction, Developing through intra-family communication
	Meso-level (others-oriented)	Reactions towards others and events	Comments of people around us about us, Morality, Reactions towards others and events, Attitudes and behaviours towards others, Having universal values, Having ethical values, Adopting social life, Having social communication skills, Satisfying expectations of society, Eliminating negative behaviours

As seen above, the meso level encompassed relational aspects and the micro level was oriented more on one's attitudes towards oneself. All codes were considered important, codes were categorised by semantic relation, and the categories were labelled with the most dominant codes. Then, the most dominant codes were used as a starting point to identify the 'demi-regularities' at the empirical level of reality (O'Mahoney & Vincent, 2009). That is,

the most dominant codes were described as partial events (Lawson, 1997). The demi-regularities, or patterns, in the empirical data can be understood as partial regularities indicating the actualization of a mechanism in a specific context (Lawson, 1997). This context determines how, when and whether they are actualized. In this context, actualization is generally only partially evidenced and in potentially many different ways, and so full regularity in terms of their actualization is meaningless here – it will practically always be a partial actualization that is in evidence. The top level data coding using this method led to the generation of five demi-regularities (Fletcher, 2017) illustrated in Figure 6 below.

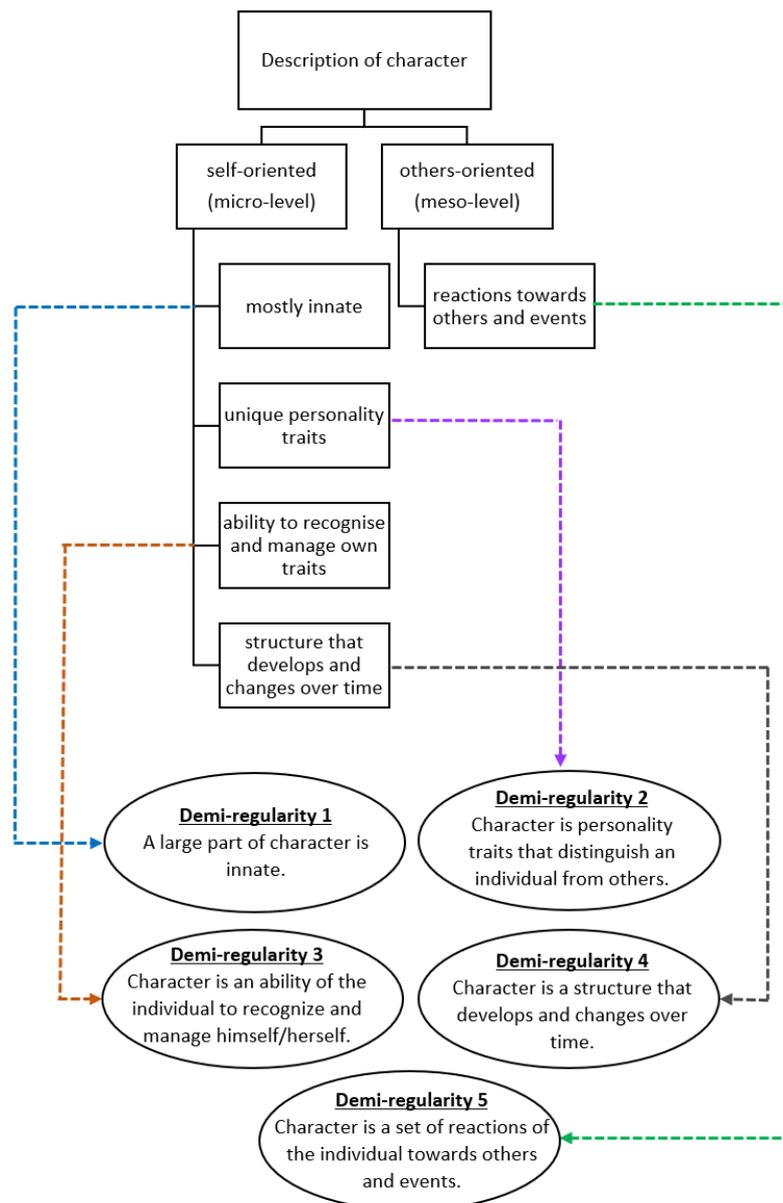


Figure 6: Thematic map of the demi-regularities about character description

In the first demi-regularity, character is seen as an innate disposition of the individual based on genetic make-up. In five of the SACs (SAC 1, 3, 5, 7, and 10), most of the teachers agreed on this. In the focus group excerpts, the most comprehensive explanations related to all demi-regularities in each SAC where this view has come up, are presented below.

Character consists of mostly the disposition of the person and then the family discipline. Some of the characteristics of children resemble their fathers or mothers. (SAC 1)

I accept parents are role-models in the building of character. However, 90 % of character traits of the individual are inherent in origin. (SAC 3)

As my friend said, I think, 80% of character development is hereditary. But there is still a 20% contribution from education. Family is also effective but only until a certain age. During adolescence, friends are more in the forefront. There are critical periods that are age dependent in character development; therefore, there is also a developmental aspect of character. (SAC 3)

I have identical twins, their characters are different from each other. Although they have the same parents and environment, their reactions are different. Although they are exposed to the same things, their reactions are different even if the same education is given to them. They have a character that originates in the innate and they reflect it on us. Therefore, I think character is innate, and everybody's character is different. Character may change, but not completely. As my friend said, I (think this because) have twin children whose genetic codes are the same, but their character codes are not the same. (SAC 3)

I think that not only environmental factors affect character, but that genetic heritage has very large effect on our behaviours and our thoughts. Therefore, there is no clear definition of character. (SAC 5)

Character is like a fingerprint, so every person's character is different. There is a cultural heritage, genetic predisposition, and family discipline within character. (SAC 5)

I think the social environment and culture have an impact on character development. However, we have an inner world, in which there are personal traces which we bring from birth. (SAC 5)

Character is certainly related to genes, the child comes into the world with an idiosyncratic character, but he/she can also be affected by the environment where he/she lives. (SAC 7)

I do not believe that the same two types of children can be born. I think every child is born with his/her own idiosyncratic character. Absolutely, environmental factors have an effect, but difference comes from the genes; later environmental factors step in. (SAC 10)

The second demi-regularity focuses on the aspect of the uniqueness of the individual, coming from personalized characteristics/habits and/or genetic make-up. In six of the SACs (SAC 1, 2, 4, 5, 9, and 10) most of the teachers agreed on this.

Character is a whole set of features that distinguish the person from other people. (SAC 1)

Character consists of personal habits. Since everyone's habits are different, everybody's character is different, that is, character is specific to the individual. Character education should not interfere with human nature. For example, I am an excited person and behave excitedly. I don't want to change this trait. My characteristics should not be put into a standard form. (SAC 2)

Character can be considered as standardized personal behaviour patterns, which constitute a large part of behaviours of the person. (SAC 4)

Raising individuals as the community wants is the aim of character education, but the unique aspect of the individual is undermined at this point. (SAC 5)

I think character is a capsule that covers the person. We get information and thoughts by filtering them from our capsules, and then, we reflect it according to our characters. For example, if there is an event here, everyone will react differently. (SAC 9)

Each of my students has distinctive traits, particularly, in this school, each student has distinctive characteristics. For example, some of them are introverted, some of them are extroverted, some of them want to work within a group, and some of them want to study individually. (SAC 10)

I believe the effect of the environment on character, but I think character is a whole of smaller building blocks or traits that make a person oneself. (SAC 10)

The third demi regularity focuses on the aspect of the recognition and management of the (existing) self. In other words, character is seen as a tool for the self to flourish. Awareness of the individual towards himself/herself is in the foreground. In four of the SACs (SAC 2, 3, 5, and 6) most of the teachers agreed about this.

When we speak or hear of character, many concepts come to my mind, but it is hard to do a definition. But I think character is a tool to achieve personal goals. (SAC 2)

The concepts of the philosophers on this subject have always attracted my attention. Aristotle also constantly says character. This concept sounds to me, very mysterious. Character is like an ability to recognize oneself at all points and to nurture the current potential at all points. (SAC 3)

Character can be associated with self-consciousness or self-realising. The individual needs to know who he/she is, what can improve him/her, what is harmful or beneficial for him/her, character helps to answer these questions. (SAC 5)

Character comes to me like a palette, we have a lot of colours in our palette, and we are continuing to do a strange mix with them. That is, you have everything we have in all of us, but the weights of them are different in each of us. The character is therefore an ability to recognize these weights and manage them. (SAC 6)

Character is to be able to become aware of one's own skills and manage these skills. It provides self-awareness of the individual. (SAC 6)

The fourth demi regularity is seen as a flexible structure that develops over time with both intentional and unintentional interactions. In other words, character corresponds to the educable, or teachable, or changeable aspect of the individual. In eight of the SACs (SAC 1, 2, 3, 4, 5, 6, 9, and 10) most of the teachers agreed on this.

I don't think it's a congenital thing, character develops later. Character is like a seed. If you put it in the soil and irrigate, it becomes green. If you look better, it blooms. If you vaccinate, it gives you fruit. I think that is character. Character is not something that is ready in the brain of the human being. It belongs to the individual, so, it occurs and matures over time. (SAC 1)

Character starts with social communication skills in the family. Character consists of the child's interaction with the mother, father, close relatives, the environment the child lives in, and the school, respectively. (SAC 2)

In fact, we need to look at scientific research about that. But I think character is shaped after some life events, such as military service for men. (SAC 2)

I think character is an aspect of the individual open to education and development. (SAC 2)

I think character is teachable. When we say 'good character', it should be parallel to the norms of Turkey, because it may change from country to country, from culture to culture. It is flexible. (SAC 3)

I don't know the effect rate of genetic and environmental factors on character development. However, character development starts in the family, and then it continues to develop in the school, among relatives, and the environment. (SAC 4)

I don't think genetics has much of an effect on character. Character has something that has been formed over time, we are making additions to it, and then we call it as character. (SAC 5)

Character is an open system that accept everything, it is related to the decisions of a person. (SAC 5)

Character is about the environment. Character consists of some traits we get through the influence of the environment and society, such as; honesty, goodness, helpfulness. Therefore, the character of a child is a result of the interaction with the environment he/she lives in. (SAC 6)

I think character is the educable and developable aspect of a person. (SAC 9)

For character, using the concept of changeable is truer than using the concept of development, because character is shaped through family and environmental conditions. Correspondingly, this is not a development, this is changeable something by shaping. (SAC 9)

We see that the same child's reactions differ over time. Economy, environmental factors, peers, role models, and hereditary properties are effective in the constitution of character. So, character is an identity acquired over time. (SAC 9)

I believe that the environment has a broad effect on character development. When you give two siblings to two different families, they will grow up as totally different individuals. Correspondingly, their perspectives towards events will be also different. (SAC 10)

In the first four demi-regularities, character was seen mostly as self-oriented, but it was defined mostly as others-oriented in the fifth demi-regularity. That is, considering societal expectations, adapting to social life, attitudes and behaviours towards others were to the forefront in these descriptions of character. In seven of the SACs (SAC 1, 2, 4, 5, 7, 8, and 10) most of the teachers agreed on this.

Character is necessary to satisfy the expectations of the society. Therefore, it is caught rather than taught. (SAC 1)

In fact, what we call character is related to how people perceive us, rather than how we interpret ourselves. Character is something that is shaped through interpretations of people who know me in my environment. (SAC 2)

Character is related to having social communication skills that affect an individual's relationships with others. In other words, character is related to the child's interaction with the mother-father, close relatives, the environment the child live in, and the school, respectively. (SAC 2)

Having a character means having universal values for a better society, because it is shaped by the society in which we live in. (SAC 2)

Character is related to attitudes and behaviours towards other people. So, it includes an individual's wording and behaviours. Therefore, genetic factors have little effect in the development of character. (SAC 4)

I can define character as a reaction shown towards others, or an event, or a situation by filtering them through our mental processes. These mental processes are affected by genetics, environment, family, and society. (SAC 4)

When we say character, universal values come to my mind. For example, respect, tolerance and goodness; so having these universal values can be described as character. (SAC 5)

Character is a schema based on the perceptions and interpretations of other people. Both genetic and environmental factors are effective on character. (SAC 5)

Character serves to eliminate negative behaviours. (SAC 7)

Character means to have ethical values and to work in an ethical framework. (SAC 8)

Character requires having social skills as well as having values. Character development starts especially in the 0-6 age-period and develops with the influence of the environment. (SAC 10)

Our character must be appropriate to the society where we live in to be able to live together and avoid exclusion. We need to have a character education program since we live together. (SAC 10)

Actually, I can define character as a sort of morality which contains social rules. (SAC 10)

Character is also related to adapting to social life. We are not living creatures able to live alone; we are living in a society. Therefore, we need to carry out the expectations and rules of the society as well. (SAC 10)

This phase of data processing showed the generation of the empirical demi-regularities developed from qualitative data from how teachers, who work with gifted pupils, described character.

7.2.2 Quantitative part: Statistical analysis related to the demi-regularities

To complement the findings from the qualitative interviews, although the focus was very much on the qualitative experiences and opinions of teachers the survey data was used descriptively to assess to what extent teachers who work in other SACs and were not attendees of the focus group interviews, agreed with these demi-regularities (*descriptive analysis*) and to investigate relationships between the demi-regularities (*correlation analysis*) without making causal attributions (Ron, 2002). Statistical analysis may allow us to modify and improve our theoretical views on social mechanisms and to capture key features of social reality (Williams, 2009). The qualitative and quantitative methods were therefore combined to investigate in depth, the possible causal mechanisms that may have led to the descriptions of character by teachers. Turning to quantitative data related to these demi-regularities, descriptive statistics (see Figure 7, 8, 9, 10, 11, and Table 9 below) revealed that 37% of the participants chose somewhat agree, 19% of the participants chose agree, and 5% of the participants chose strongly agree that character is innate ($M=3.62$, $SD=1.25$). This means that approximately 61% of the participants assume that there is at least some innate aspect of character, although the degree of agreement on this assumption varies.

On the idea that each character is a set of unique traits, 5% of the participants chose somewhat agree, 46% of the participants chose agree, and 39% of the participants chose strongly agree ($M=5.03$, $SD=1.21$). That is, approximately 90% of the participants assume that character refers to unique traits of the individual although the degree of agreement on

this assumption varies. That character is a set of reactions towards others and events 30% of the participants answered somewhat agree, 43% of the participants answered agree, and 8% of the participants chose strongly agree ($M=4.26$, $SD=1.15$). This means that approximately 81% of the participants assume that character refers to reactions towards others and events despite different degrees of agreement on this assumption.

18% of the participants were in somewhat agreement, 50% of the participants were in agreement, and 17% of the participants were in strong agreement that character is an ability to recognise and manage one's own traits ($M=4.60$, $SD=1.14$). That is, approximately 85% of the participants assume that character as an ability of an individual to recognise and manage his/her own traits, although the degree of agreement on this assumption varies. Lastly, 27% of the participants chose somewhat agree, 39% of the participants chose agree, and 19% of the participants chose strongly agree that character develops over time ($M=4.58$, $SD=1.08$). This means that approximately 85% of the participants assume to varying degrees that character develops over time. In summary, each item was agreed on by more than half of the participants although the degrees of agreement varied. However, the most agreed on character descriptions by the participants were: a set of unique traits, an ability to recognise and manage one's own traits, and developing over time.

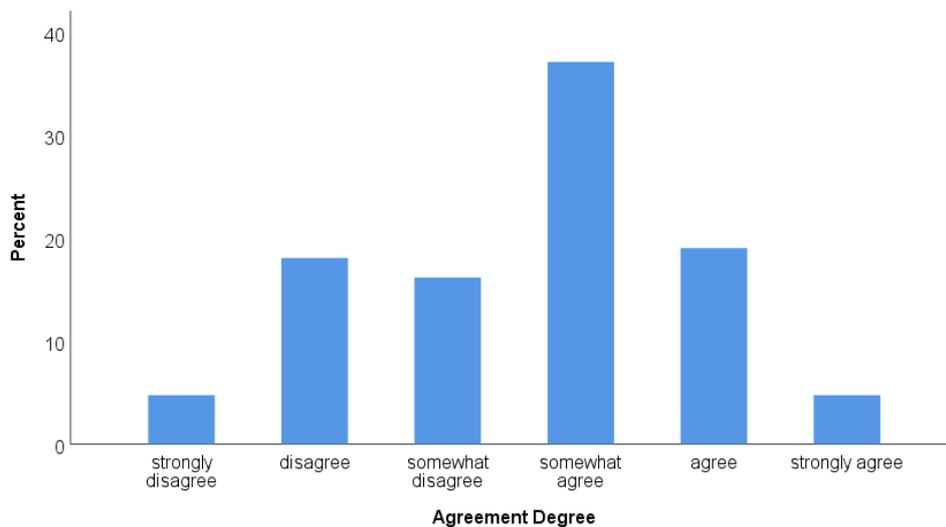


Figure 7: Participants' agreement degree on the innate aspect of character

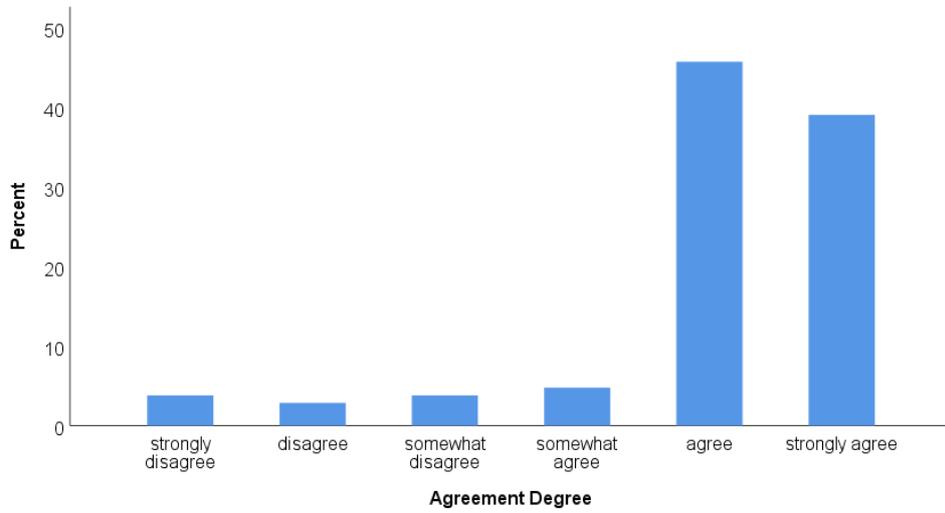


Figure 8: Participants' agreement degree on the unique aspect of character

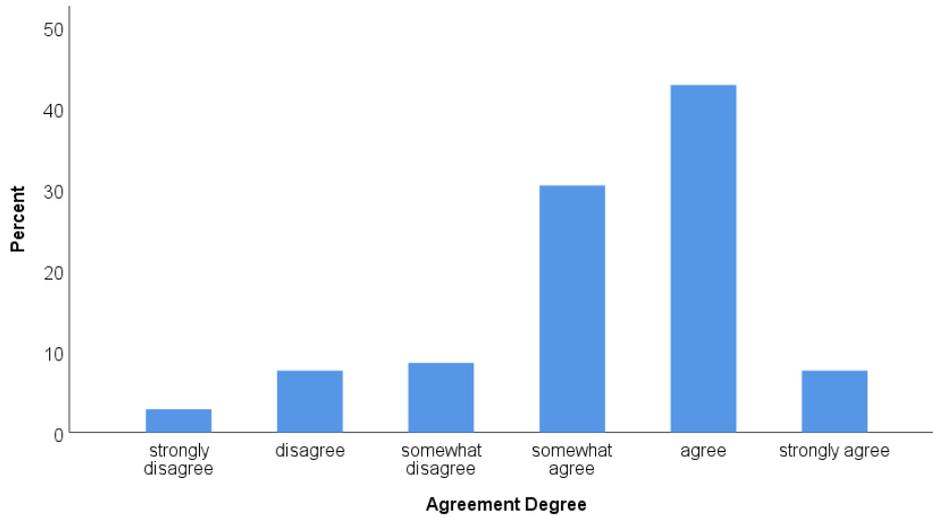


Figure 9: Participants' agreement degree on the description of character about reactions towards others and events

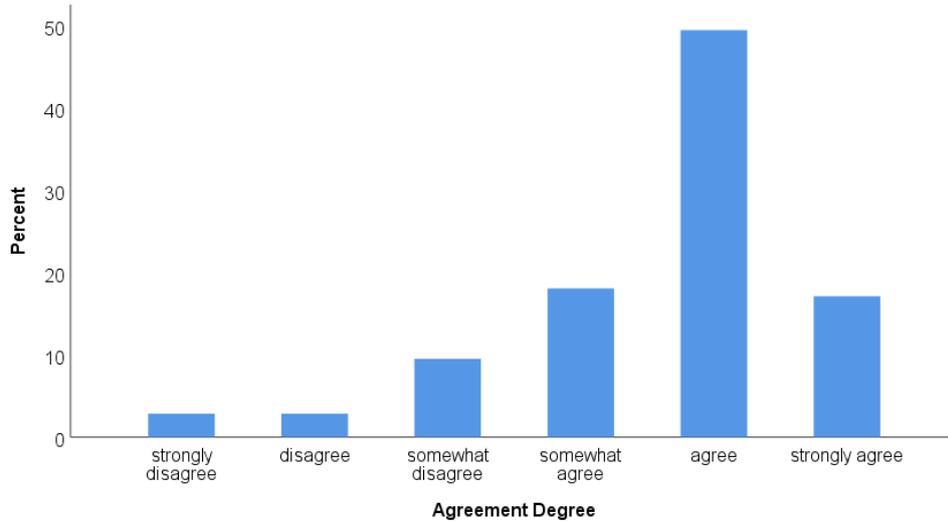


Figure 10: Participants' agreement degree on the description of character about the ability to recognise and manage own traits

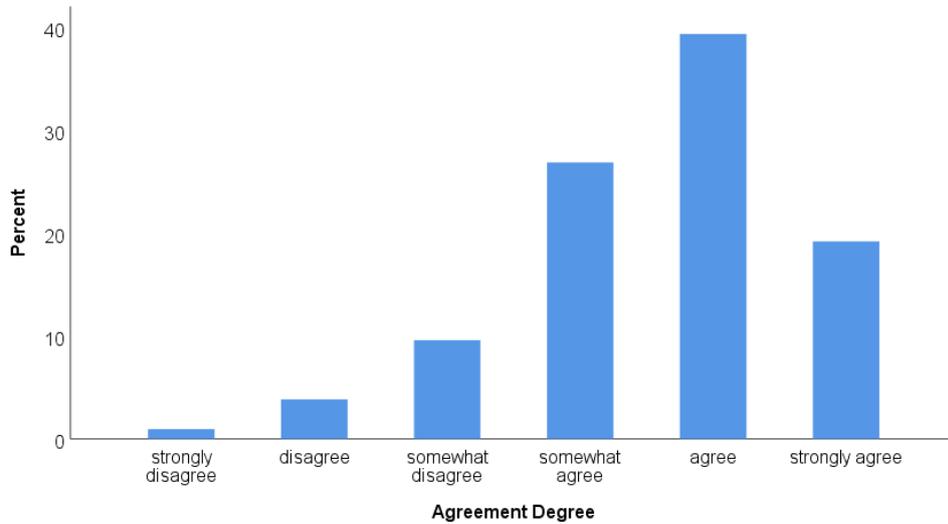


Figure 11: Participants' agreement degree on the development over time aspect of character

To see the distribution symmetry of the responses, a skewness test was implemented. Each of the items was negatively skewed (see Table 9), indicating that participants were more likely to agree to the items. To analyse peakedness or flatness of the distribution of the scores of the responses, a kurtosis test was used. There was positive excess in four of the five measures indicating distribution toward the tails in 4 items and 1 measure where excess kurtosis was negative. In general distribution was abnormal in all cases but markedly so in

only two cases (see items 2-3 in Table 9). Overall, this means that there was abnormal distribution in the items.

Table 9: Descriptive analysis of the items related to character description

Items	M	SD	Skewness	Kurtosis
Part1 (Character description)				
1. Character is innate.	3.62	1.25	-.26	-.58
2. Character is a set of unique traits.	5.03	1.21	-1.90	3.58
3. Character is an ability to recognise and manage own traits.	4.60	1.14	-1.22	1.61
4. Character is reactions towards others and events.	4.26	1.15	-.98	.70
5. Character develops over time.	4.58	1.08	-.75	.52

Spearman’s correlation analysis was then conducted, which is presented in Table 10 below. The analysis showed that ‘innate aspect’ was significantly associated with ‘unique traits’ ($r=.29$, $p<.05$), but as expected, was significantly negatively associated with ‘development over time’ ($r=-.21$, $p<.05$). Similarly, in the qualitative data, although ‘innate’ was more dominant than ‘development over time’ or vice versa according to the participants, they acknowledged the effects of both on character. Secondly, the correlation was significant between ‘unique traits’ and ‘an ability to recognise and manage own traits’ ($r=.41$, $p<.05$). That is, participants who describe character as a set of unique traits also likely agree that character is an ability to recognise and manage own traits. This relationship was an expected result because the qualitative data also showed that the participants who supported each approach also assumed that there is an existing self that is innate in origin.

Similarly, ‘an ability to recognise and manage one’s own traits’ had a significant relationship with both ‘reactions towards others’ ($r=.41$, $p<.05$) and ‘development over time’ ($r=.39$, $p<.05$). Based on the qualitative data, this was an expected association in terms of being able to manage the relationships with others by also considering one’s own self or traits. Lastly, a significant correlation also exists between ‘reactions towards others’ and ‘development over time’ ($r=.41$, $p<.05$). This was also an expected relationship in parallel with the qualitative data, since here, the qualitative data showed that the individual was expected to refresh his/her character to integrate into the environment he/she was in as surroundings and events changed.

Table 10: Correlation coefficients between the items related to the character description

Items	1. ... innate.	2. ... a set of unique traits.	3. ... an ability to recognise and manage own traits.	4. ... reactions towards others and events.	5. ... develops over time.
Character...					
1. ... innate.					
2. ... a set of unique traits.	.29**				
3. ... an ability to recognise and manage own traits.	-.01	.41**			
4. ... reactions towards others and events.	-.08	.25**	.41**		
5. ... develops over time.	-.21*	.27**	.39**	.41**	

For Spearman $r^ < .05$ $r^{**} < .01$*

Following critical realist ontology and epistemology (where there is a ‘real’ world and it is theory-laden, not theory-determined), all explanations of reality, including those obtained by and from research participants, theorists, and scientists, are treated as fallible (Bhaskar, 1979). There is no superiority of either scientific explanations or participants’ views and experiences in the sense of how data can help us find explanations for social phenomena. However, participants’ views and experiences can be positioned as a challenge to existing scientific knowledge and theories (Redman-MacLaren & Mills, 2015) about how events have come to be as they are. From coding, identifying demi-regularities and statistical analysis, data are then conceptualised through relevant theoretical ideas, using abductive reasoning.

7.2.3 Abduction

After identifying the demi-regularities coming from the qualitative data and presenting their descriptive and correlation analyses from the quantitative data, abduction was carried out in order to generate theoretical propositions, particularly by identifying the deep processes related to the phenomenon in their contextual conditions, about the possible causal mechanisms that led teachers to describe character in the ways indicated in the demi-regularities. This process necessitated an investigation into the beliefs about, and the context of character in Turkey; as analysing the beliefs about character is central in understanding how teachers working with gifted pupils describe and operationalize these beliefs in their

teaching practice. For the purpose of this study, the literature that examines the link between character and genetic make-up, related to the first demi-regularity needs to be investigated. According to many teachers who attended the interviews in the SACs, a large part of character is innate. The quantitative data showed that approximately 61% of the participants agreed that there is an innate aspect of character ($M=3.62$, $SD=1.25$), although the degree of agreement on this argument varies.

Teachers who support this demi-regularity have an ontogenetic approach to character development that claims stability and that differences in character development are mainly influenced by genetic factors (Geukes et al., 2018). Although the nature-nurture debate regarding character development has continued, there are studies that exemplify the contribution of genetics. For example, Bouchard and Loehlin (2001) claim that 50% of personality traits are genetic in origin, and the remaining percentage is from non-shared environmental influences that function make individuals within the same family even more different from each other. Hundert (1995) says that any individual organism, human beings included, is a product of a DNA sequence unique in developmental history, and is shaped by both internal (exclusively genetic factors, nature) and external (exclusively environmental factors, nurture) forces. Deary (2012) states that genetic research about intelligence also continues to exemplify the contribution of genetics, even if the genetic contribution rate changes at different ages (Lee et al., 2010). Although the genetic approach is seen as dominant here, it is also clear that the inevitable effect of external factors on character development is acknowledged. This theoretical perspective points to the requirement that character be compatible with the environment in which the individual lives at the meso level alongside the genetic aspect of the individual at the micro level.

Turning to the research context, the concept of character is used interchangeably with temperament in Turkey. In the dictionary of the Turkish Language Association (TDK), the official regulatory body of the Turkish language, temperament is described as “a whole of the creational and spiritual characteristics of the individual” (TDK, 2018). In other words, it is more associated with innate aspects. There are also many adages and idioms related to temperament in Turkish culture and belief, in which the innate disposition of the individual is referred to. For example, the wolf changes its village (or feathers) but does not change its temperament (adage); a leopard cannot change its spots (adage) (TDK, 2018). Turning back to the concept of character, in the same dictionary, character is described as “an individual’s unique structure, the main symptoms that distinguish the person from others and determines

the individual's behaviour patterns, superior main traits, and self-structure" (TDK, 2018). That is, in Turkish culture, the concept of character is used to emphasize the *sui generis* aspect of the individual – which corresponds to demi-regularity 2 (unique traits).

Similarly, when also looking at the educational policy and practices on character education in primary, secondary, and high schools in the Turkish Ministry of National Education, it is seen that character education is reviewed under the headings of: values education; religious culture and moral knowledge; democracy and human rights; thinking education; and law and justice (MEB, 2018f). There is no approach or practice in education that directly targets character since it is assumed to include characteristics that make the individual unique. This understanding, focusing on the unique aspect of the individual, was defined by some teachers in the focus group interviews, as character by associating it with innate dispositions. Similarly, the survey data revealed that 90% of the participants concurred in varying degrees that character is a set of unique traits ($M=5.03$, $SD=1.21$) and that the innate aspect of character was significantly associated with a set of unique traits ($r=.29$, $p<.05$). Hence, in the contextual sense, character exhibits the innate disposition of the individual but is not limited to it. The individual also needs to learn and adapt to the rules of the society in which he/she lives considering that "the individual is a social being, enmeshed in relations with others" (Hodgson, 2007, p. 221). This contributed to the identification of the next demi-regularities.

Another demi-regularity developed from the qualitative data is related to the flexible structure of character that develops and changes over time. According to a number of teachers in each SAC, although genetics has an effect on the character of the individual, environmental factors are more dominant. Quantitative data also showed that approximately 85% of the participants agreed that character develops over time ($M=4.58$, $SD=1.08$) and that its innate aspect was significantly, but negatively, associated with development over time ($r=-.21$, $p<.05$). In other words, they represent opposing views of character (*innate/nature vs time-developing/nurture*), as evidenced by their significant (negative) relationship.

Here, the teachers have a sociogenic approach to character development, which accepts the influence of genetic factors but emphasizes the importance of environmental influences (Geukes et al., 2018). This is in contrast to the ontogenetic approach as in demi-regularities 1 and 2. Change and development of character do not stop, however, the effect of genetics and environmental factors on individual differences in personality development

might change depending on age and time at different stages of life (Krueger et al., 2006). This view focuses on the educable, or teachable, or changeable aspects of character while considering social context and time; as was indicated by some teachers in the focus group interviews. This reminds us of Aristotle's approach to character where he attributes 'character' as deriving from individual 'habits'. Thus, he advocates that an individual's virtue is perfected in him/her by habitual practice (Walker & Lovat, 2017).

From an Aristotelian perspective, character education can be defined as transforming virtues (*intellectual, performance, moral, and civic*) into habits, by approaching a nurturist understanding. Here, intellectual traits (comprising discernment, right action and the pursuit of knowledge, truth, and understanding of the person in an epistemic context, for example, curiosity and reasoning) and performance (enabling the moral, civic, and intellectual virtues, for example, perseverance and self-discipline) (e.g., Davidson, 2004; Roberts & Wood, 2007) illustrate in a sense the ability to recognize and manage one's own traits (demi-regularity 3) In the third demi-regularity, character was described as an ability to recognise and manage one's own traits by many teachers in the focus group interviews. The survey data showed approximately 85% of the participants agreed in varying degree on that idea (M=4.60, SD=1.14).

In addition, the quantitative data revealed that an ability to recognise and manage one's own traits had a significant relationship with a set of unique traits ($r=.41$, $p<.05$), development over time ($r=.39$, $p<.05$), and reactions towards others and events ($r=.41$, $p<.05$). That is, teachers who describe character as an ability to recognise and manage one's own traits were likely to agree as well on character being at least in part, a set of unique traits, having development over time, and as reactions towards others. This relationship highlights that participants acknowledge both the existence of an innate self in the character of an individual and character's position in the individual's relationships with others. Hence, recognising the innate self, at the micro level of the individual, and managing this self in the meso level of the environment/society that he/she lives in, are the main processes of establishing character in an individual.

To better understand the position of character in the individual's relationships with others in both the relevant literature and contextual conditions, there is need to look at the last demi-regularity, 'character is reactions towards others and events.' In the survey data, approximately 81% of the participants agreed on this idea (M=4.26, SD=1.15). In the

qualitative data, although the teachers used different concepts such as ethical values, universal values, morality, and social communication skills, they all described character as mostly as by ‘considering others’. This approach brings to mind the aims of moral philosophy, which seeks an answer to ‘how we should behave and how we should treat other humans with whom we coexist’ (Walker & Lovat, 2017). When we consider that we live in society, we need to be aware of *alterity* (otherness), which implies an awareness of others’ viewpoints by going beyond our ego. Correspondingly, the question “What should I do?” comes before “How should I live?” In other words, moral decision-making and acting are a communal process that requires an intersubjective assessment of what is right or just for all affected (Harper, 2009; Walker & Lovat, 2017). This also refers to the moral (acting well in situations that require an ethical response, for example, kindness and compassion) and civic (engaging with responsible citizenship and contributing to the common good, for example, civility and community awareness) virtues of the Aristotelian perspective (Baehr, 2017).

The quantitative data also revealed that the set of ‘reactions towards others and events’ is significantly associated with the set of ‘unique traits’ ($r=.25$, $p<.05$), ‘an ability to recognise and manage one’s own traits’ ($r=.41$, $p<.05$), and ‘development over time’ ($r=.41$, $p<.05$). That is, teachers who describe character as a ‘set of reactions towards others and events,’ were also likely to agree on character as: ‘a set of unique traits’, ‘development over time,’ and ‘an ability to recognise and manage one’s own traits.’ This association shows that character contains the unique aspect of the individual but has a flexible aspect for relational adaptation.

Turning back to the context of Turkey, the Head Council of Education and Morality (TTKB, 2017), within the Turkish Ministry of National Education, has determined 10 key values within the values education to be taught to all students: (1) justice, (2) friendship (including altruism, trust, understanding, solidarity), (3) honesty, (4) self-control, (5) patient, (6) respect, (7) love, (8) responsibility, (9) patriotism (including hardworking, collaboration, compliance with rules and laws, being sensitive to historical and natural heritage, and the caring society), and (10) helpfulness (including generosity, cooperation, mercifulness, hospitality, and sharing). As seen, most of these values are others-oriented or regarding, rather than being self-oriented or regarding. In addition, there are some compulsory and optional courses that correspond to a kind of character education in Turkey at all educational levels that include values as a subject. For example, religious culture and moral knowledge (see table 4).

The concept of morality is used interchangeably with the concept of character in the educational context in Turkey. Moral knowledge is included in religious culture, that is, a connection is established between morality and religion. This was therefore considered as the effect of religious/belief paradigms on the character descriptions of the teachers; since in addition to religious culture and moral knowledge, there are the course of human rights, civilization, and democracy (optional), law and justice (optional), thinking education (optional), and democracy and human rights (optional) (MEB, 2018-2019), which correspond in some way to character education. As has been seen, these practices are also mostly related to behaviour patterns and rules that people need to obey in a society. Locating these contextual policies and practices related to character education, explains that to be a person of character, not only makes individual sense but also societal sense. Character therefore functions to enable the innate aspect of the individual to live in balance with his/her socio-cultural environmental.

Through abductive reasoning, theoretical redescription has brought to light how, in this study; the views of the teachers about the concept of character are constructed in the nexus of cultural beliefs, contextual contingencies and relationships. Therefore, they are central in understanding the importance of beliefs on their concept of character. Better understanding of these beliefs and contingencies in the context of broader empirical and theoretical literature can therefore allow for new descriptions of the relevant phenomena, which is made possible through the final analytic phase, retroduction.

7.2.4 Retroduction

The retroduction stage was carried out to find and posit the mechanisms that could lead to the demi-regularities in the teachers' views on character and the contextual conditions and relationships that enabled them to be realised (Blom & Moren, 2011). This stage started with the analysis of entities in terms of their constitutive structures, powers, and liabilities. Causal mechanisms exist and are activated through the powers and liabilities of entities. Entities are "things which 'make a difference' in their own right, rather than as mere sums of their parts" (Fleetwood, 2005, p. 199). Within this theme, eight entities were identified from the empirical data and its contextual conditions: culture, belief, educational policy and practices, society, interactions, life events, environment, and individual habits, behaviour patterns and reactions. These entities can all be said to have constitutive structures, powers, and liabilities in and of themselves, at the micro, meso, and/or macro level. There are also interactional

relations between these entities; a change in one may lead to changes in the others (Easton, 2010). The underlying causal explanation which links the demi-regularities, entities, and causal mechanisms is illustrated in Figure 12 below.

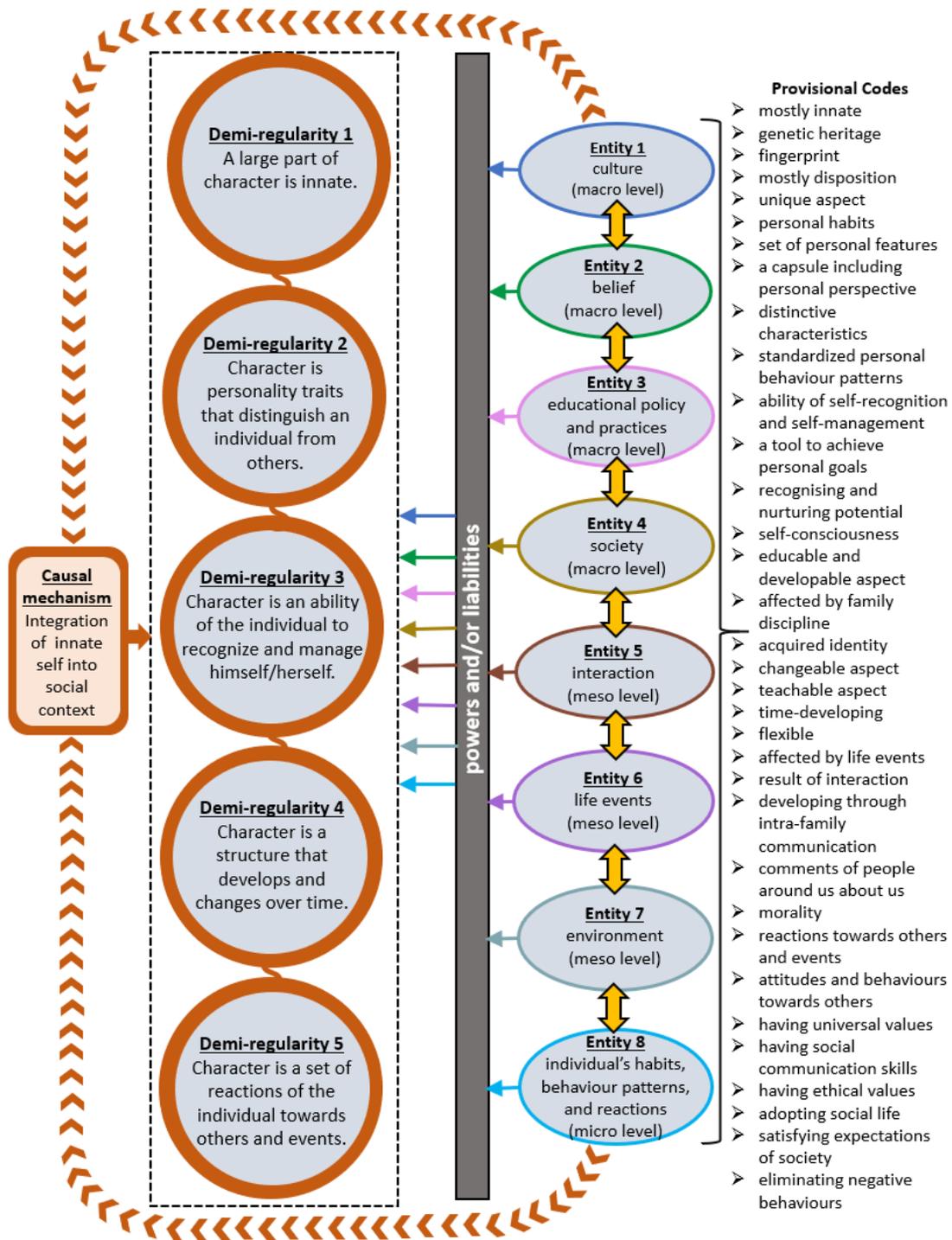


Figure 12: Retroduced causal explanation for character descriptions

Integration of innate self into social context appears to be the causal mechanism that I can derive from the empirical data. In the first three demi-regularities, the individual's innate self is the focus in the different forms. In other words, its existence was predominantly acknowledged, although often indirectly, by the teachers that character has an open aspect for development and change. In the fourth demi-regularity, the possible changes that can be actualized in character over time are in view; for example, educable, changeable, teachable, interacting, life-events are among the codes for this demi-regularity. Here character is seen as an open system by focusing on the malleable side of the self. The individual needs to renew himself/herself depending on interactions, relationships, and events experienced over time; the renewable part in the individual is character. In other words, character is seen as a capability to live in a society as based on the innate self but requiring more than that.

In the last demi-regularity, character is defined directly as the capability to integrate into social life. For example, attitudes and behaviours towards others, social communication skills, adopting social life, satisfying expectations of society, eliminating negative behaviours, morality, having universal and ethical values, and the comments of people around us about us, are among the codes. In other words, a bridge is established between the innate self of the individual and social context in which the individual lives. The quantitative data also revealed that there is a significant – but negative – relationship between the innate self and development over time. This ability to recognise and manage one's own traits, which clearly indicates the relationship between the innate self and the social context, is the most statistically associated with other character descriptions: unique aspect, reactions towards others, and development over time. To sum up briefly the qualitative and quantitative relationships between the demi-regularities, in all five demi-regularities, there is an understanding that the innate self and the social context are in some way both necessary and necessarily affecting of each other and are both linked to character. The innate self and social context are both in the foreground and in the background of these demi-regularities and are essential components of any causal mechanism I may posit to explain them (the demi-regularities).

In Turkish culture and belief (both entities at the macro level), the concept of character corresponds to the 'unique aspect' based on innate qualities of the individual. This is well illustrated Turkish adages, idioms, and in the definition of character in the dictionary of the TDK. This understanding in Turkish culture and belief reflects on educational policy and practices, which is another entity at the macro level. Current education policy and

practices use the concepts of values, morality, and citizenship in the educational context, rather than character. For example, values education, moral education, and citizenship education. Here, we see that culture and belief have the *power* to shape educational policy and practices, and this power transforms into a *liability* for said educational policy and practices. Furthermore, this shaping of policy and practice creates a perception that the probability that character can be educated, taught, and/or changed is low. In a Foucauldian sense, this perception is the *power* of the educational policy and practices, in forming what it is possible to think and to say about character. The *liability* here is that it puts constraints that oppose the very purpose of character education; to mold it for the benefit of society.

The targeted values in the framework of values education moral education, and citizenship education within the educational policy in Turkey are mostly others-oriented or regarding, rather than self-oriented or regarding. This brings to the fore the society in which the individual lives, which is another entity at the macro level. Society has the *power* to shape the individual's habits, behaviours, and reactions, which are an entity at the micro-level. Interaction with society and experiencing life events in the social context, which are entities at the meso level, have the *power* to shape the individual's reactions. In other words, it becomes a *liability* for the individual, who then needs to integrate the dynamic social context in which he/she lives. This nested process also shows that there is a necessary relation between the entities. The causal mechanism that leads the teachers to describe character in terms of the demi-regularities seen in this study, comes from the need to provide a balance between the innate self of the individual and the social context in which the individual lives.

Whilst teachers do of course have different views at the empirical layer, they largely have the same purpose at the real layer, which is the need to integrate innate self into social context. In this way, by considering contextual conditions and relationships, critical realism allows us to understand how the causal mechanisms lead to the teachers' views about character (five demi-regularities). This method, by providing knowledge about the mechanisms that lead to teachers' views about the phenomenon offers an in-depth understanding which can promote more effective suggestions or solutions for policy and practice. The implications of this causal mechanism for policy and practice are explained in more detail in the concluding chapter.

7.3 Research Question 2

How do teachers think about the character development of gifted pupils?

7.3.1 Qualitative part: Identification of demi-regularities

Data collected were coded, which lead to the demi-regularities (or patterns) as conceptualised in a critical realist approach. First, all the data were coded thematically using a data-driven inductive approach (Boyatzis, 1998; Braun & Clarke, 2006) and 24 provisional codes (see Table 11 below), which explain how teachers think about the character development of gifted pupils, were generated. Important for this stage of initial coding, identified in the literature review, was consideration of teacher beliefs and experiences, the realities as defined by the participants, and the cultural effects of discourses about the character development of gifted pupils (Braun & Clarke, 2006).

These 24 codes were gradually reduced during the second coding cycle, as they were re-organized and combined into the framework of a macro, meso, and micro conceptual map, informed by critical realism (Blom & Moren, 2011). These critical realism-informed categories were: (1) gifted education policy-oriented at the macro level, including the categories of *neglect from relying upon superior cognitive development*; (2) family and immediate environment-oriented at the meso level, including the categories of *positive discrimination and expectations from the family and immediate environment towards the child after identification*; and (3) gifted child-oriented at the micro level, including the categories of *effect of positive discrimination and expectations on the child's sense of self*, which were illustrated in Table 11 below.

Table 11: Critical realism-informed codes and categories about the character development of gifted pupils

Theme	Conceptual map levels	Categories	Provisional codes
Character development of gifted pupils	Macro-level (gifted education policy-oriented)	Neglect relying upon superior cognitive development	Expected mature behaviour due to cognitive development, Limited time for character education, Focusing on scientific and artistic activities, Focusing on academic development, Competitive system, Structure of the SACs, Neglect based on high potential, A belief/expectation that potential reflects on character
	Meso-level (family and immediate environment-oriented)	Positive discrimination and expectations from the family and immediate environment towards the child after the identification	Depending on the mission loaded by the family on to the child, Tolerance by the family of the child's every aspect, Depending on the guidance of the family, Psychological or emotional pressure from the family, Depending on satisfying the high expectations of the family and environment, Depending on privilege created by the family and immediate environment, Depending on the education level of the family, Depending on the emotional intervention of parents, Depending on the relationship with the family, Depending on parents' attitudes, behaviours, and reactions, Depending on what the family appreciates
	Micro-level (gifted child-oriented)	Effect of positive discrimination and expectations on the child's sense of self	Trusting the gifted label, Success-oriented, Trusting solely one's own intelligence, A privileged position in school that relies upon identification as gifted, Having a big ego

As seen, the macro level encompassed more political level effects, the meso level relational aspects, and the micro level focused on the perception of the child towards the self. While coding the data, all codes were considered important, and codes were categorised by semantic relation and the categories were labelled with the most dominant codes. Then, the most dominant codes were used as a starting point to identify 'demi-regularities' at the empirical level of reality (O'Mahoney & Vincent, 2009). That is, the most dominant codes were described as partial events (Lawson, 1997). The demi-regularities, or patterns, in the empirical data can be understood as partial regularities indicating the actualization of a mechanism in a specific context (Lawson, 1997). In this context, actualization is generally only partially evidenced and in potentially many different ways, and so full regularity in

terms of their actualization is meaningless here; it will practically always be a partial actualization that is in evidence. The top level coding led to the generation of three demi-regularities: (1) the character development of gifted pupils is neglected by assuming that character development is parallel to cognitive development; (2) the character of gifted pupils develops based on positive discrimination and expectations made by the family and immediate environment in which they grow up after their identification; and (3) the positive discrimination and expectations of the family and immediate environment prompt the child to behave according to the socio-cultural profile drawn for the gifted child. These are presented in Figure 13 below.

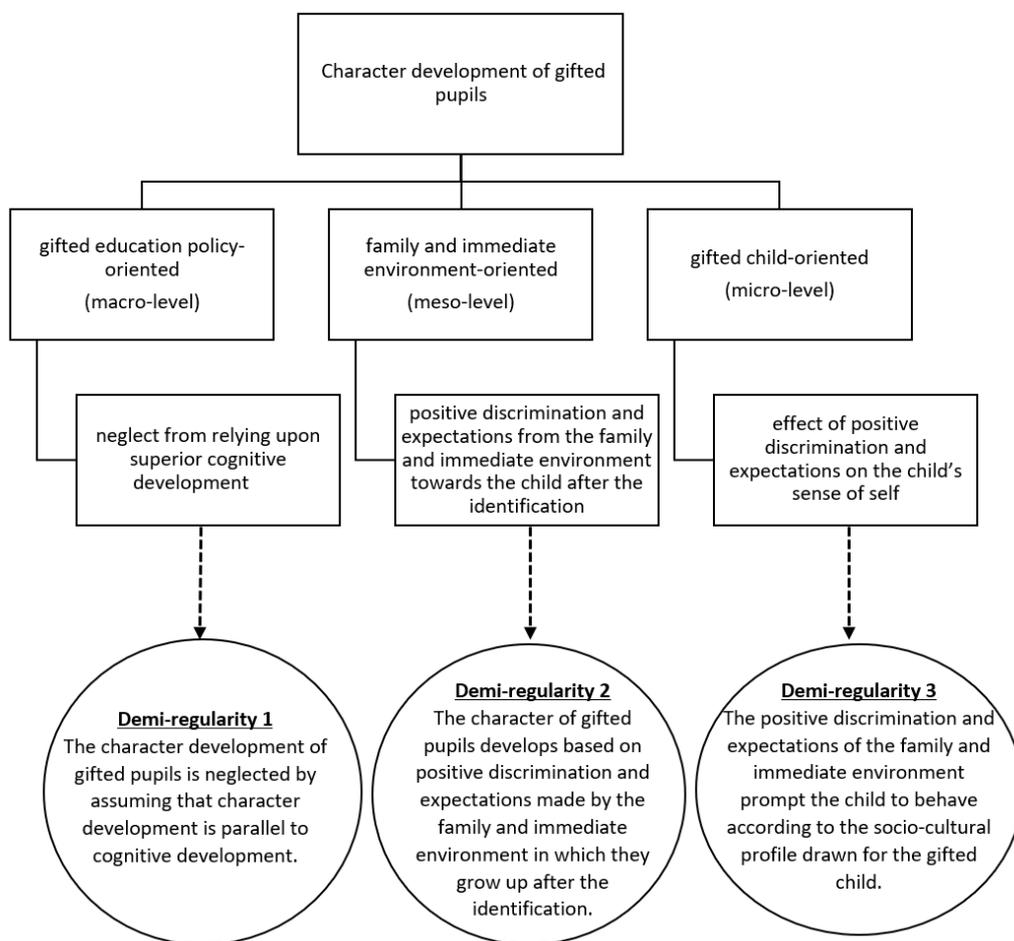


Figure 13: Thematic map of the demi-regularities about the character development of gifted pupils

In the first demi-regularity, the character development of gifted pupils is neglected due to mostly the intensity of academic work. Hence, this creates a perception/assumption that the character development of gifted children is parallel to their superior cognitive

development. In eight of the SACs (SAC 1, 2, 3, 5, 6, 7, 9, and 10), most of the teachers agreed about this.

In fact, here, children are not honoured and motivated for their behaviours by their families. Families approach with the understanding that this mature behaviour is already an expected thing from a smart child. Hence, there is no meaning of a behaviour illustrated in the framework of values in terms of specially talented children. There is only an appreciation for their academic successes. (SAC 1)

Here, there is no practice related to the values education and it is also not possible due to time limitations. (SAC 1)

Our time is limited here, so practices in values education are left to the initiative of the teacher. (SAC 2)

Our children are very busy with scientific and artistic activities; they have no time for anything. This also prevents from providing character education. (SAC 3)

This is also related to the structure of the SACs, a student comes to us for 4 hours in a week or 6 hours in a week. When we spend time with him/her, we focus on the content of the lesson. We need to mostly focus here on their academic development, we cannot create time for character education, but of course, there should be time since it is very important. (SAC 5)

I can say that gifted children are sensitive in terms character development. It is obvious that they really need well rounded personal development, but this is missing due to time limitation. (SAC 6)

There is a competitive system, so specially talented children are constantly competing with students who studied in the other SACs. Therefore, their character development is neglected by considering (too much focus on) their high potential. (SAC 7)

We want to believe that the high potential of these children will positively reflect on their character development. We have become accustomed to this expectation, or we were previously accustomed to it. (SAC 10)

The second demi regularity is “the character of gifted pupils develops based on positive discrimination and expectations made by the family and immediate environment in which they grow up after the identification”. Here, the teachers first drew attention to reflections of the giftedness understanding of the family – or the manifestation of giftedness in the mind of the family – and then the immediate environment in the character development of gifted pupils. In the context of this argument, some teachers in seven SACs (SAC 1, 2, 4, 5, 6, 8, and 10) were in agreement about this.

Families are loading a mission onto these children. However, the child cannot carry this mission of the family and the child begins to suffer. The character development of these children is neglected because of being ascribed too great a significance priority to their cognitive development by their families. (SAC 1)

The most important factor that negatively affects these children is the family. After the child is identified as specially talented, everything about the child is tolerated by families. (SAC 1)

The specially talented children come here without realizing their own abilities, but families qualify their children as 'you are gifted or talented'. In a simple case, these children say 'if you are gifted you will know' to each other. This type of issues disturbs the character development of specially talented children. (SAC 1)

The families constantly impose 'you are the best, you know the best, you are a student of the SAC' on their children. This naturally creates a psychological or emotional pressure on the child. (SAC 2)

High expectations of the families and environment from their specially talented children create a feeling of insufficiency in these children. Here, children are busy with satisfying these expectations of families. (SAC 4)

When a child is identified as specially talented, the first discrimination towards him/her starts in the family. The family discriminates this child from his/her siblings. That is, the family takes more care of this child and the family makes even their immediate environment feel that this child is specially talented. Hence, this child gains a privileged position in the family and environment. This situation, that is, the inadequacy of the family, immediate environment, and school system creates a caprice and behaviour disorder in the specially talented child. An atmosphere manifests in which the child can say everything he/she wants, can exhibit any behaviour he/she wants, and get what he/she wants. The child thinks that he/she is right every time. (SAC 5)

There are specially talented children who have come from an educated family and lived in an elite environment, but also there are specially talented children who have come from a less educated family and a low socio-economic environment. We can observe that educated families are more conscious about the character development of specially talented children. (SAC 5)

Parents want to manage their specially talented children's feelings, especially in primary school pupils. These children are exposed to the emotional intervention of parents. (SAC 6)

The relationship between the family and the specially talented child, the attitudes, behaviours, and reactions of the family towards their specially talented child shape the character development of the child. (SAC 8)

First of all, the child wants to be appreciated by his/her parents and trying to act depending on their appreciation. Therefore, their character development forms depending on what the family appreciates. (SAC 10)

The third demi-regularity is "the positive discrimination and expectations of the family and immediate environment prompt the child to behave according to the socio-cultural profile drawn for the gifted child". In this demi-regularity, at the micro-level, the teachers focused on the reciprocity of the effects of being identified as gifted on the child's sense of self. The teachers think that positive discrimination, which is gained from the

identification/labelling, in the perceptions of gifted pupils forms their sense of self and this reflects on their attitudes and behaviours. In eight SACs (SAC 1, 2, 3, 5, 7, 8, 9, and 10), some teachers agreed about this.

Children here think 'I can say what I want because I am specially talented'. Unfortunately, there is this kind of situation. (SAC 1)

They are over motivated towards success. Success means much more than a source of motivation for them. Their lives are built on success. I don't want to generalise, but most of them have. This generally affects them badly. (SAC 1)

In such a competitive environment, children focus on achievement even in games rather than enjoyment and there are definitely tears in every lesson. Children begin to think like 'I must always be at the top, I must be the most popular.' At this point, they can ignore their friends, this reflects on their social relations as well. (SAC 2)

Some thoughts negatively affect them, such as 'I am specially talented, that's enough for me.' They assume that they can get something even if they don't work, so they don't care, this leads to a lack of character. (SAC 3)

Children think that only he/she is the most successful, they trust solely own intelligence, and they don't want to collaborate with their friends. (SAC 5)

These children have a privileged position in their schools because they come here by success in the tests. This makes them feel different from their peers, such as smarter. (SAC 7)

These children have a big ego arising from being identified as specially talented. When we say 'no' them, it is as if the child bumps against a wall. They have these thoughts 'I am clever, I can do anything what I want, I can be spoilt as much as I want.' (SAC 8)

Being identified as specially talented makes them spoiled. For example, when they fail, they want to change their teacher or school, rather than accepting the failure and trying it again. (SAC 8)

To be honest, I couldn't see a difference between specially talented children and other children in terms of character development. However, specially talented children are more affected by success and failure. (SAC 9)

They want to be the first in every competition. They want to be the leader in every group. They do not have a good collaboration, so this impacts us as teachers. (SAC 10)

This phase of data processing showed the generation of the empirical demi-regularities developed from the qualitative data related to how teachers who work with gifted pupils think about the character development of gifted pupils.

7.3.2 Quantitative part: Statistical analysis related to the demi-regularities

To complement the findings from the qualitative interviews, although the focus was very much on the qualitative experiences and opinions of teachers, the survey data was used descriptively to assess the extent teachers, who work in other SACs and did not attend the focus group interviews, agree with these demi-regularities (*descriptive analysis*) and to investigate the relationships between the demi-regularities (*correlation analysis*) without making causal attributions (Ron, 2002).

Descriptive statistics (see Figure 14, 15, 16 and Table 12 below) revealed that 28% of the participants answered somewhat agree, 38% of the participants answered agree, and 14% of the participants answered strongly agree that the education programs focused mostly on academic development and neglects the character development of gifted pupils ($M=4.39$, $SD=1.11$). Hence, approximately 80% of the participants have an assumption – despite different agreement degrees – that the intense focus on academic skills in education programs causes the character development of gifted pupils to be neglected. Secondly, 36% of the participants chose somewhat agree, 24% of the participants chose agree, and 19% of the participants chose strongly agree; that after a child is identified as gifted, the positive discrimination of the family and the environment towards the child is a factor that negatively affects the character development of the gifted child ($M=4.36$, $SD=1.13$). This means that approximately 79% of the participants assume – although the degree of agreement varies – that the diagnosis as gifted causes a positive discrimination of family and immediate environment towards the child and this negatively affects the character development of the child.

Lastly, 32% of the participants chose somewhat agree, 34% of the participants chose agree, and 18% of the participants chose strongly agree that the positive discrimination of the family and environment towards the gifted child creates a big ego in the child and this negatively affects the character development of the child ($M=4.52$, $SD=1.02$). Hence, approximately 84% of the participants have an assumption in varying degree that the big ego created by positive discrimination negatively affects the character development of gifted pupils. In summary, each item was agreed on by more than half of the participants although the degree of agreement varied. However, the most agreed item by the most participants was that positive discrimination of the family and environment towards the gifted child creates a big ego in the child and this negatively affects his/her character development. Items 6 and 7

are both among the demi-regularities of research question 4; in the section on challenges in actualizing character education of gifted pupils. These two items therefore were also included in the analysis of research question 4.

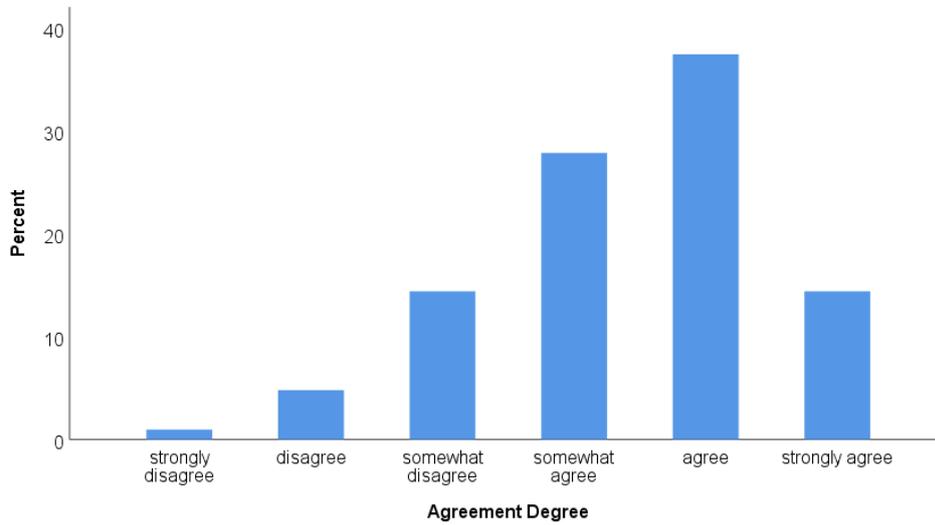


Figure 14: *Participants' agreement degree on the negative effect of education programs oriented mostly academic development*

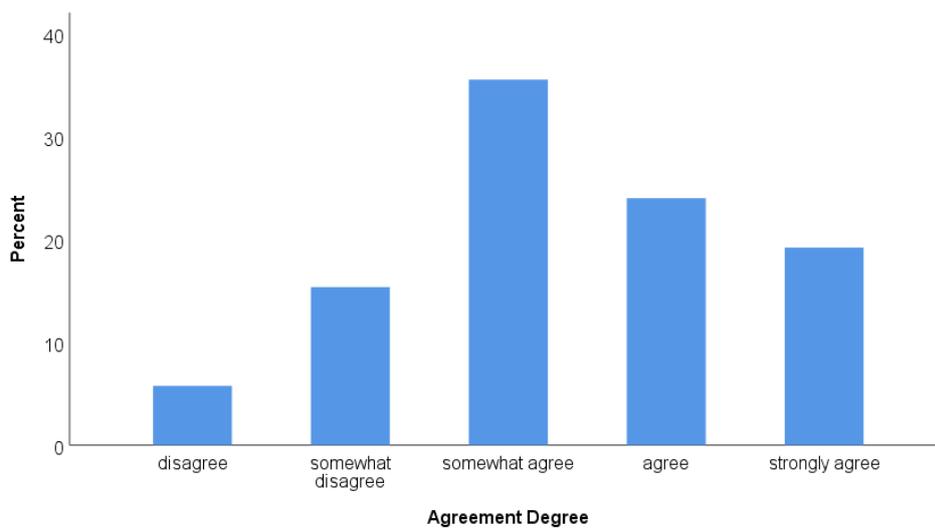


Figure 15: *Participants' agreement degree on the negative effect of the positive discrimination of the family and the environment*

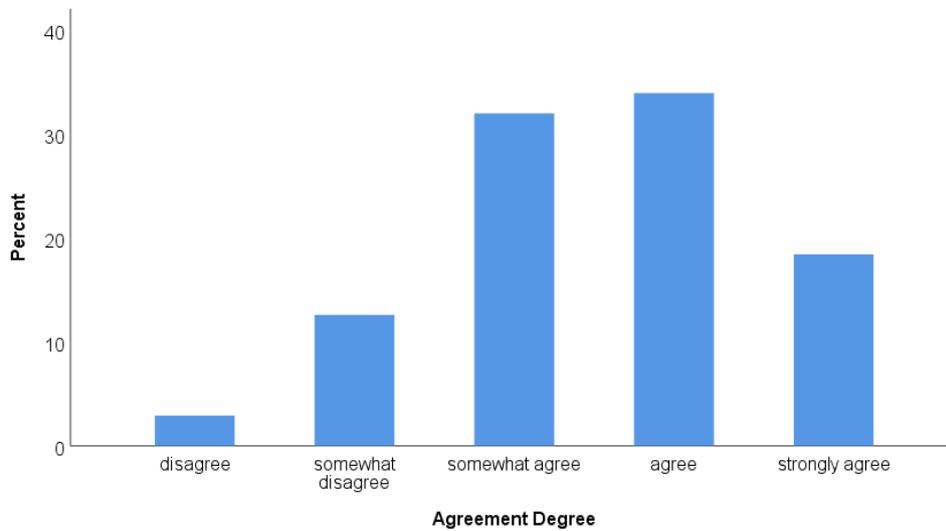


Figure 16: Participants' agreement degree about the effect of the positive discrimination on creating big ego

To analyse the symmetry of the responses, their skewness was measured. Each of the items was negatively skewed (see Table 12 below), indicating that participants were more likely to agree to the items. Kurtosis measures showed distribution close to normal with all measures of excess kurtosis close to 0, the measure of normal bell curve appearance (see Table 12 below).

Table 12: Descriptive analysis of the items related to the character development of gifted pupils

Items	M	SD	Skewness	Kurtosis
Part 2 (Character development of gifted pupils)				
6. The education programs, focusing mostly on academic development, neglect the character development of gifted pupils.	4.39	1.11	-.57	.28
7. After a child is identified as gifted, the positive discrimination of the family and the environment towards the child is a factor that negatively affects the character development of the gifted child.	4.36	1.13	-.16	-.64
8. The positive discrimination of the family and environment towards the gifted child creates a big ego in the child and this negatively affects the character development of the child.	4.52	1.02	-.31	-.41

Correlation analysis was then conducted, which is presented in Table 13 below. The analysis showed that there was a significant correlation between the positive discrimination of the family and the environment towards the child after the child is identified as gifted and

a big ego created by this positive discrimination in the child ($r=.81, p<.05$). That is, participants who agree that the positive discrimination created by the family and environment through the identification has a negative effect on the gifted child's character development are likely to agree that this positive discrimination causes a big ego in the child that negatively affects his/her character development. This was an expected association when looking at the qualitative data. The qualitative data showed that: identifying a child as gifted causes positive discrimination of families towards the child, the positive discrimination causes a big ego in the child, and the big ego causes a negative effect on the child's character development.

The 'neglect of the character development of gifted pupils by mostly academic development-oriented education programs' had a significant relationship with both 'positive discrimination' ($r=.55, p<.05$) and 'big ego created by positive discrimination' ($r=.57, p<.05$). This means that participants who agree that the neglect of the gifted pupils' character development caused by the intensity of the academic program usually also agree that 'positive discrimination' and the 'big ego created by positive discrimination' negatively affect the character development of gifted pupils.

Table 13: Correlation coefficients between the items related to the character development of gifted pupils

Items	6. The education programs focused mostly on academic development neglects...	7. After a child is identified as gifted, the positive discrimination of the family and the environment towards the child is a factor that negatively affects...	8. The positive discrimination of the family and environment towards the gifted child creates a big ego in the child and this negatively affects...
6. The education programs focused mostly on academic development neglects...			
7. After a child is identified as gifted, the positive discrimination of the family and the environment towards the child is a factor that negatively affects...	.55**		
8. The positive discrimination of the family and environment towards the gifted child creates a big ego in the child and this negatively affects...	.57**	.81*	

*For Spearman $r^{**} <.01$*

Following critical realist ontology and epistemology (where there is a ‘real’ world and it is theory-laden, not theory-determined), all explanations of reality, including those obtained by and from research participants, theorists, and scientists, are treated as fallible (Bhaskar, 1979). There is no superiority of either scientific explanations or participants’ views and experiences in the sense of how data can help us find explanations for social phenomena. However, participants’ views and experiences may be positioned as a challenge to existing scientific knowledge and theories (Redman-MacLaren & Mills, 2015) in terms of understanding how events have come to be as they are. From coding, identifying demi-regularities and statistical analysis, data are then conceptualised through relevant theoretical ideas, using abductive reasoning.

7.3.3 Abduction

After identifying the demi-regularities coming from the qualitative data and presenting descriptive and correlation analyses of them from the quantitative data, this stage – abduction – was carried out in order to generate theoretical propositions about possible causal mechanisms that lead teachers to think about the character development of gifted pupils in ways indicated in the demi-regularities. This is done by identifying the deep processes related to the phenomenon in its contextual conditions. This process therefore necessitates an investigation into the beliefs about, and the context of, the character development of gifted pupils in Turkey to understand how teachers working with gifted pupils think about that and operationalize these beliefs in their educating and teaching practice. Therefore, this study began by examining the current gifted education policy and practices in the Turkish research context related to demi-regularity 1.

According to many teachers in the SACs, the character development of gifted pupils is neglected by assuming that character development is parallel to cognitive development. Similarly, quantitative data showed that approximately 80% of the participants have a varying assumption that the intense focus on academic skills in education programs causes character development to be neglected in gifted pupils ($M=4.39$, $SD=1.11$). Furthermore, this neglect of character development had a significant relationship with both ‘positive discrimination’ ($r=.55$, $p<.05$) and the ‘big ego’ created by the positive discrimination ($r=.57$, $p<.05$). Turning to current relevant policy and practice in gifted education in Turkey, the identification of gifted individuals is done through group screening and individual intelligence tests (MEB, 2019a). The individuals identified as gifted can benefit from

privileged educational opportunities (e.g., special schools, special classes, and after-school programs). As explained previously, in the SACs, there is no specific planned program (e.g., syllabus, time and resources) for the character education of gifted pupils. There was consensus on the importance and necessity of character education for gifted pupils amongst most teachers in the SACs. However, many teachers noted that there had been no time for character education. Therefore, both gifted pupils and their families are in an education program focusing mostly on the development of cognitive and artistic abilities.

In addition, in the 2019 meeting report of the Ministry on gifted education, the action plans for the education of gifted pupils were mostly related to identifying and developing talents (MEB, 2019). There is no tangible action plan for the social and emotional development of gifted pupils. Yet, as I have seen in the focus group interviews, one of the teachers highlighted that they wanted to believe that high potential would positively affect character development, they were either predisposed or had become accustomed this expectation. Similarly, from a family perspective, these practices may be perceived as a kind of exemption in character education for the gifted child or an assumption that the character development is supplied or enhanced directly by cognitive development. Hence, the responsibility of character development is left to the superior cognitive development of the child, manifesting as a side effect.

The relevant literature acknowledges on one hand that gifted children have a privileged position in moral development and moral reasoning because of their precocious intellectual development (e.g., Andreani & Pagnin, 1993; Berkowitz & Hoppe, 2009; Folsom, 1998; Howard-Hamilton, 1994; Karnes & Brown, 1981; Silverman, 1994; Terman, 1925; Tirri & Nokelainen, 2007); on the other hand, it rejects the linear relationship between mature character development and superior cognitive development. For example, Sternberg (2009b) says that, thinking that a gifted person can do anything in the most right way due to his/her intelligence, is an unrealistic optimism that can lead to egocentrism in gifted children. Similarly, Brooks (1985), Gath and colleagues (1971) state that there is no clear relationship between intelligence and morality. Although there is no consensus on the relationship between intellectual and moral development in the literature, the consideration of the specific socio-cultural contexts of educational policy and practices may be effective in making inferences on how families impact on this issue. This also requires focusing on parenting beliefs and roles towards the gifted child, which is related to the demi-regularity 2.

According to some teachers who attended the interviews in the SACs, after a child is identified as gifted, positive discrimination and high expectations from the family and environment towards the child begin. The character development of the child is shaped by them, and this, for the most part, negatively affects the character development of the gifted child. There was even a clear consensus amongst the teachers for the necessity of a family training program related to gifted education. This is also suggested in the relevant literature (Colangelo & Davis, 2003; Fornia & Frame, 2001; Rotigel, 2003; Silverman & Golon, 2008; Silverman, 2013). Similarly, the quantitative data showed that approximately 79% of the participants concur in varying degrees, that the diagnosis as being gifted causes a positive discrimination by family and environment towards the child and this negatively affects their character development. The positive discrimination here refers to the framing of ‘othering’ as a strategy employed by the family and the environment to preserve or sustain the high potential of the identified child. This occurs in various forms in the coded qualitative data.

The relevant literature shows that parents are a significant social influence, providing guidance, socialization, and settings that foster positive development and character; particularly through childhood and adolescence (Lerner et al., 2012; Parke & Buriel, 2006). Similarly, parent-child interaction is one of the most effective factors in the character development of gifted children (Coon, 2004; May, 1994). Parent and child behaviours mutually affect each other, but parent behaviours are also affected by parental beliefs (Sameroff & Fiese, 2000). When a family has a gifted child, parental roles change to deal with giftedness and parenting responsibility (Schader, 2008; Shore et al., 1991). Giftedness is seen as a stressor in the family that affects both the family and the gifted child (May, 1994). The parenting of the gifted child is affected by the perceptions of giftedness that parents have that are often based on culturally, socially, economically, and educationally determined attitudes and expectations (Solow, 2001).

Biases and beliefs of parents related to the gifted label (such as gifted children are successful in all areas, gifted children’s intellectual development is in line with their emotional development etc.) influence their parenting practices (Shore et al., 1991). Ogurlu and Kahraman (2018) conducted a study about irrational beliefs of parents of gifted in Turkey. In this context, ‘irrational’ refers to illogical, rigid, and unscientific notions about the phenomenon of giftedness. The study compares the parenting styles of parents who had training in gifted education (n=35) and parents who were untrained (n=64) towards their gifted children. They used the Parent Irrational Beliefs Scale (Kaya & Hamamci, 2011)

including an expectation sub-scale related to irrational parental expectations of their children (e.g., parental view regarding parents' tolerance for their child's disagreement with them on a subject, parental view that the child must always behave as expected by their parents etc.) and a perfectionism sub-scale related to parents' views about perfectionist parenting (e.g., parental view that if they bring up their child as perfect they are a good parent, parental view that they aim that their children be perfect in every subject etc.). The results show that parents who were not trained about giftedness scored higher on parents' irrational beliefs than trained parents. That is, the parents' lack of information about giftedness causes confusion about their parenting roles and cause them to have or maintain some irrational thoughts and expectations of their children. Parents' explanations of the challenges with their gifted children were related to irrational beliefs. In addition, the education level of parents had a significant negative impact on parents' irrational beliefs.

In the interviews, the teachers agree that educated families are more conscious about the character development of gifted children. Hence, from a teacher's perspective, the positive discrimination of the family towards the gifted child could be read as a lack of knowledge about giftedness, but understood from the perspective of the family, it can be seen as a strategy to preserve/sustain and develop the high potential of the gifted child. As seen, the role of family at the meso level in the character development of gifted pupils is also acknowledged by the relevant literature. In addition to family, the effect of immediate environment on the character development of gifted child is also emphasized by the participants. This makes it mandatory to look closely at the socio-cultural context of family and environment in a socially critical study.

There are a very strong emotional bonds and social contacts between family members in Turkey (Duben, 1982; Imamoglu & Karakitapoglu-Aygun, 1999). Hence, the Turkish family is characterized as 'functionally extended' (Abadan-Unat, 1986; Kagıtcıbası, 1982; Kandiyoti, 1974). Individuals grow up in a 'culture of relatedness' (Kagıtcıbası, 1985) including interactions with a broad network of relatives: grandparents, uncles, aunts, and cousins (Bastug, 2002). There are extremely close ties between parents and children, between siblings, and between the children of siblings (Ataca, 2009). This close relationship shows that not only the parents but also the relatives, who play a large part of the immediate environment, play a role in the character development of the child. Furthermore, this relationship establishes an environment in which the giftedness perspective of the family of a gifted child will likely be shaped as well by the giftedness perspectives of surrounding

relatives. This constitutes an aspect of why the giftedness perspective of the family – or the manifestation of the gifted label in the family – and the immediate environment of the gifted child has been so impactful on his/her character development. In order to investigate further the cultural context of identification; the positive discrimination and expectation process that starts after identifying a child as gifted, we can turn to relevant literature on labelling for further insight.

The relevant literature says that labelling has both positive and negative aspects for gifted children. For example, positive aspects are; the privileges of learning, special experiences, more opportunities offered, having a different curriculum, a non-boring classroom environment, and better teachers, while negative aspects are; internal pressure, family pressure, teachers' prejudices and high expectations of people, for gifted children (Berlin, 2009; Feldhusen & Dai, 1997; Moulton et al., 1998). Becker (1963), who was one of the first to put forward labelling theory, states that labelling creates serious changes in both the behaviour of the society and the environment against the child and in the child's behaviour as well. Robinson (1989) says that the expectations of parents and environment affect emotional states of gifted children negatively. As stated by many teachers in the SACs, the labelling leads to positive discrimination from the family and environment towards the gifted child; an external ramification that takes different forms.

There is also an internal ramification at the micro level of labelling, that is, how a gifted child perceives labelling and how it affects his/her character development. This reminds us of demi-regularity 3, where, according to many teachers in the SACs, positive discrimination and expectations of the family and immediate environment prompt the child to behave according to the socio-cultural profile drawn for him/her. That is, the gifted child thinks, feels, and behaves that he/she is different, or as is expected from him/her from others, due to this discrimination. Quantitative data analysis showed that approximately 84% of the participants assume that positive discrimination of the family and environment towards the gifted child creates a big ego in the child and that this negatively affects his/her character development ($M=4.52$, $SD=1.02$). There was a significant relationship between positive discrimination towards the child and a big ego ($r=.81$, $p<.05$). Both were thought to have a negative impact on the character development of the gifted child. Expressing more detail about the internal impact of labelling on the gifted child, Matthews and Foster (2009) state that:

the gifted label can cause children to question not only what lies ahead, but also their identity and abilities, asking, for example, ‘Am I really different than other kids?’ and ‘Do I want to be different?’ It can trigger introspection, self-questioning, and even worries that someone has made a mistake about their abilities (p. 240).

Heller (2004) notes that labelling formed by diagnosis may negatively affect the child’s personality development and self-perception, resulting in social isolation, egocentric attitudes and behaviours. Yet, as has been seen in the focus group interviews, after identification the child tries to acquire (live up to) the gifted profile drawn by families and environment. For example, the idea of being able to do whatever I want because I am gifted, wanting to be a leader in every group without caring about collaboration, and wanting to change teacher or school rather than accepting failure were indicated as attitudes and behaviours of gifted children by the teachers in the SACs. This requires us to closely examine positive discrimination and expectations since these are outcomes from a process that starts with the child’s identification as ‘gifted’. According to the teachers in the SACs, to ascribe a great meaning to the cognitive development of the gifted child, to impose constantly ‘you are the best, you know the best, to have high expectation about the child, to load a mission on the child, to take more care of, and to manage the feelings of the gifted child are positive discriminations applied by families and indirectly by the environment. Therefore, what is expected from the gifted child is to satisfy high expectations of the family and to gain the appreciation of the family.

Hence, from a teacher’s perspective, to trust the gifted label and intelligence, to be success-oriented, and to have a big ego (see table 11) could be read as behaving according to the socio-cultural profile drawn for them, but understood from the perspective of the child, it can be seen as satisfying the family’s high expectations and trying to gain its appreciation. Therefore, it may be seen as a trace of a socio-cultural assumptions about gifted labelling. Children experience the complex emotional, social and academic effects of being labelled as gifted (Hobbs, 1975). The impact of labelling on both attitudes and behaviours of the family and the environment at the meso level, and the self-perception of the gifted child at the micro level, comes with the child’s identification or labelling.

Through abductive reasoning, new theoretical ideas about the character development of gifted pupils were reached by seeking hypotheses based on observable facts (the demi-regularities) in the nexus of cultural beliefs, contextual contingencies and relationships, and political and educational implementations. The lack of character education in gifted

education is perceived as a kind of exemption in character education or as a parallelism between cognitive and character development by the gifted child's family. The positive discrimination towards the child is a strategy used families and indirectly, by the immediate environment to sustain the high potential of the gifted child and the label itself with its attendant advantages. The behaving of the child in accordance with the gifted socio-cultural profile, aims to meet the expectations of the family and to gain its appreciation. Understanding the character development of gifted pupils requires considering contextual beliefs, contingencies, and relationships. Better understanding of these beliefs, contingencies, and relationships in the context of broader empirical and theoretical literature can therefore allow for new descriptions of the relevant phenomena. This is accomplished through the final analytic phase, retroduction.

7.3.4 Retroduction

The retroduction stage was carried out to find and posit the mechanisms that could lead to the demi-regularities in the teachers' views on character development of gifted pupils and the contextual conditions that enabled them to be realised (Blom & Moren, 2011). This stage starts with the analysis of entities, which refer to things that make a difference in their own right (Fleetwood, 2005) in terms of their constitutive structures, powers, and liabilities. Eight entities were determined from the empirical data and its contextual conditions: gifted education policy and practices; structure of the SACs; identification as gifted; beliefs; culture; family and the immediate environment; teachers; and the gifted child. These entities can all be said to have constitutive structures, powers, and liabilities in and of themselves, at the micro, meso, and macro level. There are also interactional relations between these entities; a change in one may lead to changes in the others (Easton, 2010). The underlying causal explanation which links the demi-regularities, entities, and causal mechanisms is illustrated in Figure 17 below.

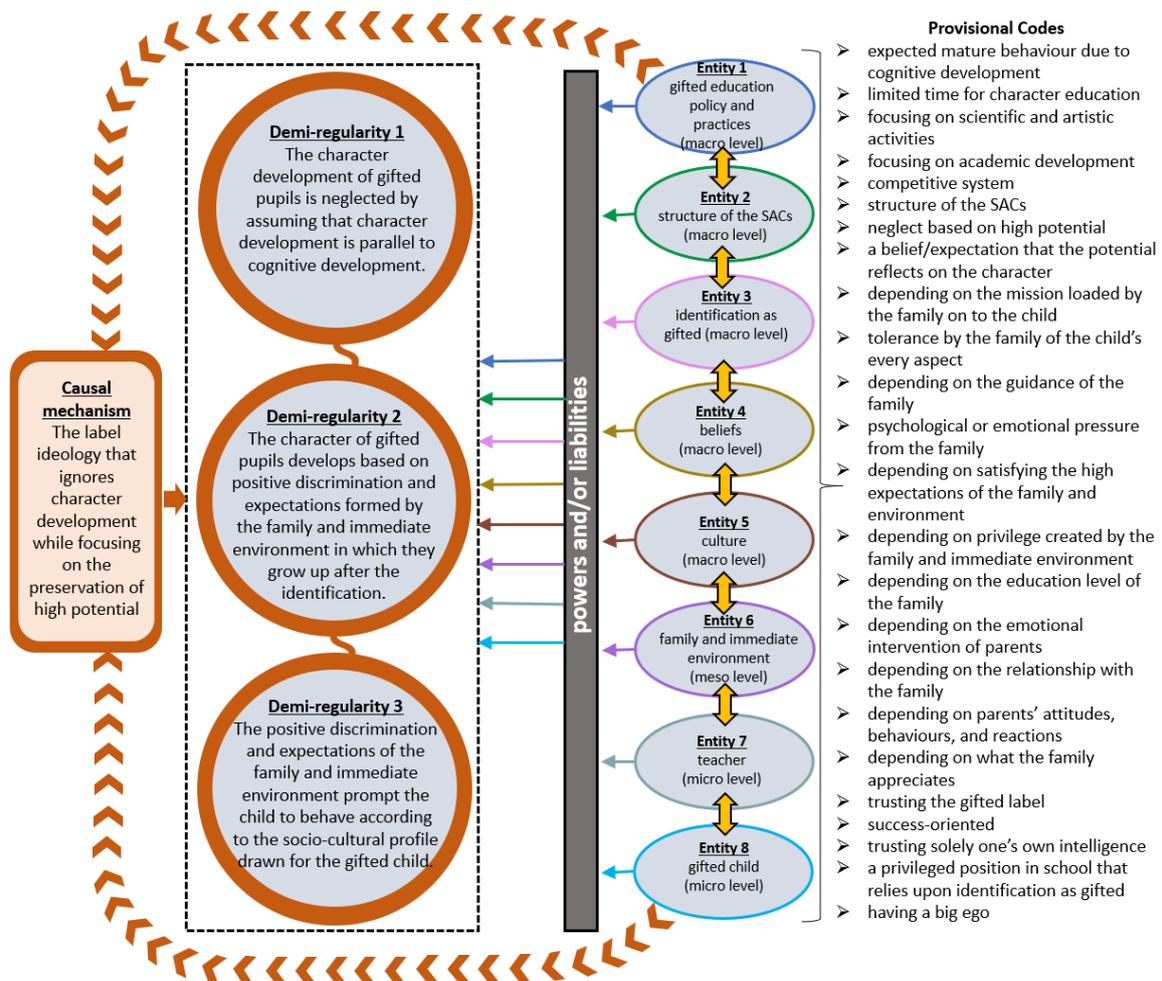


Figure 17: Retroduced causal explanation for views about the character development of gifted pupils

The label ideology that ignores character development while focusing on the preservation of high potential appears to be the causal mechanism that I can derive from the empirical data. The first demi-regularity focuses on an implicit assumption of the policy and practices about the character development of gifted pupils, which is that the character development of gifted pupils develops in parallel as an effect of their superior cognitive development. The character development of gifted pupils is neglected due to the priority of current practice on; academic-focused programs, engaging generally with scientific and artistic activities; as well as from the competitive atmosphere among the SACs. There is no planned time for character education of gifted pupils. The teachers stated that the focus is on cognitive and academic development rather than on the socio-emotional development of the child after getting the gifted label. Hence, such practices in gifted education may lead one to think that the education policy assumes that gifted pupils have also a mature character resulting from their superior cognitive development.

The second demi-regularity focuses on positive discrimination and expectations on the child made by the family and immediate environment after the child's identification. That is, attitudes, behaviours, reactions, and expectations of the family and immediate environment towards their gifted children in the Turkish cultural context are in consideration. Hence, the gifted label in the mind of the family and immediate environment has a deterministic role in the character development of gifted pupils. Similarly, the third demi-regularity focuses on the effect of the socio-cultural profile drawn for the gifted child and its manifestation in the child's mind, on his/her character development. Here, the gifted label perception of the family and immediate environment creates positive discrimination and high expectations towards the child. This privilege creates a profile of a student that trusts his/her label, intelligence, and success and as a result, has a big ego. In other words, the gifted child shapes his or her self-image according to the expectations and behaviour of the family and immediate environment toward him/her.

As seen, the label ideology is both implicitly and explicitly in the centre of these three demi-regularities and is an essential element of any causal mechanism I may posit to explain these demi-regularities. In all three demi-regularities, interconnected political, cultural, and contextual meanings are in some way ascribed to the gifted label. In the critical realist understanding, the causal mechanism – here the label ideology that ignores character development while focusing on the preservation of high potential – is a combination of the entities with their structures, powers, and liabilities. One of the entities that I posit here at the macro level is gifted education policy and practice. The current gifted education policy in Turkey, identifies students who are gifted through an intelligence test. Since this implementation is identification oriented, it shows that an innate paradigm of giftedness predominates in the policy. This identification creates a label based on specific selection criteria that brings with it privileged educational opportunities. The SACs, one of these privileged education opportunities, which is another entity, are mostly scientific and artistic works-oriented, in which there is no planned time for the character education of gifted pupils. Hence, this implementation in the SACs unintentionally pushes character development into the background. Similarly, this effectively establishes the gifted label as a an 'exemption' from character education. Additionally, the gifted label encourages families to focus on preserving and sustaining the high potential of their children by providing positive discrimination towards their children. This serves to maintain the various societal and

institutional advantages that the label confers on their child and indirectly on the family in terms of status.

After the child is identified as gifted, positive discrimination by the family, an entity at the meso level, begins. That is, the gifted label has the *power* to shape parents' attitudes, behaviours, and expectations towards their gifted child. Here, positive discrimination in its different forms (see the codes) is the *power* that resides in the entity of the gifted education policy and practices. Then, this discrimination is also expressed in the immediate environment, which is also an entity at the meso level. That is, this mechanism that extends privilege to the child, spreads among the other entities at the micro level (i.e., teacher, gifted child), just as wave movements created by a stone thrown into water. This spread shows that there is a necessary relation between the entities. Subsequently or as a result, this ascribed meaning to the gifted label, or in another sense, the psychological pressure of having to bear the gifted label, becomes a *liability* for the gifted child.

As seen in the initial codes, to satisfy high expectations of the family, to gain the appreciation of the family, to consider the guidance of the family, and to be psychologically or emotionally pressured by the family are all powers over the child's behaviour and self image. That is, the gifted child tries to behave according to the profile consisted in the mind of the family and the immediate environment along with the influence of policy and practices, culture, and beliefs. As seen, the effects of the labelling as 'gifted' are nested like the rings of a chain and are not independent from the entities. In this complex environment in which the labelling has impact and its effects function, is partly what is creating the powerful effects. Other entities are influential at the macro level, the cultural and societal values and beliefs based on experience and policy, which have the *power* to shape – that is ascribe meanings to – the concept of the label (gifted) and to the understanding of family and the immediate environment about the character development of the gifted pupil.

It is seen that the demi-regularities identified and analysed in the context of teachers views (taken to be culturally representative) in this section, has uncovered a contradiction between policy goals and implementation in the character development of gifted pupils. This explains why, in respect to the character development of gifted children, the label ideology that ignores character development while focusing on the preservation of high potential is considered to be deterministic from the very beginning of identification. Whilst teachers do of course have different views at the empirical layer, they largely originate from the same

source at the real layer, which is the label ideology that ignores character development while focusing on the preservation of high potential. In this way, critical realism allows us to understand how the causal mechanisms lead to the teachers' views about character development of gifted pupils (three demi-regularities) at the empirical level. This conclusion – having knowledge about the mechanism that leads to teachers' views about the phenomenon – therefore offers in-depth understanding which can promote more effective suggestions or solutions for policy and practice. The suggestions of this causal mechanism for the policy and practice are explained in more detail in the concluding chapter.

7.4 Research Question 3

How do teachers think about character education of gifted pupils?

7.4.1 Qualitative part: Identification of demi-regularities

Data collected was coded, leading to the demi-regularities (or patterns) defined in a critical realist method. First, all the data was coded thematically using a data-driven inductive approach (Boyatzis, 1998; Braun & Clarke, 2006) and 31 provisional codes (see Table 14 below) that explain why character education is perceived by teachers to be important for gifted pupils, were generated. Important for this stage of initial coding was consideration of teacher experiences, the realities as defined by the participants, and the cultural effects of discourses on character education for gifted pupils (Braun & Clarke, 2006). These 31 provisional codes were gradually reduced during the second coding cycle, as they were re-organized and combined into the framework of a macro, meso, and micro conceptual map, as informed by critical realism (Blom & Moren, 2011). These critical realist-informed categories were: (1) humanity-benefit oriented at the macro level, including the categories of *social benefit* and *big harm avoidance*; (2) influencing others-oriented at the meso level, including the categories of *good positions in science, art, and country management in the future* and *power of influence over other people*; and (3) personal development-oriented at the micro level, including the categories of *socio-emotional development*. These are presented in Table 14 below.

Table 14: Critical realism-informed codes and categories about character education of gifted pupils

Theme	Conceptual map levels	Categories	Provisional codes	
Importance of character education for gifted pupils	Macro-level (humanity-benefit-oriented)	Social benefit	To bring them to society, To be beneficial to society, To be beneficial to state, To be beneficial for humanity, To shape high potential in a good way, To take care of needs of humanity, To be able to give something to society, Not to behave as an egoist, To use potential for humanity	
		Big harm avoidance	To behave ethically, To prevent their possible major damages, To prevent them from using illegal methods, To stay away from crime organizations, To reduce danger rate, To use potential in right place, time and with ethical values, To prevent them being harmful to society, To prevent them from going wrong	
	Meso-level (influencing others-oriented)	Good positions in the science, art, and country management in the future	Future roles in science and art world, Positions in future, Power to influence future, Future role in management of country, Future leaders and executives	
		Power to influence other people	Role model for others, Power to influence a large part of society, Probability of affecting whole humanity, To prevent a mechanical approach to everything	
	Micro-level (personal development-oriented)	Socio-emotional development		To control own potential, To become aware of potential, To improve self in a positive way, To reveal and nurture their high potential, For socio-emotional development

As seen, the macro level encompassed more structural or societal level concerns, the meso level relational aspects, and the micro level was oriented towards personal development concerns. While coding all data, all codes were considered important and semantically related codes were categorised and the categories were labelled with that of the most dominant codes. Then, the most dominant codes used as a starting point to identify ‘demi-regularities’ at the empirical level of reality (O’Mahoney & Vincent, 2009). The demi-regularities, or patterns, in the empirical data can be understood as partial regularities indicating the actualization of a mechanism in a specific context (Lawson, 1997). This context determines how and whether they are actualized. The top level data coding led to the generation of three demi-regularities (Fletcher, 2017) illustrated in Figure 18 below.

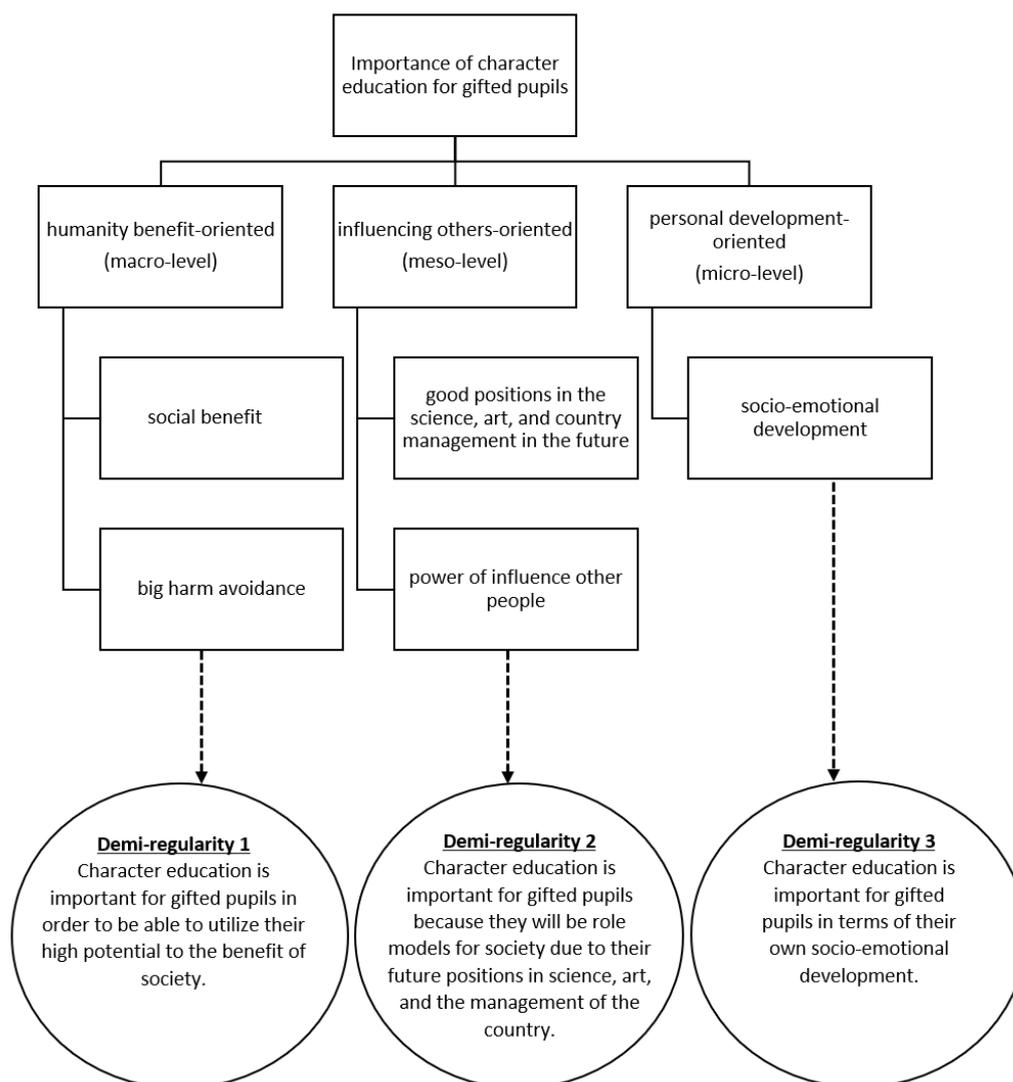


Figure 18: Thematic map of the demi-regularities about character education of gifted pupils

In the first demi-regularity, character education is seen as instrumental for gifted pupils in order to be able to use their high potential effectively to meet the needs of society and wider humanity, to bring social benefits, and to prevent the possible damage that they could otherwise create. In nine of the SACs (except SAC 7), most of the teachers agreed about this. For example:

We are trying to teach them that they are also an individual of the society, we are trying to bring them to society, because we want them to consider society. These children tend to be shaped as dough, they are extremely open to everything. So, I think that character education is very important for these children. (SAC 1)

We all want gifted children to take care of needs of humanity. Their role in the society is big. So, their theories and ideas are very important. (SAC 2)

I think that character education for specially talented children is very important, because they correspond to the top 1% of the society in terms of the cognitive abilities. Therefore, there is need to shape their high potential in a good way. Their character education is very very important because if we think that they will be a beneficial individual for society in terms of the future tasks and responsibilities they will take. Particularly, in the SACs, many things can be done, we are working only as project-oriented here. (SAC 2)

Character education should be given to these children in order not to behave as an egoist, to take into consideration the goals of society. In the world, we need each other. The smallest thing done by each of us does affects every one of us. For this reason, these children should be given character education, it should be a priority, and we should start with the aim of doing something good. The core purpose is to get something good for the benefit of humanity. (SAC 3)

Character education, which makes gifted children more beneficial individuals for society rather than individuals who have made bad inventions, is necessary. (SAC 3)

High potential should be controlled for the benefit of society. There is an expression that uncontrolled power is not power. So, like this. (SAC 3)

These children are very smart. If they go in the wrong way, they can create much bigger problems with their intelligence and spread it to the society. I think the effect will be great. (SAC 4)

Character is important, but it is more important for specially talented children. We can bring up a very good scientist from a gifted child, but what this scientist does is more important. For example, today artificial intelligence is spoken (about). How artificial intelligence will be used, how it will benefit humanity is important. (SAC 5)

I think this should be turned into a state policy. Otherwise, these children may pass to the hands of the bad-faith groups, it may be more dangerous for other people. So, in order to prevent them being harmful to society, we should care about their character education. (SAC 5)

These children should be well educated because they have very high potential. If they are not educated very well, they can use illegal methods, or they could be the leader of the most dangerous criminal organizations. That's why character education is more important for specially talented children. (SAC 5)

Their role in the society is big. These children will be great scientists and artists. Therefore, it is very important for them to behave ethically. (SAC 5)

I think that character education and development are very important for all humanity, but especially for specially talented children. As far as I see, specially talented children have special challenges. On the one hand, they will understand that they have a gift if they can recognize themselves, on the other hand, they will feel punished because of feeling a responsibility to do something for the humanity. The child doesn't know what he/she need to do. So, at this point, character education becomes the main topic. (SAC 6)

What do we really want? What are the desires of society? What are the desires of the country? They are really coming to the world with a different mission, they have a gift for all humanity in the world, they must give it. (SAC 6)

I have come across many different examples. They may not be able to think about the results of what they have done. That is, the potential can be used in a harmful way. These children should know to use their potential in the right place and time by knowing the ethical values. (SAC 8)

The specially talented child comes into the world as being different from me and has a high potential. Therefore, character education should provide him/her to give me or society something. There should be win-win management. This education absolutely must be interactive. (SAC 9)

I think that these children should be given character education or values education in all educational institutions. If we do not provide character education, these children will bring up by chance, but we can reduce the possibility of shifting them to the black side or prevent their possible major damages with education. (SAC 10)

The second demi-regularity “character education is important for gifted pupils because they will be role models for society due to their future positions in science, art, and the management of the country.” Here, the teachers anticipate a functionalist outcome whereby gifted pupils would have a position or career of some standing in the future. Therefore, they think that character education is important because such individuals will have the power to influence society as a result of such positions. In the context of this argument, some teachers in nine SACs (except SAC 7) agreed about this. For example:

We raise leaders and executives of the future, thus, we should give a good character education to them, if we are to expect many things from them for the government in the future. (SAC 1)

They need to have a strong character to they can give direction to the life or the future, in this way they can positively affect society. (SAC 2)

Character education is more important for gifted children than others. Because, in the coming years, students who have high potential will have a voice in the future stages of science, in the management of the country, so, they must be very strong in terms of character and they must be conscious. (SAC 2)

We need to tell goodness to these children, because they will come to better positions in the future. They will more affect others due to their future positions. (SAC 3)

When a normal student has bad character, he/she affects only himself and his/her family or up to 10 or 15 people, but the gifted individual affects thousands or maybe millions of people. Character education is important for these children for the future. (SAC 3)

I think their effects will be great in society because they will have a big role in society. They have more effect on people. (SAC 4)

Character education is important for specially talented children because I think these children should be seen as individuals who will play a big role in art and science in terms of the development of the country. They will be adults who can influence other normal people. (SAC 5)

The fact that they approach everything mechanically shows that they carry a risk of becoming very well-trained killer engineers or narcissist doctors. The mistakes or wrongs of our gifted children will affect not only their families and friends but also society. The minds of our children are very good, but these minds should be supported by character education and the development of conscience. (SAC 6)

They will come to very good positions in the country, so it is important to give character education to children in the early years. (SAC 8)

Their behaviours are also very important for their peers in terms of being a role model. (SAC 9)

We all agree that these children have a high potential. Tomorrow they will come to very good positions or we want them to come to good positions. Hence, they have a probability of affecting the whole of humanity. Therefore, character education is more important for gifted children. (SAC 10).

The third demi-regularity “character education is important for gifted pupils in terms of their own socio-emotional development.” In this demi-regularity, at the micro-level, the teachers focused on the factors that contribute to the development of specially talented pupils at an individual level. In SACs 3, 6, 7, and 8, teachers agreed about this. For example:

Character education is important for specially talented children to control their own potential. I mean that the self-realization of the high potential should be controlled. This education is not only for themselves, but also for the benefit of society. (SAC 3)

Character education is important for them to be aware of this special gift they have and to be able to give it for themselves and humanity. They need to know what they will do and what they want to do. (SAC 6)

Character education is important in terms of revealing and nurturing their own potential. The individual who cannot be useful to himself or herself cannot be useful to others. (SAC 6)

Character education is the key to improving themselves of specially talented children in a positive way. As my friends said, that not only for the self-realization but also for the benefit of the community. It is an important point. (SAC 7)

Character education is not only necessary for their contribution to society but also it is necessary for their emotional and spiritual development. They should be healthy in terms of the development of the emotional and the spiritual and character is the cornerstone for that. These children have good potentials, so they need to be educated for both self and others. (SAC 8)

This phase of data processing showed the generation of the empirical demi-regularities developed from the qualitative data as to why teachers who work with gifted pupils think that character education is important for gifted pupils.

7.4.2 Quantitative part: Statistical analysis related to the demi-regularities

To complement the findings from the qualitative interviews, although the focus was very much on the qualitative experiences and opinions of teachers, the survey data was used descriptively (quantitatively) to assess to what extent teachers, who work in other SACs and who did not attend the focus group interviews, agree with these demi-regularities (*descriptive analysis*) and to investigate relationships between the demi-regularities (*correlation analysis*) without making causal attributions (Ron, 2002). Statistical analysis may allow us to modify and improve our theoretical social mechanism and to capture the key features of social reality (Williams, 2009). The qualitative and quantitative methods were therefore combined to investigate, in depth, to discover the possible causal mechanisms that may lead to teachers' opinions about the character education of gifted pupils.

The descriptive statistics related to these demi-regularities (see Figures 19, 20, 21, 22, 23, and Table 15 below) revealed that 8% of the survey participants are somewhat in agreement, 22% of the participants were in agreement, and 63% of the participants were in strong agreement that gifted pupils are a valuable resource for the future of the society ($M=5.40$, $SD=.96$). This means that approximately 93% of the participants assume in varying intensity that gifted pupils are important for the future of society. Of the sample, 11% of the participants were somewhat in agreement, 39% of the participants were in agreement, and 43% of the participants were in strong agreement that character education is necessary for gifted pupils in order to prevent the possible harm and loss they can create in the future ($M=5.15$, $SD=.96$). Hence, approximately 93% of the participants think in varying intensity that character education is necessary for gifted pupils in terms of preventing the possible harm and loss they can create in the future.

On the survey, 11% of the participants chose somewhat agree, 29% of the participants chose agree, and 53% of the participants chose strongly agree that character education is very important for gifted pupils because they are the leaders, scientists, and artists of the future ($M=5.28$, $SD=.94$). This means that approximately 93% of the participants assume to varying degrees that gifted pupils are future leaders, scientists, and artists. Therefore, character education is seen as important for them. 24% of the participants answered somewhat agree,

45% of the participants answered agree, and 18% of the participants answered strongly agree that character education is important for gifted pupils because they are role models for others (M=4.61, SD=1.10). That is, approximately 87% of the participants agree to some extent that character education is important for gifted pupils as they are role models for others. Lastly, 16% of the participants chose somewhat agree, 37% of the participants chose agree, and 37% of the participants chose strongly agree that there should be a character education programme for the whole personal development of gifted pupils (M=4.92, SD=1.17). Hence, approximately 90% of the participants see to some degree that character education is important for the complete personal development of gifted pupils.

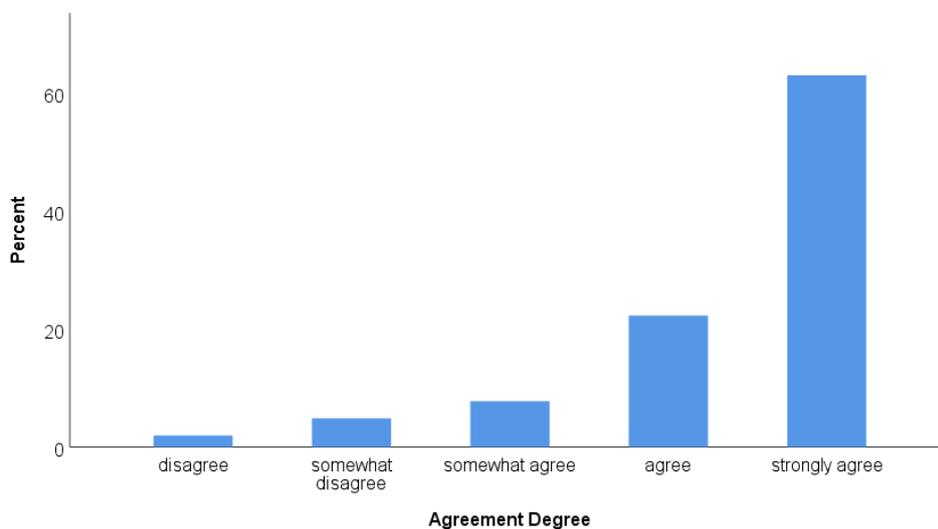


Figure 19: Participants' agreement degree on perceiving gifted children as a valuable resource

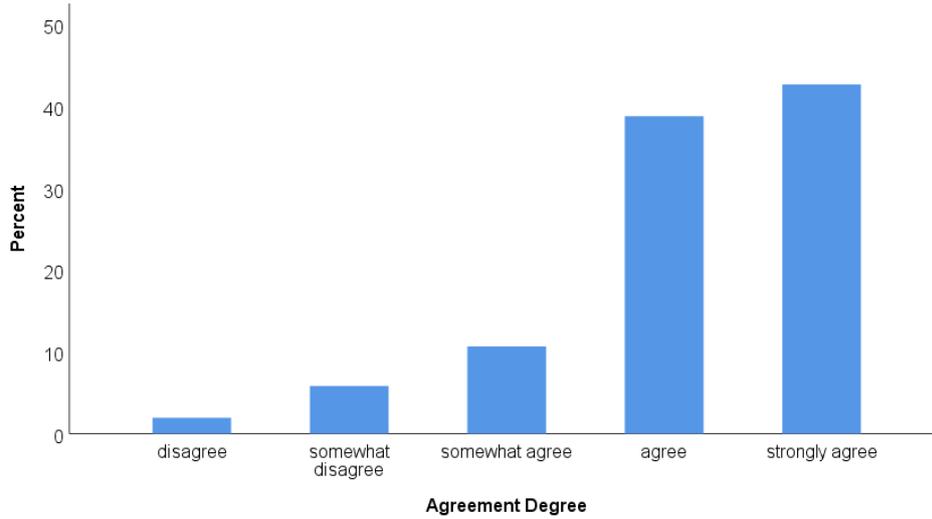


Figure 20: Participants' agreement degree on the importance of character education in terms of preventing possible harm and loss in the future

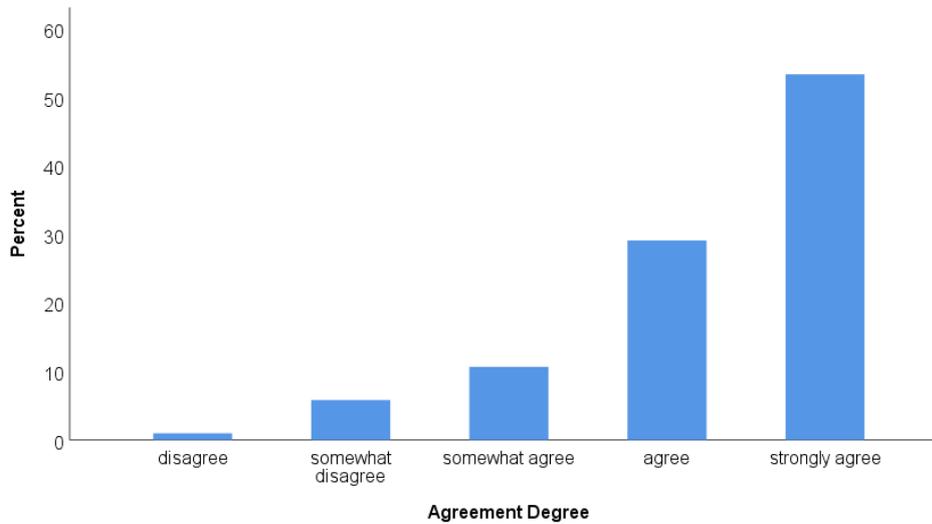


Figure 21: Participants' agreement degree on the importance of character education in terms of becoming future's leaders, scientists, and artists

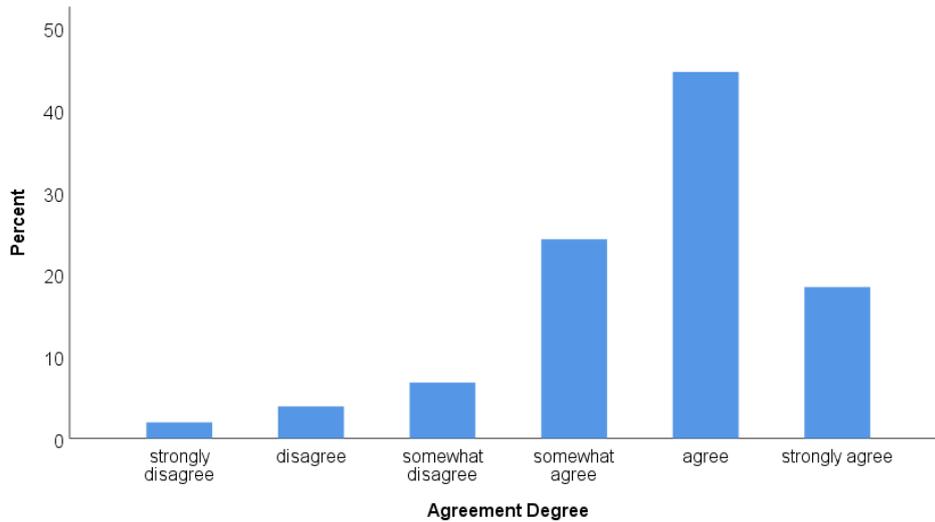


Figure 22: Participants' agreement degree on the importance of character education in terms of becoming role models for others

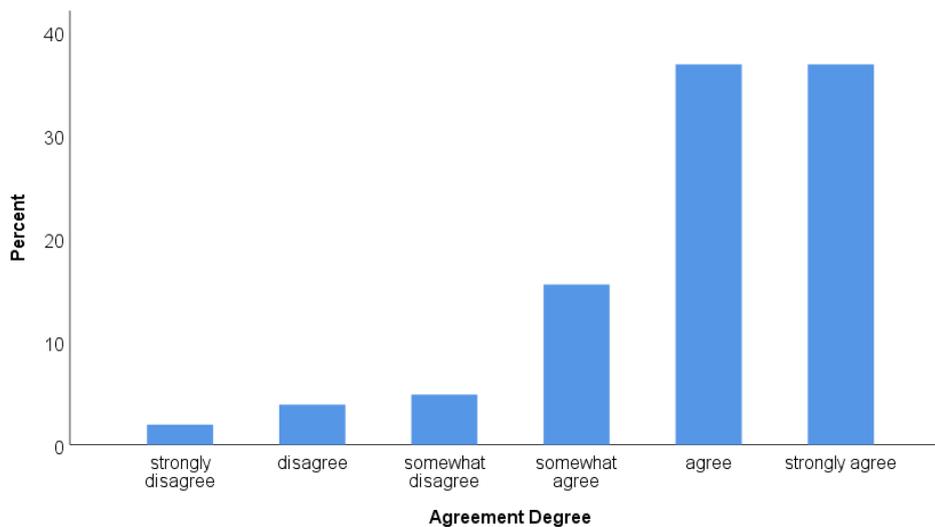


Figure 23: Participants' agreement degree on the importance of character education in terms of complete personal development

A skewness test was implemented to see the symmetry of the response. Each of the items was negatively skewed (see Table 15 below), indicating that participants were more likely to agree to the items. Again kurtosis measured abnormal distribution with all measures significantly displaced from the median (see Table 15). Overall, this means that there was abnormal distribution keyed to agreement in this part of the survey.

Table 15: Descriptive analysis of the items Related to the character education of gifted pupils

Items	M	SD	Skewness	Kurtosis
Part 4 (Importance of character education for gifted pupils)				
9. Gifted pupils are a valuable resource for the future of the society.	5.40	.96	-1.75	2.60
10. Character education is necessary for gifted pupils in order to prevent possible harm and loss they can create in the future.	5.15	.96	-1.23	1.30
11. Character education is very important for gifted pupils because they are the leaders, scientists, and artists of the future.	5.28	.94	-1.30	1.14
12. Character education is important for gifted pupils because they are role models for others.	4.61	1.10	-1.09	1.44
13. We should have a character education programme for the complete personal development of gifted pupils.	4.92	1.17	-1.35	1.76

Correlation analysis was then conducted, which is presented in Table 16 below. It is apparent from this table, there was a significant ($p < .05$) positive correlation between all items. Firstly, being a valuable resource for the future of the society had a significant relationship with the future position of gifted pupils in science, art, and leadership ($r = .68$, $p < .05$). Similarly, there was a significant relationship between being a valuable resource for the future of the society and preventing possible harm and loss they can create in the future ($r = .52$, $p < .05$). Of course, based on the qualitative data, these were expected associations since these categories are closely related conceptually and since their effects will be great in society. Secondly, preventing the possible harm and loss they can create in the future had a significant relationship with the future position of gifted pupils in science, art, and leadership ($r = .63$, $p < .05$). Similarly, there was a significant association between preventing possible harm and loss they can create in the future and complete personal development ($r = .61$, $p < .05$). That is, participants who consider character education is necessary for the complete personal development of gifted pupils also likely consider it to be necessary in preventing the possible harm and loss they can create in the future.

Thirdly, being a role model for others had a significant association with preventing possible harm and loss they can create in the future ($r = .47$, $p < .05$). Similarly, there was a significant relationship between being a role model for others and the future position of gifted pupils in science, art, and leadership ($r = .41$, $p < .05$). These were also expected relationships when looking at the qualitative data. The qualitative data showed: Many

teachers in the SACs expect or wish that gifted pupils will reach significant positions – in which they will be a role model for others – with humanitarian interests – to prevent possible harm and loss that they can create – in their work in the future. Therefore, participants see character education as important for gifted pupils. Lastly, complete personal development had a significant positive relationship with their future positions in science, art, and leadership ($r=.39, p<.05$). This means that participants who consider that character education is necessary for gifted pupils in terms of their complete personal development, also were likely to consider its importance in terms of their potential impact on science, art, and society in the future.

Table 16: Correlation coefficients between the items related to character education of gifted pupils

Items	9. ... they are a valuable resource for the future of the society.	10. ... in order to prevent possible harm and loss they can create in the future.	11. ... they are the leaders, scientists, and artists of the future.	12. ... they are role models for others.	13. ... the complete personal development of gifted pupils.
Character education is important for gifted pupils because...					
9. ... they are a valuable resource for the future of the society.					
10. ... in order to prevent possible harm and loss they can create in the future.	.52**				
11. ... they are the leaders, scientists, and artists of the future.	.68**	.63**			
12. ... they are role models for others.	.34**	.47**	.41**		
13. ... the complete personal development of gifted pupils.	.30**	.61**	.39**	.25**	

*For Spearman $r^{**} <.01$*

Following critical realist ontology and epistemology (where there is a ‘real’ world and it is theory-laden, not theory-determined), all explanations of reality, including those obtained by and from research participants, theorists, and scientists, are treated as fallible (Bhaskar, 1979). There is no superiority of either scientific explanations or participants’ views and experiences in the sense of how data can help us find explanations for social phenomena. However, participants’ views and experiences may be positioned as a challenge

to existing scientific knowledge and theories (Redman-MacLaren & Mills, 2015) in terms of understanding how events have come to be as they are. From coding, identifying demi-regularities and statistical analysis, data are then conceptualised through relevant theoretical ideas, using abductive reasoning.

7.4.3 Abduction

After identifying the demi-regularities from the data and presenting descriptive and correlation analyses of it (the data), this stage – abduction – was carried out in order to generate propositions about possible causal mechanisms that lead teachers to think about the character education of gifted pupils in the manner indicated in the demi-regularities. This was done particularly identifying the deep processes related to the phenomenon under its existing contextual conditions. This process therefore necessitates an investigation into the beliefs about, and the context of giftedness in Turkey; as this context is central in understanding how teacher views on character education for gifted pupils in Turkey are formed. For the purposes of this study, I therefore begin from the literature that situates giftedness as a belief-based construction (Phillipson & McCann, 2007).

Belief-based constructions have led to both conceptual complexity and misunderstandings in this area of study. Indeed, misconceptions (e.g., myths) about gifted education are often used to argue for particular perspectives (e.g., Treffinger, 1982). Sak (2011) states that most theories related to giftedness and intelligence first occur as personal and societal in people's minds, through their personal and social experiences, and then, these implicit beliefs convert into scientific constructions after validation on scientific platforms through empirical investigations. Personal and/or societal beliefs related to giftedness and intelligence are partly established in culture. Neisser (1979) explains intelligence as a cultural invention based on what people value. However, examining the concepts of giftedness and intelligence with cultural markers is a complex phenomenon because neither of these terms has an agreed definition (Sak, 2007; Ziegler & Heller, 2000). For example, cultural beliefs show differences in whether gifts are accepted as, for instance, God-given or human-developed, and what aspects of human qualities are construed as gifts or talents.

Turning to the Turkish context, beliefs in Turkey about gifted individuals are affected by the particularities of the culture, as is the case in every country. In addition, there are the effects of conditions that facilitate and hinder the situation, for instance, the educational and learning resources provided (Ziegler, 2005), which are reflected in the expectations that are

then constructed about gifted individuals. Sak (2011) investigated the diversity in what was termed misconceptions, dogmas and popular views about giftedness and intelligence in a study among 812 lay people in Turkey (41.6% male and 58.4% female), who answered multiple-choice questionnaires in six cities located in the mid part of Turkey. According to this study, the popular beliefs about giftedness and intelligence are as follows: the trendy view (52.1 % of the participants believed that individuals have more than one intellect), and the worker view (45.9 % of the participants believed that even if individuals are not born gifted, life experience can make them gifted). The dogmas about giftedness are as follows: the gift belief; 74.1 % of the participants believed that skills and talents have divine or metaphysical origins, thus genetic determinants are not important, the deterministic belief; 34.4 % of the participants based their beliefs on the role of destiny and chance, the relativist belief; 42.6 % of the participants believed that the intellect devoted to divine unity is smarter than the intellect devoted to rationality. Sak (2007) states that in addition to culture, religious beliefs and political views also influence people's beliefs about giftedness.

There is also research that examines the perceptions of teachers and teacher candidates towards gifted individuals in Turkey. For example, Ozsoy (2014) investigated the perceptions of teachers working in the SACs about gifted individuals. The results of the study show that teachers regard a gifted student as follows: (1) hardworking, (2) someone who needs the appropriate education, (3) mysterious and difficult to understand, (4) a precious person, (5) a person who looks different from his/her peers, (6) a person with high capacity, and (7) a sophisticated person. Another study by Capan (2010), who used metaphorical analysis, shows that the teacher candidates in Turkey used metaphors such as "gold mine, computer, bomb, and diamond" in describing gifted children. In addition to cultural and belief-related factors, gifted education policy and practices (i.e., identification of gifted individuals through IQ tests, providing privileged educational opportunities for gifted pupils, focusing on cognitive and academic development rather than character development) may also affect perspectives about giftedness and the gifted individual.

These studies reveal something of the contextual situation of the phenomena of giftedness in Turkey. According to most of the teachers in the SACs, character education is important for gifted pupils in order to be able to utilize their high potential for the benefit of society (demi-regularity 1). In other words, it is assumed that the impact of the work that gifted individuals do, or will do in the future, may be great enough to affect society and/or humanity. Character education is seen as a tool in terms of shaping gifted individuals so that

giftedness benefits society and possible dangers and damage to society are prevented (see the codes at the macro level in Table 14). Similarly, the quantitative data showed that approximately 93% of the participants assume in varying degrees that gifted pupils are a valuable resource for the future of society ($M=5.40$, $SD=.96$) and that character education is necessary for gifted pupils in order to prevent possible harm and loss that they might do in the future ($M=5.15$, $SD=.96$). There was also a significant positive relationship between the view of 'possible future harm' and that of as a valuable resource for the future of society ($r=.52$, $p<.05$). In parallel with these findings, Jewell (2001) states that solving social problems and contributing to society are a moral duty of gifted persons. Similarly, Tannenbaum (2001) suggests making moral education an integral part of gifted education by drawing attention to the possibility of using giftedness for great good and great evil. We see from this that these contextual views in Turkey are consistent with the more universal perceptions cited above.

Returning to the character education policy of the Head Council of Education and Morality (TTKB, 2017), within the Turkish Ministry of National Education, 10 key virtues within values education have been chosen to be taught to all students, including gifted pupils in the SACs (MEB, 2016): (1) justice, (2) friendship (including altruism, trust, understanding, solidarity), (3) honesty, (4) self-control, (5) patience, (6) respect, (7) love, (8) responsibility, (9) patriotism (including hard work, collaboration, compliance with rules and laws, being sensitive to historical and natural heritage, and the caring society), and (10) helpfulness (including generosity, cooperation, mercifulness, hospitality, and sharing). As seen, most of these values are others-oriented, rather than being self-oriented. This policy context may also reflect on the teachers' perspectives towards the character education of gifted pupils, in which societal benefit is at the forefront.

Another important point for the development of policy and practice is that the socio-emotional development of gifted pupils remains in the background of teaching practice. In the 2019 meeting report of the Ministry about gifted education (MEB, 2019b), the action plans for the education of gifted pupils were mostly related to identifying and developing talents. There is not any tangible action plan for the social and emotional development of gifted pupils. Therefore, as the teachers in the SACs indicated, character education of gifted pupils mostly falls to the initiative of teachers independent of the policy context.

Another demi-regularity is that character education is important for gifted pupils in terms of being role models for society due to their future positions in science, art, and the management of the country. This is parallel to the first demi-regularity in terms of being others-oriented or regarding. Similarly, the quantitative data showed that approximately 93% of the participants share to some degree an assumption that character education is important for gifted pupils because they are future leaders, scientists, and artists ($M=5.28$, $SD=.94$). Approximately 87% of the participants have, to varying degrees, an assumption that gifted pupils are role models for others ($M=4.61$, $SD=1.10$). There was also a significant positive relationship between ‘they are future leaders, scientists, and artists’ and ‘they are role models for others’ ($r=.41$, $p<.05$).

Many teachers in the SACs expect or wish that gifted pupils will reach significant work positions of humanitarian interest in the future. Therefore, they focus on the transformation of today’s character education outcomes into societal contributions in the future. This perspective is also replicated in key literature in the field. For example, Piirto (2005) says that “If . . . (gifted children) . . . are to be our future leaders. . . the values they hold are important because they will influence . . . future decisions and actions needed to do good works of global importance” (p.116). Eyre (2004) states that “Today’s gifted pupils are tomorrow’s social intellectual economic and cultural leaders, and their development cannot be left to chance” (as cited in Campbell et al., 2007, p.48). Similarly, Renzulli (2002) indicates that “the history and culture of humankind can be charted to a large extent by the creative contributions of the world’s most gifted men and women” (p.57). Gibson and Landwehr-Brown (2009) take these views one step further and interpret moral development as the sine qua non for the global citizenship of gifted individuals. Global citizenship is the understanding of the interconnectedness and interdependence of humanity and an acceptance of universal responsibility leading to global consciousness (Bah’a’I, 1993; Frey, 2003). In other words, global citizenship is an extension of citizenship from the national level to the global level, which implies stewardship of humanity and the environment. It does not replace national citizenship but may in some sense supersede it.

The last demi-regularity is that character education is important for gifted pupils in terms of their socio-emotional development. According to some teachers in the SACs, character education is necessary to channel individual potential (see micro level codes in Table 14). Similarly, the quantitative data showed that approximately 90% of the participants assume to some extent that we should have a character education program for the complete

personal development of gifted pupils ($M=4.92$, $SD=1.17$). However, children with high potential in diverse areas of intellectual ability are often found to differ in their socio-emotional functioning or characteristics (Subotnik et al., 2011). A standardised program may not be indicated. For example, there are some views around higher levels of self-concept (Hoge & Renzulli, 1993), superior socio-emotional adjustment (Francis et al., 2015), altruism, generosity, social sensitivity and empathy (Silverman, 1994), sensitivity to justice (Hartsell, 2006; Roeper, 1988), and excitability and passion (Lovecky, 1992). These differences bring along different needs and properly tailored flexible character education may play an important role in meeting these needs (e.g., Berkowitz & Hoppe, 2009).

However, the teachers in the SACs see character education as an alternative in terms of awareness, nurturing, and channelling of potential in positive/desired ways; by considering the societal aspect, rather than focusing on the needs arising from different characteristics. This approach suggests service learning (Terry et al., 2008) as a possible technique in the character education of gifted pupils. The quantitative data also showed that ‘complete personal development’ had a significant positive relationship with ‘preventing possible harm and loss they can create in the future’ ($r=.61$, $p<.05$), and with ‘their future positions in the science, art, and leadership’ ($r=.39$, $p<.05$). This means that participants who consider that character education is necessary for gifted pupils in terms of their complete personal development, also likely consider its importance in terms of their direct or indirect potential impact on society in the future.

Through abductive reasoning, new theoretical ideas about the character education of gifted pupils were attained by seeking hypotheses based on observable facts (the demi-regularities) in the nexus of cultural beliefs, contextual contingencies and relationships, and political and educational implementations. Aside from cultural and belief-related factors, gifted education policy and practice affects the perspectives about giftedness and gifted individuals, and indirectly, the expectations regarding the character education of gifted individuals. An others-oriented or regarding character education policy also helps determine in what respect character education is considered important for gifted pupils. Theoretical redescription has brought to light how the views of the teachers in this study are constructed within cultural beliefs and contextual contingencies and relationships related to giftedness and character education. Therefore, they are central in understanding the importance of beliefs on character education for gifted pupils. Better understanding of these beliefs and contingencies in the context of broader empirical and theoretical literature can therefore

allow for new descriptions of the relevant phenomena, which is made possible through the final analytic phase, retroduction.

7.4.4 Retroduction

The retroduction stage was carried out to find and posit the mechanisms that could lead to the demi-regularities about the teachers' views on character and the contextual conditions that enabled them to be realised (Blom & Moren, 2011). This stage starts with the analysis of entities, which refer to things that make a difference in their own right (Fleetwood, 2005) in terms of their constitutive structures, powers, and liabilities. Within this theme, seven entities were determined through the empirical data and its contextual conditions: society, culture, beliefs, the gifted label, gifted child, gifted education policy, and character/values education policy. These entities, which are coming from empirical findings and contextual conditions, can all be said to have constitutive structures or properties, powers and liabilities, at the micro, meso, and/or macro level. There are also interactional relations between these entities; a change in one may lead to changes in the others (Easton, 2010). In discussing the causal mechanism that was retroduced in our analysis, the structures, powers, and relationships of these entities are explained in more detail. The underlying causal explanation which links the demi-regularities, entities, and causal mechanisms are illustrated in Figure 24.

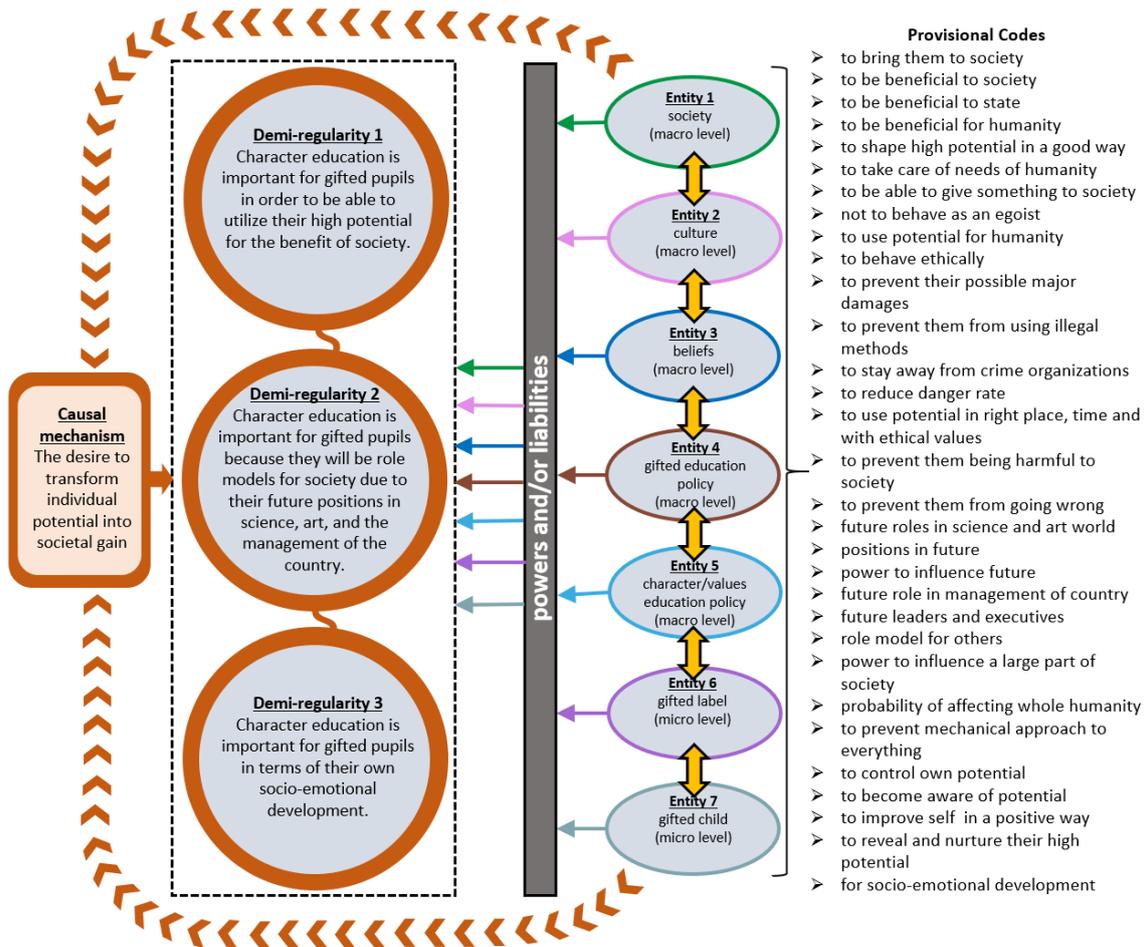


Figure 24: Retroduced causal explanation for beliefs about character education of gifted pupils

The desire to transform individual potential into societal gain appears to be the causal mechanism that we can derive from the empirical data of these views of the teachers in Turkey. The first two demi-regularities are directly focused on the societal dimension of character education for gifted pupils. In the first demi-regularity, the teachers have an instrumental conception of gifted pupils; to utilise success resulting from their high potential for the benefit of others. According to the teachers, the needs of, and benefits for, society are directly implicated. In the second demi-regularity, the teachers expect that gifted pupils will be the scientists, artists, and leaders of the future. According to these teachers, gifted pupils will be role models, thereby having a high impact on other people, due to their future positions. Here functionalist beliefs about the character education of gifted pupils supporting such roles were discovered. In the last demi-regularity, the societal dimension of character education is indirectly expressed. According to the teachers, character education is important for gifted pupils to complete their socio-emotional development. Here the teachers are indirectly still expressing beliefs about character education more widely than in purely

individualistic terms, as they think that the outcomes of character education and socio-emotional health, can benefit society. That is, here a developmental view is expressed that situates gifted pupils in the context of their society.

Similarly, the quantitative data also showed that the importance of character education for gifted pupils in terms of complete personal development had a significant positive association with other items that mostly consider the social effects of character education for gifted pupils. Society is both in the foreground and in the background of these demi-regularities and is therefore an essential element of any causal mechanism I may posit to explain these demi-regularities. In all three demi-regularities, there is an understanding that society is in some way both necessarily linked to, and impacted by, the gifted individual. In other words, policy derived from a mystery model in terms of identification (according to the categorization of Matthews & Foster, 2005) implicitly understands the gifted individual as coming into the world with a specific role relative to others; as a result of their potentialities and understood through the range of entities incorporated in the model. Teachers directed by such a policy appear also to have personal views that dovetail with it and think that this role should be promoted by expecting gifted individuals to take responsibility with respect to meeting societal needs and expectations. From this perspective, character education can be seen as a tool that can not only help accomplish these ends, but which is integral to the socialization expectations of the gifted child in relation to society. Therefore, the causal mechanism that leads teachers to evaluate character education for gifted pupils in terms of the demi-regularities seen here, is this socialized expectation of the transformation of individual potential into societal gain.

In a critical realist understanding, it is a combination of the entities, their structures, powers and liabilities that affect the impact of this causal mechanism. One of the entities that we posit here is the gifted label at the micro level of the individual. The current gifted education policy in Turkey identifies students who are gifted through an intelligence test. This label creates a privileged identity based on specific selection criteria. This identity brings with it high expectations. Pupils afforded this identity are seen as the future scientists, artists, and leaders of society. Hence, privileged identity and high expectations are the *powers* that reside in this entity. Another *power* created by this entity is that these pupils are accepted as role models in society due to their anticipated future positions and therefore, they are invested with the power to influence people. It would appear that there are a series of powers that come together in this identity, like the rings of a chain. Other entities are

influential at the macro level, the cultural and societal values and beliefs based on religion, experience, and policy, which have the *power* to shape – that is ascribe meanings to – the concept of the label (gifted) and the expectations of society about the character development of the gifted pupil.

There is a necessary relation between these entities. As seen in the initial codes, which are related to the identification of demi-regularities obtained from the responses of the participants; society expects gifted pupils: to be beneficial to society, to use their potential for the good of humanity, to take care of the needs of humanity, not to behave egotistically, to behave ethically, to be able to give something to society, to shape their potential, and to be a role model for others. It is expected that the gifted individual, through the powers ascribed to them, will do much more than other individuals in terms of their role and contribution to society, with considerable potential for positive and negative effects as a result. This therefore explains why, in respect of character education, it is considered to be important and appropriate that the gifted individual should consider others in relation to their potential from the moment of identification.

In this society-oriented character approach, meeting these considerable and far-reaching expectations and needs of society, also becomes a *liability* for the gifted pupil who has to conform and perform to expectations. Many teachers think that education on how this high potential; that is the power afforded to just a select few, should be used for the betterment of society and is therefore the rationale for the character education of gifted pupils. In other words, having high potential requires character education with respect to consideration of others and potential usefulness in and for society. In this way, critical realism allows us to understand how the causal mechanism of the desire to transform individual potential into societal gain – which is at the real level – leads to teachers' views about why character education is important for gifted pupils – which is at the empirical level – by considering contextual conditions.

The discovered causal mechanism shows that a societal consideration which consists of a mix of communitarianism/virtue ethics and the ethics of caring, represents the foundation of the teachers' views related to the importance of character education for gifted and is not based only on the individualist approach of Kantian reasoning. This suggests a more in-depth intersection with a particular paradigm of character education, rather than observation of empirical behaviours and stated belief alone might. This mechanism is

activated in specific ways in this context and may occur differently depending on differing contextual conditions. The stratified explanation and the causal mechanism provide information about the underlying foundation for how character education for gifted pupils is conceived and directed. Whilst teachers do of course have different views at the empirical layer, they largely have the same intention at the real layer, which is consideration of the societal contribution. This perspective underplays the self-regarding part of character education for gifted pupils. This conclusion – having knowledge about the mechanism that leads to teachers’ views about the phenomenon – therefore offers in-depth understanding which can promote more effective suggestions or solutions for policy and practice. The suggestions of this causal mechanism for the policy and practice are explained in more detail in the concluding chapter.

7.5 Research Question 4

What are the challenges and needs in terms of teachers' perspective in actualizing the character education of gifted pupils?

7.5.1 Qualitative part: Identification of demi-regularities

Data collected were firstly coded, which leads to the demi-regularities (or patterns) as conceptualised in a critical realist approach. First, all the data was coded thematically using a data-driven inductive approach (Boyatzis, 1998; Braun & Clarke, 2006) and a total of 30 provisional codes were generated (see Table 17 below), 17 of which are about challenges and 13 of which are about needs that explain what the challenges and needs are in terms of the teachers' perspectives on actualizing the character education of gifted pupils. Important for this stage of initial coding and identified in the literature review, was the consideration of teacher beliefs and experiences, the realities as defined by the participants, and the cultural effects of discourses about the character development and education of gifted pupils (Braun & Clarke, 2006).

Firstly, the 17 codes about challenges were gradually reduced during the second coding cycle, as they were re-organized and combined in the framework of a macro, meso, and micro conceptual map informed by critical realism (Blom & Moren, 2011). These critical realism-informed categories were: (1) teacher-based at the micro-level, including the category of *personal opinions and choices of teachers*; (2) family and environment-based at the meso-level, including the category of *positive discrimination of the family and environment towards the child*; and (3) gifted education policy-based at the macro-level, including the categories of *gaps in the policy and practices*, which were presented in Table 17 below.

Table 17: Critical realism-informed codes and categories about the challenges and needs in actualizing character education of gifted pupils

Themes	Conceptual map levels	Categories	Provisional codes
Challenges in actualizing the character education of gifted pupils	Micro-level (teacher-based)	Personal opinions and choices of teachers	Depending on the teacher's initiative, Depending on personal effort/investigation of the teacher, Personal/subjective choice of resources by the teacher, Lack of knowledge of the teacher about character education of gifted pupils, Inadequacy of teacher education in gifted education, Developing a personal method over time based on personal experience, Differences in definitions of values arising from personal experience and opinion of the teacher, Insufficiency feeling about the interests and needs of gifted pupils
	Meso-level (family and environment-based)	Positive discrimination of the family and environment towards the child	The mission loaded by the family on to the child, Tolerance of the family of everything about the child, High expectations of the family and environment, Privilege created by the family and environment
	Macro-level (gifted education policy-based)	Gaps in the policy and practices	Deficiency in the frame plan, Inadequacy of values education regulation, Limited resource, Reliability of the resources in this field, Lack of curriculum, Deficiency of clear regulation
Needs in actualizing the character education of gifted pupils		Mostly focusing on academic works	More academic oriented program, Time limitation, structure of the SACs
	Micro-level (teacher-based)	Need for teacher training	Course in undergraduate education, Compulsory internship, In-service training, Separate discipline
	Meso-level (family-based)	Need for family training	Family training program, Coordination between family and school, Systematic support, Simultaneous training model
	Macro-level (gifted education policy-based)	Need for a scientific resource	Scientific resource prepared by experts, A resource including common definitions of universal values, Universal resource, Clear-understandable-applicable resource
		Need for scheduled time	Scheduled time, Creating specific time
		Need for a clear regulation	An activity plan or specific clear regulation
	Need for a separate directorate in the Ministry of National Education	Separate directorate in the Ministry of National Education	

As seen, the macro level encompassed more political level effects, the meso level relational aspects, and the micro level focused on the individual impact of the teacher. While coding all data, all codes were considered important; however, the most dominant codes were used as a starting point to identify ‘demi-regularities’ at the empirical level of reality (O’Mahoney & Vincent, 2009). This context determines how and whether they are actualized and so full regularity in terms of their actualization is virtually meaningless here; it will always be (at least theoretically) a partial actualization that is in evidence. The top level coding led to the generation of three demi-regularities about the challenges: (1) Leaving the character education of gifted pupils to teachers’ personal opinions and choices is a challenge faced in this field; (2) the positive discrimination of the family and environment towards the child is a challenge faced in the character education of gifted pupils; and (3) the gaps in the policy and practices in terms of time, resources, and regulation is a challenge faced in the character education of gifted pupils. These are presented in Figure 25 below.

Afterward, the 13 codes about needs were gradually reduced during the second coding cycle, as they were re-organized and combined in the framework of a macro, meso, and micro conceptual map: (1) teacher-based at the micro-level, including the category of *need for teacher training*; (2) family-based at the meso-level, including the category of *need for family training*; and (3) gifted education policy-based at the macro level, including the categories of *filling the gaps in the relevant policy and practices* (see Table 17 above). In parallel to the challenges presented above, this coding also provided for the generation of the three demi-regularities about needs: (1) There is a need for teacher training about gifted education to help the character education of gifted pupils; (2) there is a need for family training about gifted education to help the character education of gifted pupils; and (3) there is a need for clear regulations in the relevant policy and practices in terms of providing time, resources, and a separate directorate for the character education of gifted pupils (see Figure 25 below).

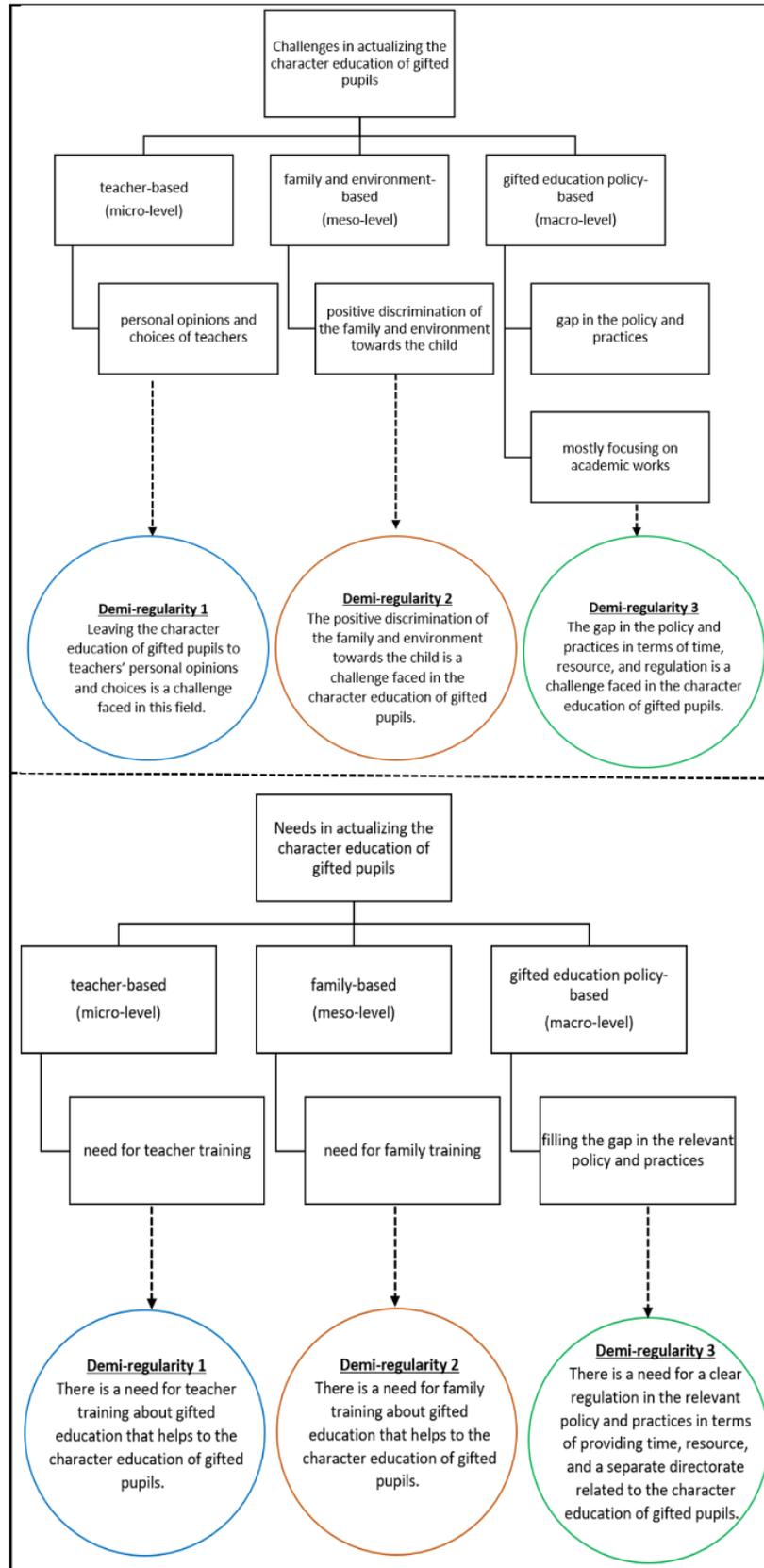


Figure 25: Thematic map of the demi-regularities about the challenges and needs in actualizing character education of gifted pupils

In the first demi regularity, leaving the character education of gifted pupils to teachers' personal opinions and choices is seen a challenge faced in this field. This challenge also gave rise to the need for teacher training in gifted education to help the character education of gifted pupils. In nine of the SACs (except SAC 7), most of the teachers agreed about this.

I think teacher education is not enough in this field. I received a special education course for 2 years, but we didn't speak ever about gifted students. We mostly focused on what could be done for students with learning disability. We say that the characters of the specially talented students are different, but I don't know a hundred percent how to approach them. (SAC 1)

We did not take a course related to this in the undergraduate program and the topic of gifted children was mentioned a few times in the lectures. But I think it is necessary to receive training about gifted children as a teacher. I didn't know what to do when I first came here. (SAC 1)

Every teacher determines his/her own method over time based on personal experience. That is all. (SAC 1)

Everyone defines values according to their own experiences and personal opinions and transfer them to children. Thus, the meaning of values also change from person-to-person. Here is the problem. (SAC 1)

I think a separate discipline for gifted education should be in the faculties of education. Actually, there are, but it is not enough. I came to the SAC because I have specially talented children, so I wondered about this field. We are learning by doing and experiencing, but there should be a different training for teachers who will work in these schools. (SAC 2)

We have not received any training in this field. There was a workshop on special talent, and it was not detailed. We learn by ourselves by investigating. There is no course in faculties of education related to this subject in the previous years. There was special education course, but it was about mostly individuals with mental disabilities. (SAC 2)

In general, our teachers are trying to integrate values into their subjects. It's entirely up to the teacher's initiative. In the SACs, activities related to values are left to the initiative of teachers. The teacher may decide to add new values or take out some values. At this point, our programs are flexible. This challenges us in the character building of gifted children because there is uncertainty. (SAC 2)

I think there should be a separate teacher training, like an in-service training, for particularly the SAC teachers. I don't think our training is enough in this field. (SAC 3)

We had a special education course at the university. However, our course was related to children with mental retardation or children with learning disability. There was no information about gifted children. (SAC 3)

Here, there are personal differences that cause the complexity in transferring the values. There is no scientific resource, the resource is us and the internet. It was

left to the initiative of the teacher although teachers don't have sufficiency in this field. (SAC 3)

Teachers who start to work with specially talented children are amazed at the beginning, because having theoretical information about specially talented children is not enough. Before coming here, teachers must have intensive in-service training, they must have experience or do internship, the Ministry should provide this training. Otherwise, the first year here passes with recognizing and observing these children. We are insufficient in the face of the interests and needs of specially talented children and most of our time goes to recognizing them. There is such a gap in this area, there are so many missing. (SAC 4)

I don't think teacher training is enough, I didn't get anything about it in the undergraduate program. We hadn't any course about it, we were informed about inclusive education. In teacher education, I mean undergraduate education, every student is seen as normal. What we gained by our own efforts, that is all. (SAC 4)

We did not take any lessons about gifted children and their characteristics. We here started from zero. We became a teacher, entered the class, and then we learnt inclusive education and the individualized education program for specially talented students. (SAC 4)

I can say that the values education of gifted children is composed of what the teachers do individually. I think that we are lacking at this point. Since there is no certainty, everything related to it depends on the personal effort of the teacher. But I think something must be done. (SAC 4)

I think teacher training is incomplete in this sense and I don't think our teachers are enough in this regard. (SAC 5)

There is only a special education course in the teacher education and the topic of gifted education was limited, the topics were mostly related to learning disability. (SAC 6)

The choice of resources is subjective. It depends on my personal choices again. Which value we give with which perspective is important and this is subjective without a resource. The point of view of the given values varies from person to person, from institution to institution. (SAC 6)

Here, we are like a counsellor rather than a teacher for these children. They assume us so. Therefore, we need to have more knowledge about them to help their character development and education. (SAC 6)

While I was getting pedagogical training, we talked about gifted education. We talked about gifted children's achievements and how they can gain the right to go to the SAC, rather than their socio-emotional development, and books also do not go beyond that. However, an in-service training including other topics about gifted education may be good. (SAC 7)

Before coming to the SACs, informing about gifted education should be done to teachers, a workshop may be done about it. (SAC 7)

There is a character education on the initiative of the teacher. The most important thing is consistency. (SAC 8)

We accept what is given to us as true, we make an explanation based on this, that is, based on our background or experiences. The matter is this. (SAC 8)

I do not know exactly how to give character education to a child, even if this child is gifted. I am devoid of this training. (SAC 9)

I didn't take any course about these children when I was at the university. However, definitely, it should be given. In this field, I think more experience means a better teacher, therefore, the experience is gaining importance in this field. (SAC 10)

I do not have any resource to provide character education. I give information about values by relying on my personal belief, my opinion, my personal knowledge, and my personal experience. So, it is too subjective. (SAC 10)

I think extra training about gifted education should be provided in the faculties of education. Even, compulsory internship in the SACs can be provided to gain teaching experience. (SAC 10)

The second demi regularity is “the positive discrimination of the family and environment towards the child is a challenge faced in the character education of gifted pupils.” This challenge also gave rise to the need for family training about gifted education that helps the character education of gifted pupils. In seven of the SACs (SAC 1, 2, 3, 4, 5, 8, and 9), most of the teachers agreed about this.

Families are loading a mission on to these children. However, the child cannot carry this mission of the family and the child begins to suffer. The character development of these children is neglected because of being ascribed a great meaning to their cognitive development by their families. (SAC 1)

The parents of gifted children should be trained, family seminars should be done. The most important factor that negatively affects these children is the family. After the child is identified as specially talented, everything about the child is tolerated by families. (SAC 1)

Family training should be arranged in a coordinated manner with the school and classroom. Character education can only be actualized in this way. (SAC 2)

I think there should be systematic support. Firstly, in-service training should be carried out and then a co-ordinately family and teacher training. If the family does not support the teacher, it is a matter. In this sense, the Ministry of National Education should provide a coordinated training. (SAC 3)

When registering to the SACs, a condition should be, for example, completing the family training program. Absolutely, this is very important. (SAC 3)

The family is as important as scientific materials and should be incorporated into the process. (SAC 3)

High expectations of the families and environment from their specially talented children create a feeling of insufficiency in these children. Here, children are busy with satisfying these expectations of families. The expectations of families are bigger than their children. (SAC 4)

When a child is identified as specially talented, the first discrimination towards him/her starts in the family. The family discriminates this child from his/her siblings. That is, the family takes more care of this child, and the family even makes their immediate environment feel that this child is specially talented. Hence, this child gains a privileged position in the family and environment. This situation, that is, the inadequacy of the family, immediate environment, and school system creates a caprice and behaviour disorder in the specially talented child. An atmosphere reveals in which the child can say everything he/she wants, can exhibit any behaviour he/she wants, get what he/she wants. The child thinks he/she is right every time. (SAC 5)

Training about specially talented children should be given to both teachers and families. I think, it can be useful to provide a standard program in this regard. I mean a simultaneous model for the family, teacher, and child. I think it would be useful to support these corners of the triangle. (SAC 8)

The family is more important than school in character education, because it starts in the family and children's time is limited in schools. (SAC 9)

The third demi regularity is "the gaps in the policy and practices in terms of time, resource, and regulation is a challenge faced in the character education of gifted pupils." This challenge also gave rise to the need for clear regulations in the relevant policy and practices in terms of providing time, resources, and a separate directorate related to the character education of gifted pupils. In seven of the SACs (SAC 1, 2, 3, 4, 5, 6, and 7), most of the teachers agreed about this.

In fact, resources on this subject are limited and we do not have any special material. So, following a random path is not effective due to resource inadequacy. (SAC 1)

Surely, the definitions of values should be the same. There is actually a need for a resource including common definitions of the universal values. Maybe a handbook. (SAC 2)

We cannot do big activities because our time is limited here. There is a need for a planned time for this. Otherwise, I do not know how this will be possible. (SAC 2)

Having a resource about values or character education for specially talented children will make our task easy. Because everything depends on our effort. We don't have a reliable resource about that, of course, this is a matter. (SAC 2)

The Board of Education and Discipline should prepare a curriculum and determine the topics in this field for each week. There should be a scheduled time for that. That is, character education of specially talented children should be handled more professionally in the education world. For this, there must be a separate directorate. (SAC 2)

We focus on more academic knowledge rather than character education because we give 2 or 4 hours to a child in a week, so time is limited. The regulation regarding that should be clearer. (SAC 2)

Our children are very busy with academic and artistic programs, they have no time for anything. This also prevents us from providing character education. (SAC 3)

Even if we have a plan regarding values education for each month, the values education regulation is not enough and clear, 10 or 15 values cannot be enough. (SAC 3)

There should be a unique directorate for gifted education within the Ministry of National Education. We need someone to lead us. Unfortunately, there is no such a thing. (SAC 3)

Materials from the internet we find do not have a scientific substructure. We need an activity handbook prepared by experts. While there is a traffic lesson in the curriculum, why there is no lesson on values education. (SAC 3)

The values education regulation is not enough, it is limited and unclear in terms of explaining values to specially talented children. (SAC 4)

Our school does not focus on the values in the regulation, everyone is trying to explain individually what they need in their own disciplines. For example, scientific ethics is very important both for me and my discipline, so I always concentrate on explaining it to children. However, an activity plan or a specific clear regulation in this field for the SACs should be prepared. The individual plan, choice or personal effort of a teacher are not enough. (SAC 4)

Here we focus on mostly academic knowledge because time is limited. Mostly, the character education of these children is neglected. We should create specific time for this. (SAC 5)

I don't think the values education is scientifically conducted. It will be very good to support values education through universal, common scientific studies, and values rather than individual views, experiences, or political views. It is very flexible area, so it is based on personal opinions, it may also cause misleading instructions. I think it would be better to provide planned time, space, and universal resource. (SAC 5)

We don't have any practice about that. This is also related to the structure of the SACs. A student comes to us for 4 hours in a week or 6 hours in a week. When we spend time with him/her, we focus on the content of the lesson, we cannot create time about values education. However, absolutely it should be, it is very important. (SAC 5)

Resources and materials may be presented to teachers, teachers may practice them and give feedback. We can contribute to improving them. The resources or materials should be clear, understandable, and applicable step by step. (SAC 6)

In our frame plan, there is no outcome related to values education of specially talented pupils, the outcomes are mostly academic and cognitive. That is, although there are aims for values education of specially talented children in the frame plan, there are no outcomes regarding it in the frame plan. This is also another dimension of this situation. (SAC 7)

This phase of data processing constitutes the generation of the empirical demi-regularities developed from the qualitative data (teachers' perspectives) about the challenges and needs in actualizing the character education of gifted pupils, from the codes at the macro, meso, and micro levels.

7.5.2 Quantitative part: Statistical analysis related to the demi-regularities

To complement the findings from the qualitative interviews, although the focus was very much on the qualitative experiences and opinions of teachers, the survey data was used descriptively to assess to what extent teachers, who work in other SACs and did not attend the focus group interviews, agree with these demi-regularities (*descriptive analysis*) and to investigate relationships between the demi-regularities (*correlation analysis*) without making causal attributions (Ron, 2002). Turning to quantitative data related to demi-regularities about challenges, descriptive statistics (see Figure 26, 27, 28, 29, and Table 18 below) revealed that 38% of the participants somewhat agreed, 19% of the participants agreed, and 4% of the participants strongly agreed that character education of gifted pupils is left to teachers' subjective opinions and choices ($M=3.62$, $SD=1.20$). This means that approximately 61% of the participants assumed to different degrees that character education of gifted pupils is left to teachers' opinion and personal choices.

For the second challenge, 36% of the participants somewhat agreed, 24% of the participants agreed, and 19% of the participants strongly agreed that after a child is identified as gifted, the positive discrimination of the family and the environment towards the child is a factor that negatively affects the character development of the gifted child ($M=4.36$, $SD=1.13$). That is, approximately 79% of the participants assume to varying extent that the diagnosis as gifted causes a positive discrimination from the family and immediate environment towards the child and this negatively affects the character development of the child. Thirdly, 29% of the participants somewhat agreed, 43% of the participants was agreed, and 15% of the participants strongly agreed that there are gaps in the policy and practices on character education of gifted pupils ($M=4.53$, $SD=1.02$). This means that approximately 87% of the participants to some extent assume that there are gaps in the policy and practices on character education of gifted pupils. This was the most agreed upon challenge by the participants.

For the last challenge, 28% of the participants somewhat agreed, 38% of the participants agreed, and 14% of the participants strongly agreed that the education programs

focused mostly on academic development and neglects the character development of gifted pupils ($M=4.39$, $SD=1.11$). That is, approximately 80% of the participants, to different degrees, share the assumption that the intense focus on academic skills in education programs causes the character development of gifted pupils to be neglected.

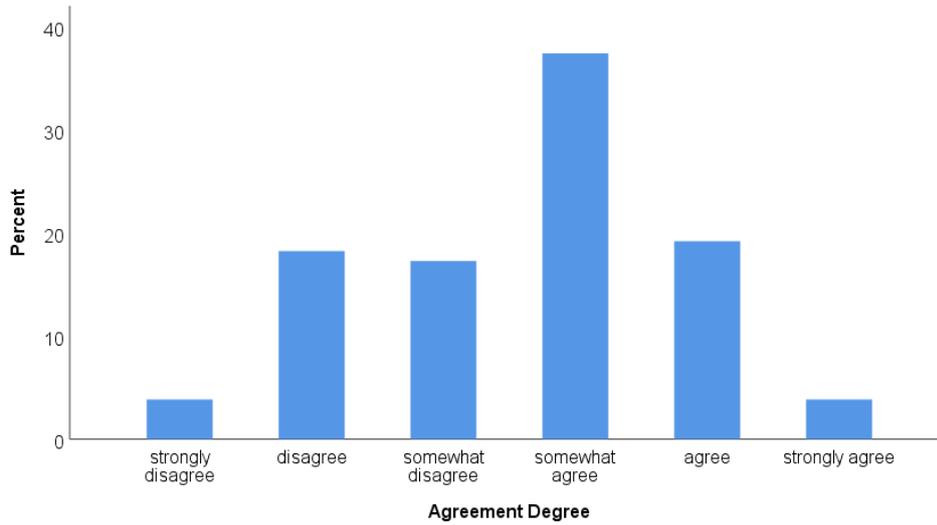


Figure 26: Participants' agreement degree on character education left to teachers' subjective opinions and choices

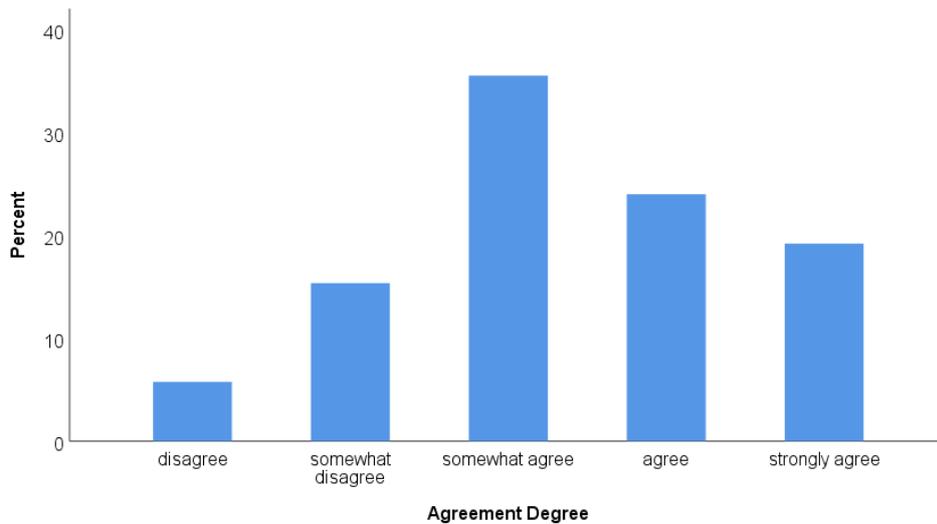


Figure 27: Participants' agreement degree on the negative effect of the positive discrimination of the family and the environment

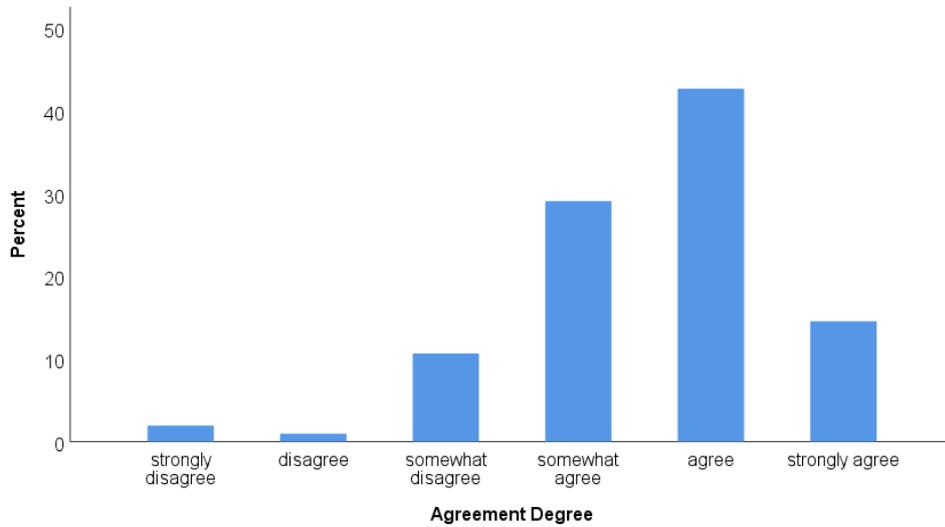


Figure 28: Participants' agreement degree on the gaps in the policy and practice on character education of gifted pupils

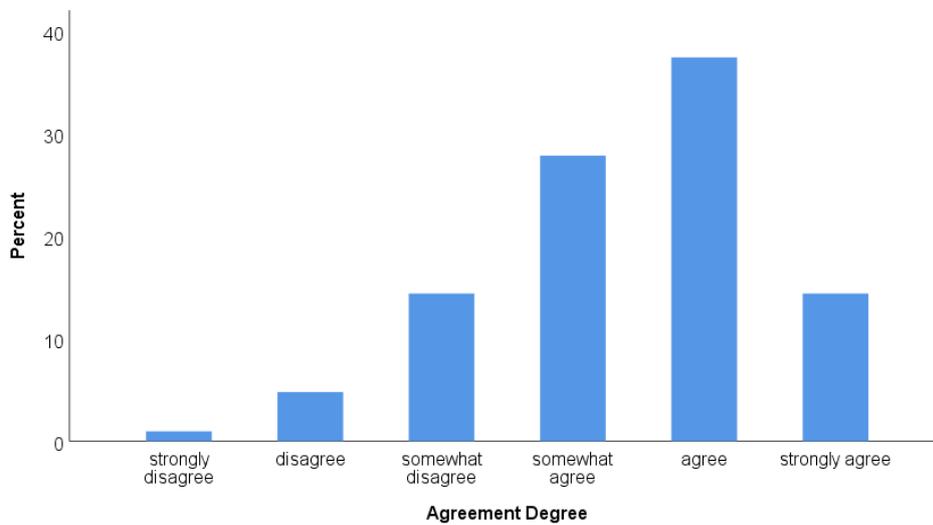


Figure 29: Participants' agreement degree on the negative effect of education programs oriented mostly to academic development

Table 18: Descriptive analysis of the items related to the challenges and needs in actualizing the character education of gifted pupils

Items	M	SD	Skewness	Kurtosis
Part5 (Challenges and needs)				
14. Character education of gifted pupils is left to teachers' subjective opinions and choices.	3.62	1.20	-.25	-.57
7. After a child is identified as gifted, the positive discrimination of the family and the environment towards the child is a factor that negatively affects the character development of the gifted child.	4.36	1.13	-.16	-.64
15. There are gaps in the policy and practices on character education of gifted pupils.	4.53	1.02	-.89	1.46
6. The education programs are focused mostly on academic development and neglect the character development of gifted pupils.	4.39	1.11	-.57	.02
16. There is a need for in-service training for teachers about the social and emotional development of gifted pupils.	5.27	.08	-1.56	2.77
17. There is a need for a family training program for the families of gifted pupils for character education of gifted pupils.	5.27	.08	-1.27	-1.56
18. There is a need for a scientific resource including virtues descriptions and activities related to them for character education of gifted pupils.	4.85	.09	-.96	1.06
19. There is a need for a scheduled time for character education of gifted pupils.	4.88	.09	-1.06	1.37
20. There is a need for a clear regulation about character education of gifted pupils.	4.95	.08	-.77	.52
21. There is a need for a separate directorate within the Ministry of National Education for the education of gifted pupils.	4.84	.12	-1.23	1.10

Turning to quantitative findings related to the teachers' perceptions of educational needs, descriptive statistics (see Figure 30, 31, 32, 33, 34, 35 below, and Table 18 above) revealed that 7% of the participants somewhat agreed, 40% of the participants agreed, and 48% of the participants strongly agreed that there is a need for in-service training for teachers about the social and emotional development of gifted pupils ($M=5.27$, $SD=.08$). That is, approximately 95% of the participants think to some degree or other that there should be teacher training on the social and emotional development of gifted pupils. This was among the most agreed upon needs by participants in the study survey. Similarly, 11% of the participants somewhat agreed, 36% of the participants agreed, and 49% of the participants strongly agreed that there is a need for a family training program for the families of gifted pupils for character education of gifted pupils ($M=5.27$, $SD=.08$). Hence, approximately 96% of the participants agree to some extent that there should be a family training program for the

families of gifted pupils. This was the most agreed upon need by the survey participants in this study.

Looking at the needs regarding gifted education policy, 18% of the participants somewhat agreed, 50% of the participants agreed, and 23% of the participants strongly agreed that there is a need for a scientific resource including virtues descriptions and activities related to them ($M=4.85$, $SD=.90$). That is, approximately 91% of the participants agree to some extent that there is a need for a scientific resource for character education of gifted pupils. Similarly, 15% of the participants somewhat agreed, 53% of the participants agreed, and 23% of the participants strongly agreed that there is a need for a scheduled time for character education of gifted pupils ($M=4.88$, $SD=.09$). This means that approximately 91% of the participants agree – although the degree of agreement varies – that a scheduled time is needed for character education of gifted pupils.

18% of the participants somewhat agreed, 48% of the participants agreed, and 28% of the participants strongly agreed that there is a need for clear regulation about the character education of gifted pupils ($M=4.95$, $SD=.08$). Hence, approximately 94% of the participants agree to some extent that clear regulation about character education of gifted pupils is needed. Lastly, 17% of the participants somewhat agreed, 35% of the participants agreed, and 36% of the participants strongly agreed that there is a need for a separate directorate within the Ministry of National Education for the education of gifted pupils ($M=4.84$, $SD=.12$). This means that approximately 88% of the participants agree to varying degree that a separate directorate within the ministry for the education of gifted pupils is needed.

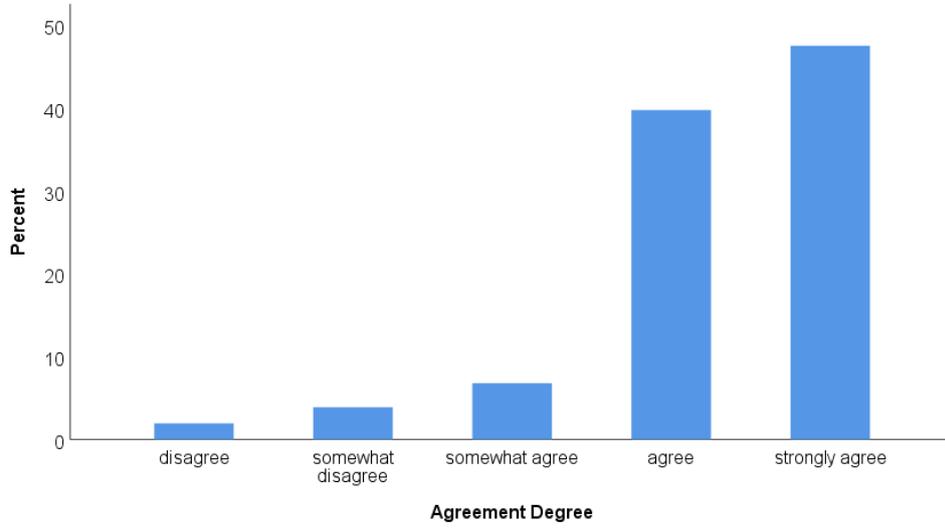


Figure 30: Participants' agreement degree regarding the need for in-service training

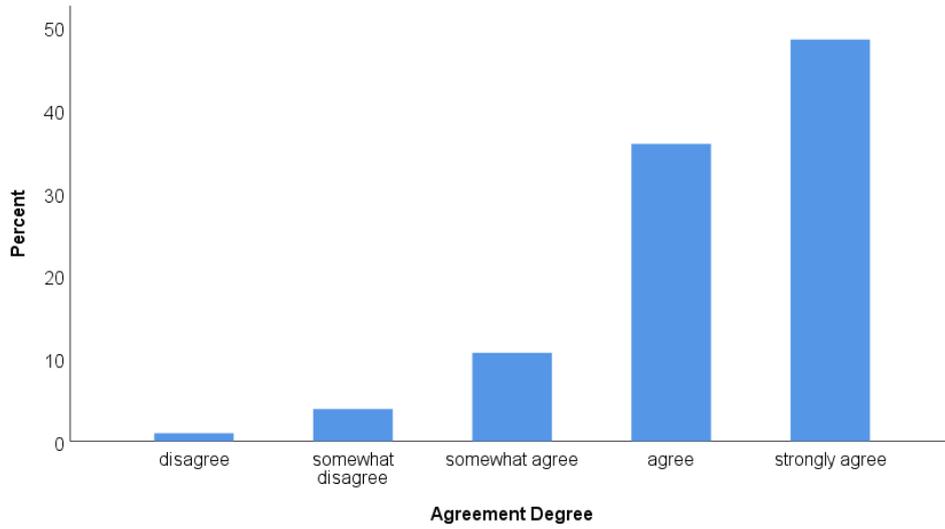


Figure 31: Participants' agreement degree regarding the need for family training program

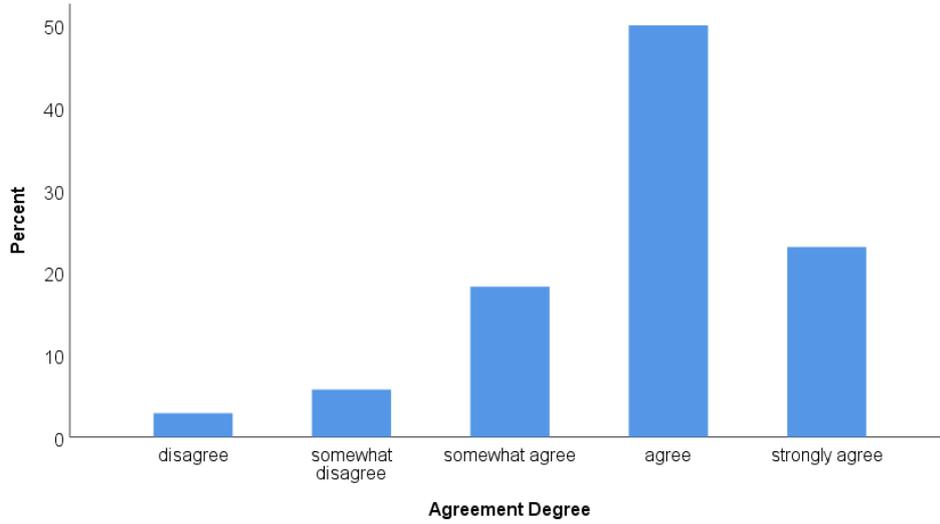


Figure 32: Participants' agreement degree regarding the need for a scientific resource

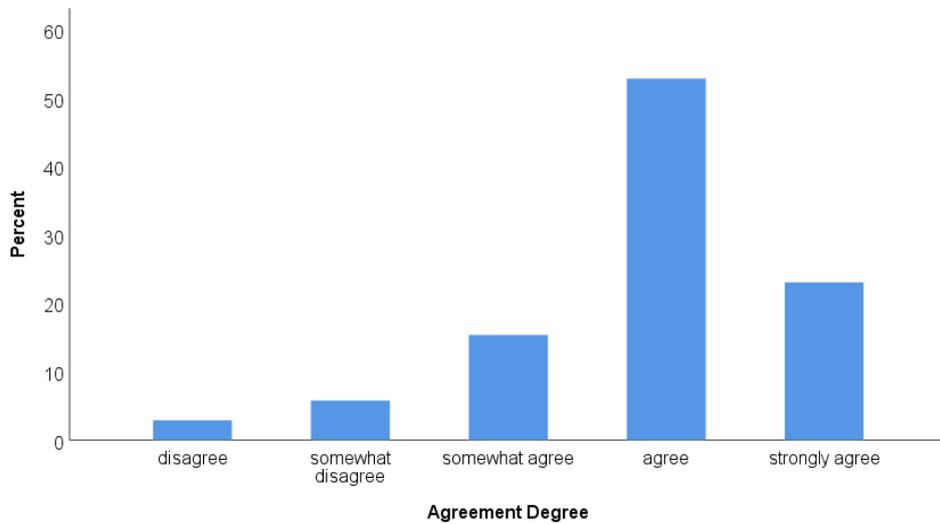


Figure 33: Participants' agreement degree regarding the need for a scheduled time

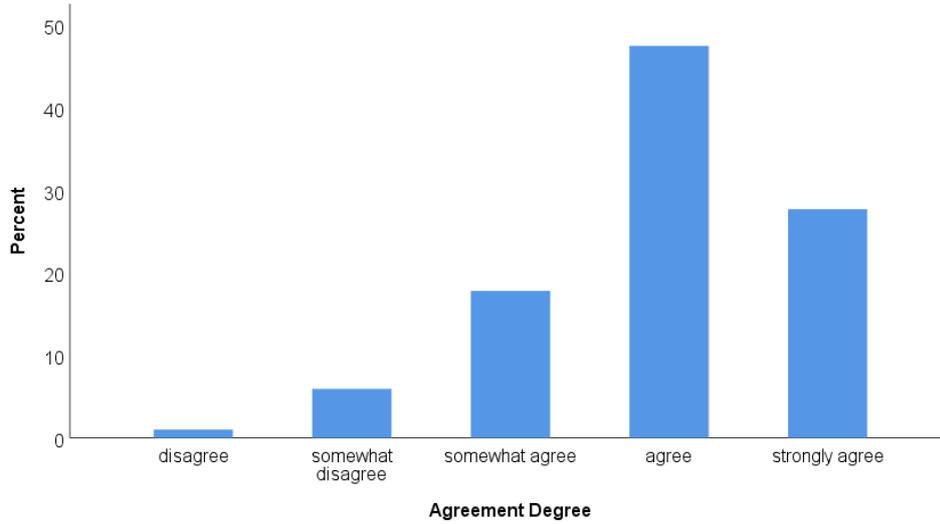


Figure 34: Participants' agreement degree regarding the need for clear regulation

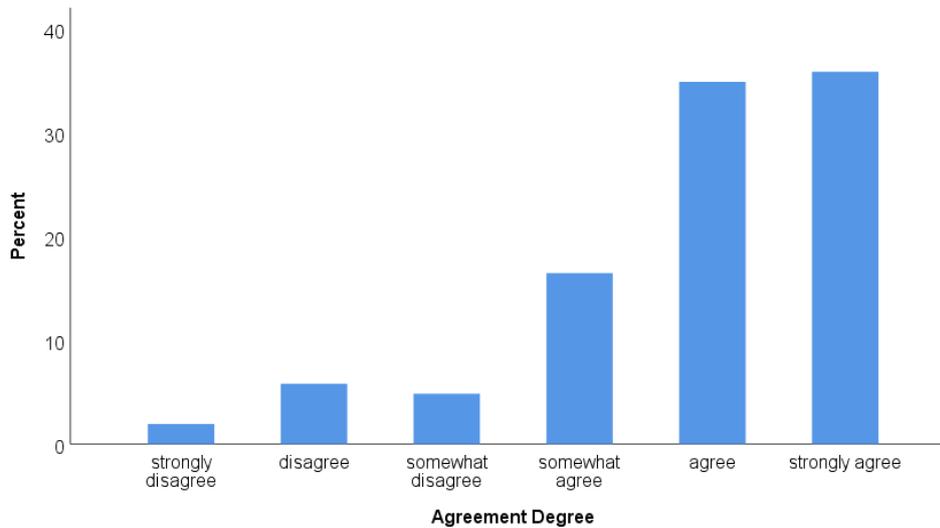


Figure 35: Participants' agreement degree regarding the need for a separate directorate for gifted education in the Ministry

To see the symmetrical distribution of the scores of the responses, skewness was tested for. Each of the items related to both challenges and needs was negatively skewed (see Table 18 above), indicating that participants were more likely to agree to the items. To analyse distribution of the scores of the responses, kurtosis was tested. In general distribution was abnormal with most items concentrated. Only four items showed an excess kurtosis of

close to 0 (see Table 18 above). Correlation analysis was then conducted, which is presented in Table 19 below. The correlations show that character education of gifted pupils being left to teachers' subjective opinions and choices had a significant positive relationship with gaps in the policy and practices on character education of gifted pupils ($r=.32$, $p<.05$). That is, the participants who think that character education of gifted children is left to the teacher's subjective opinion and choice are also likely think that there are gaps in the policy and practice on the character education of gifted pupils.

The positive discrimination from the family and environment towards the child after the child is identified as gifted had a significant positive relationship with the neglect of the character development of gifted pupils because of mostly academic development-oriented education programs ($r=.55$, $p<.05$). Assuming that the teachers' perspectives are reflective of reality, this may be seen as evidence that the two factors are mutually supportive. In other words, as the focus on academics increases in education programs that neglect character development, character development will be even more neglected. This will serve to increase the negative effect of positive discrimination by the family and environment on the character development of the gifted child.

Similarly, the education programs that focused mostly on academic development and neglect the character development of gifted pupils had a significant positive relationship with the perception of gaps in the policy and practices on character education of gifted pupils ($r=.43$, $p<.05$). This means that participants who think education programs focus mostly on academic development and neglect the character development of gifted pupils were also likely to think that there are gaps in the policy and practices on character education of gifted pupils. The perception that gaps in the policy and practices on character education of gifted pupils, had a significant positive relationship with both the need for clear regulation on character education of gifted pupils ($r=.53$, $p<.05$) and the need for a family training program for the families of gifted pupils ($r=.45$, $p<.05$). That is, the participants who think there are gaps in the policy and practices on the character education of gifted pupils also likely think that there is a need for clear regulation and a family training program regarding this.

Another notable significant positive correlation is between the need for clear regulation about character education of gifted pupils and the need for family training program ($r=.64$, $p<.05$). Similarly, the need for clear regulation also had a significant relationship with the need for a scientific resource ($r=.64$, $p<.05$). This means that the

participants who think that there is need for a clear regulation about character education of gifted pupils also likely think that there is need for a family training program and a scientific resource in this field. The need for a family training program for character education of gifted pupils had a significant positive association with both the need for in-service training for teachers ($r=.55, p<.05$) and the need for a scientific resource ($r=.46, p<.05$). In other words, the participants who think there is need for a family training program also likely think there is need for in-service training for teachers and the need for a scientific resource.

The need for in-service training for teachers had a significant positive relationship with the need for clear regulation ($r=.42, p<.05$). Similarly, the need for a scheduled time for character education of gifted pupils had a significant positive relationship with the need for clear regulation ($r=.49, p<.05$). In other words, the participants who think there is need for a scheduled time also likely think there is need for a clear regulation. This is not surprising since proper scheduling would be normal in a well regulated system. Similarly, there is a significant positive association between the need for a separate directorate within the Ministry of National Education for character education of gifted pupils and the need for a clear regulation ($r=.44, p<.05$). Again it can be seen that the desire for a separate directorate would be seen as supportive of clear regulation by the participants. These findings mean that the need for a clear regulation had a significant positive relationship with the other all needs (in-service training, family training, scientific resource, scheduled time, and separate directorate within the ministry). Lastly, the need for a scientific resource had a significant positive relationship with the need for a scheduled time for character education of gifted pupils ($r=.60, p<.05$). That is, participants who agree on there is a need for a scientific resource also likely agree on there is a need for a scheduled time for character education of gifted pupils. Overall, the statistics show no discrepancy in the consistency of the teachers' views. They support the utility of the qualitative data in determining what is going on in the context of the study.

Following critical realist ontology and epistemology (where there is a 'real' world and it is theory-laden, not theory-determined), all explanations of reality, including those obtained by and from research participants, theorists, and scientists, are treated as fallible (Bhaskar, 1979). There is no superiority between scientific explanations, or participants' views and experiences, in the sense of how data can help us find explanations for social phenomena. However, participants' views and experiences may be positioned as a challenge to existing scientific knowledge and theories (Redman-MacLaren & Mills, 2015) in terms of

understanding how events have come to be as they are. From coding, identifying demiregularities and statistical analysis, data are then conceptualised through relevant theoretical ideas, using abductive reasoning.

Table 19: Correlation coefficients between the items related to the challenges and needs in actualizing character education of gifted pupils

Items	14. ...	7. ...	15. ...	6. ...	16. ...	17. ...	18. ...	19. ...	20. ...	21. ...
14. Character education of gifted pupils is left to teachers' subjective opinions and choices.										
7. After a child is identified as gifted, the positive discrimination of the family and the environment towards the child is a factor that negatively affects the character development of the gifted child.	.15									
15. There are gaps in the policy and practices about character education of gifted pupils.	.32**	.29**								
6. The education programs focus mostly on academic development and neglect the character development of gifted pupils.	.25*	.55**	.43**							
16. There is a need for in-service training for teachers...	.00	.28**	.30**	.32**						
17. There is a need for a family training program...	.05	.30**	.45**	.30**	.55**					
18. There is a need for a scientific resource...	.12	.25*	.38**	.28**	.40**	.46**				
19. There is a need for a scheduled time...	.05	.27**	.28**	.32**	.35**	.40**	.60**			
20. There is a need for clear regulation...	.22*	.25**	.53**	.26**	.42**	.64**	.64**	.49**		
21. There is a need for a separate directorate within the Ministry of National Education...	-.00	.17	.16	.28**	.35**	.42**	.27**	.36**	.44**	

For Spearman $r^ < .05$ $r^{**} < .01$*

7.5.3 Abduction

After identifying the demi-regularities coming from the qualitative data and presenting their descriptive and correlation analyses coming from the quantitative data, this stage was carried out in order to identify the deep processes related to the challenges and needs under the contextual conditions of the study. Whilst explaining them, we move away from individual beliefs and opinions about the challenges and needs to examine more closely the relationships, interactions, and the context in which they are experienced by those involved (Shank, 1987). For the purposes of this study, I examined the challenges and needs in actualizing character education of gifted pupils in 3 subheadings: (1) teacher training at the micro level, (2) family training at the meso level, and (3) policy and practices at the macro level, in parallel to the demi-regularities.

7.5.3.1 Teacher training

Teacher training was one of the most visible stressing elements (on the teachers) in the challenges and needs related to character education of gifted pupils topic discussed by teachers in the SACs. Here we begin by an examination of the literature that examines the connection between gifted education policy and teacher education/training policy. To be able to purposefully educate gifted pupils, teachers also need a clear goal and training related to gifted education (Hansen & Feldhusen, 1994). That is, there must be a concordance between gifted education policy and teacher education/training policy. According to some teachers that attended the interviews in the SACs, there are general goals about values education of gifted pupils, but no outcome expectations related to them in the annual frame plan. Hence, the lack of a clear or specific goal and outcome plan for teachers regarding character education of gifted pupils may cause them to neglect this aspect in gifted education. In addition, according to many teachers in the SACs, they do not know how they should approach gifted pupils; they did not have any detailed course about gifted education in their undergraduate programs and in later training.

Several teachers who attended an in-service training related to gifted education also stated that they were informed only about the general cognitive traits, achievements of gifted children, and how they gain the right to be a student of the SACs. Teachers therefore benefit from the personal advice and experiences of their colleagues, and every teacher develops over time their own approach or method for gifted pupils (see the codes in Table 17). In other words, the process progresses depending on the teacher's individual effort. Some teachers

undoubtedly can acquire skills to satisfy the needs of gifted students through experience (Feldhusen, 1997). However, it is seen that not knowing how to approach gifted pupils may cause teachers to feel themselves inadequate in gifted education. This also may lead the teacher to approach the gifted child on the basis of the socio-cultural profile drawn for the gifted child (see the analysis of research question 2).

Consequently, in this research context, it takes a long time for a teacher to reach a feeling of adequacy in gifted education. Character education for gifted pupils has still not been fully clarified for both pupils and teachers in spite of there being a separate policy and practice on gifted education. Similarly, the quantitative data shows that approximately 61% of participants assume to some extent that the character education of gifted pupils is left to the teachers' opinions and personal choices ($M=3.62$, $SD=1.20$). That is, both qualitative and quantitative data reveals that there is no congruence between gifted education policy and teacher training policy; this is the source of teacher-driven challenges and needs at the micro-level. Accordingly, many teachers who attended the interviews in the SACs indicated there are needs for; a course in undergraduate education, a compulsory internship, in-service training programs, and a separate discipline in undergraduate study for gifted education (including character education of gifted pupils). Similarly, the quantitative data shows that approximately 95% of the participants agree to varying degrees that there is a need for in-service training for teachers regarding the social and emotional development of gifted pupils ($M=5.27$, $SD=.08$).

The correlation analysis shows that there is a significant positive relationship between the need for in-service training for teachers and the view that there are gaps in the policy and practices on character education of gifted pupils. This means that participants who agree there is a need for in-service training for teachers about the social and emotional development of gifted pupils also likely agree that there are gaps in the policy and practices on character education of gifted pupils. This is of concern since the success of educational programs of gifted students depends on a range of competencies of teachers of gifted students (Hansen & Feldhusen, 1994). Many authorities agree that teachers working with gifted students must receive adequate training in the field of gifted education to best satisfy the characteristics and special needs of gifted students (Copenhaver & McIntyre, 1992; Feldhusen, 1997; Gallagher, 2000; Hansen & Feldhusen, 1990; Toll, 2000). If teachers do not have a professional education in gifted education, the needs of gifted students may not be fully met (Archambault et al., 1993; Westberg et al., 1993a; Westberg & Daoust, 2003). This shortage could be

eliminated if preservice teachers receive coursework in the field of gifted education in their undergraduate programs (Bangel et al., 2010; Moon & Rosselli, 2000) and are given the opportunity for practical experience (Anderman, 2011; Feldhusen, 1985, 1997; Feldhusen & Huffman, 1988; Sisk, 1975; Whitlock & DuCette, 1989). However, the most neglected part in gifted education, which is developing gradually and gaining different dimensions, is teacher education (Reid & Horvathova, 2016).

The relevant literature shows that teachers trained in gifted education mostly focus on creativity, higher-level thinking skills, conducting more discussions, implementing student-directed activities, rather than lecturing disciplinary information in the field of gifted education (Hansen & Feldhusen, 1994). Moreover, those who have graduate degrees in gifted education are more competent in individualized instruction and in the modification of curriculum for the education of gifted students (Westberg & Archambault, 1997). On the other hand, those who have limited training about gifted education are also limited in differentiation of instruction for gifted students (Gentry et al., 2002; Starko & Schack, 1989; Westberg et al., 1993b; Archambault et al., 1993). These works show that gifted pupils are the most benefitted from teacher education/training. In other words, teacher education/training in the field of gifted education is an investment in the education of gifted pupils should be prominent in gifted education policy. Hence, the character education of gifted pupils may not find a place in gifted education unless it is established in teacher training.

The issue of 'who is to teach the gifted' and the traits of a teacher in gifted education should have, has indeed been at the focus of many teacher-training programs in many different countries. There is no clear consensus in the traits and competencies of the 'ideal teacher' for gifted pupils. Some traits suggested are: high cognitive skills in the field of teaching and asking questions, the ability to develop core curriculum changes and develop and implement individualization strategies, the ability to implement special curricular development strategies, teaching and identification of talented abilities, student counselling skills (Seeley, 1979); expert in the subject matter, teaching in a logical and well-built structure, not only intelligent but also creative (Milgram, 1979); being imaginative, flexible, stimulating, innovative, facilitative, self-confident, knowledgeable and considerate regarding individual differences (Chan, 2011); good personality characteristics, professional expertise and didactic abilities, knowledge in gifted education and administrative abilities (David, 2011). Winstanley (2004) also draws attention to the fact that the role of the teacher can be

altered, not lessened, according to the teaching strategies. For example, in a strategy where gifted pupils have control over their learning, teachers take on more of a supervisory role, helping, guiding, facilitating, rather than prescribing. Hence, in addition to the above-mentioned competencies for the teacher, the aspect of having the necessary role skills comes to the fore depending on the teaching strategy.

Turning to the research context, according to the SAC teacher selection and appointment guide (MEB, 2020b) in Turkey, the criteria to work as a teacher in the SAC are mostly centred on the academic background and social skills (e.g., graduate-level, projects, awards, publications, English language level, artistic activities, sport licence, communication skills, reasoning ability, creativity, enthusiasm, openness to scientific and technological developments) of the teacher. The focus points of these competencies are intellectual knowledge, cognitive skills, teaching ability, and contribution to the learning process of the teacher in gifted education. Some of the teachers in the interviews indicated that it is not difficult to achieve these competencies (by initial training), but it is difficult to achieve the needed competencies while working with gifted students in the SACs.

According to some teachers in the SACs, they are seen as counsellors rather than as teachers by gifted pupils. Therefore, they need this aspect to be strengthened. In the policy, while the teacher selection is made by focusing on the intellectual background of the teacher considering the possible contribution of him/her to the education of gifted pupils, from the perspective of teachers, this situation – or this kind of criterion – is not functional to the ability to work with gifted pupils since they start gifted education from scratch. From the perspective of teachers, the relevant policy and practices even neglect the counselor role of teachers in the SACs in the same way. Hence, there is also a need for considering promoting teachers' abilities as potential moral educators during teacher education (Han, 2019), since teachers are key agents and ethical professionals in nurturing gifted students (Tirri, 2017).

7.5.3.2 Family training

Another challenge and need in actualizing character education of gifted pupils in Turkey, is related to the family at the meso level. According to many teachers in the SACs, the positive discrimination of the family and environment towards the child is a challenge faced in the character education of gifted pupils. There was a clear consensus amongst most teachers for a necessity of a family training program related to gifted education. This is also suggested by the relevant literature (Colangelo & Davis, 2003; Fornia & Frame, 2001; Rotigel, 2003;

Silverman & Golon, 2008; Silverman, 2013). Similarly, the quantitative data showed that approximately 79% of the participants agree in varying degrees that the diagnosis as gifted causes a positive discrimination of family and environment towards the child and this negatively affects their character development ($M=4.36$, $SD=1.13$). The positive discrimination here refers to the framing of ‘othering’ as a strategy, occurring in different forms as indicated in qualitative codes, to preserve or sustain the high potential of the identified child as gifted, by the family and environment.

The positive discrimination of the family and environment necessitates an investigation into the beliefs and perspectives, expressed as the manifestation of the gifted label in the mind of family, and the context of the gifted label in Turkey and its reflections on the character education of gifted pupils. The relevant literature shows that parent-child interaction is one of the most effective factors in the character development of gifted children (Coon, 2004; May, 1994). Parent and child behaviours mutually affect each other, but parent behaviours are also affected by parental beliefs (Sameroff & Fiese, 2000). When a family has a gifted child, parental roles change to deal with giftedness and parenting responsibility (Schader, 2008; Shore et al., 1991) since giftedness is a stressor that both affects and is affected by the family (May, 1994). Parenting the gifted child associates with the attitudes, beliefs, and perceptions that his/her parents have on giftedness (Solow, 2001).

The biases and beliefs of parents are related to the gifted label (such as gifted children are successful in all areas, gifted children’s intellectual development is in line with their emotional development etc.) and these influence their parenting practices (Shore et al., 1991). Ogurlu and Kahraman (2018) conducted a study about irrational beliefs, referring to beliefs incompatible with the reality uncovered in their study, of gifted children’s parents in Turkey; compares parenting roles of parents who had training in gifted education ($n=35$) and parents who were untrained ($n=64$) towards their gifted children. In this study, they used the Parent Irrational Beliefs Scale (Kaya & Hamamci, 2011) including an expectation sub-scale related to irrational parental expectations of their children (e.g., parental view regarding parents’ tolerance for their child’s disagreement with them on a subject, parental view about that the child must always behave as expected by their parents) and a perfectionism sub-scale related to parents’ perfectionist views about parenting (e.g., parental view that if they bring up their child as perfect then they are a good parent, parental aim that their children be perfect in every subject).

The results show that parents who were not trained scored higher on parents' irrational beliefs than trained parents. That is, the parents' lack of information about giftedness causes confusion in them about their parenting roles and cause them to have some irrational thoughts and expectations of their children and perfect parental practice. Parents' explanation of the challenges with their gifted children were related to irrational beliefs. Yet, as I have seen in the interviews, the teachers agree that educated families are more conscious about the character development of gifted children. Hence, from a teacher's perspective, the positive discrimination of the family towards the gifted child could be seen as a sign of a lack of knowledge about giftedness, but understood from the perspective of the family, it can be seen as a strategy to preserve or sustain the high status and potential of the gifted child.

Neisser (1979) explains intelligence as a cultural invention based on what people value. In addition, there are the effects of conditions that facilitate and hinder the situation, such as the educational and learning resources provided by the country (Ziegler, 2005). In this context, turning to the current policy and practices about gifted education in Turkey, identification of gifted individuals is done through group screening and individual intelligence tests (MEB, 2019a), that is, it is based on a paradigm that views giftedness as innate. The individuals identified as gifted can benefit from privileged educational opportunities (e.g., special schools, special classes, and after-school programs). In the SACs there is no scheduled time or scientific resources for the character education of the gifted. There was a consensus on the importance and necessity of character education for gifted pupils amongst most teachers in the SACs. However, many teachers noted that there was no allotted time for character education. Therefore, both gifted pupils and their families face an education program focusing mostly on the development of cognitive and artistic abilities.

From the perspective of the family, these practices may be perceived as a kind of exemption from character education for the gifted child or an assumption that the character development is parallel to or a result of cognitive development. Hence, the responsibility of character development is left to their superior cognitive development. Correlation analysis also shows that the perception of a positive discrimination of the family and environment towards the child after the child is identified as gifted had a significant positive relationship with the perception of neglect of the character development of gifted pupils because development-oriented education programs were mostly academically oriented. In other words, as the focus on academic intensity increases in education programs the neglect of character development also increases. This then increases the negative effect of positive

discrimination by the family and environment on the character development of the gifted child. To be able to decrease the negative effect of positive discrimination on the character development of gifted pupils, many teachers in the interviews think that there is a need for a family training program. Similarly, the quantitative data shows that approximately 96% of the participants agree in varying degree that there is need for a family training program for families with gifted pupils ($M=5.27$, $SD=.08$).

Correlation analysis also shows that the need for a family training program had a significant positive relationship with both the positive discrimination of the family and environment towards the child after the child is identified as gifted, and the gaps in the policy and practices on character education of gifted pupils. This means that participants who agree that there is a need for family training also likely agree to the challenges related to the positive discrimination of the family and environment and the gaps in policy and practices. In the relevant literature, although it is highlighted that there is a need for guidance and support for parenting the gifted for parents with gifted children (Colangelo & Davis, 2003; Huff et al., 2005; Rotigel, 2003; Silverman & Golon, 2008; Silverman, 2013), parent training in the field of gifted education is still lacking and that more scientific research is needed (Jolly & Matthews, 2012; Morawska & Sanders, 2009; Reichenberg & Landau, 2009).

7.5.3.3 Policy and practices

In the relevant literature, the importance of moral education in gifted education in the 21st century is increasingly coming to the fore (e.g., Gibson & Landwehr-Brown, 2009; Jewell, 2001; Sternberg, 2017; Tannenbaum, 2001; Piirto, 2005). Although there is an increasing awareness about gifted education in Turkey, for example, a separate education policy that includes the identification process of gifted children and offers of different educational opportunities (e.g., special schools, special classes, and after-school programs) (see MEB, 2006; MEB, 2016; MEB, 2017-2018), the lack of policy and practices in terms of character education of gifted pupils creates a gap in this field and this challenges teachers. According to some teachers who attended the interviews in the SACs, the policy and practices about the education of gifted pupils are mostly related to their academic development, character education of these pupils stays in the background as long as there is no clear regulation on it. That is, there are gaps in the relevant policy on the character education of gifted pupils in terms of scheduled time, scientific resources, and a separate directorate in the Ministry of National Education.

Similarly, the quantitative data also shows that approximately 94% of the participants agree in varying degrees that there is need for clear regulation ($M=4.95$, $SD=.08$), 91% of the participants agree that there are needs for scientific resources ($M=4.85$, $SD=.09$) and scheduled time ($M=4.88$, $SD=.09$), and 88% of the participants agree that there should be a separate directorate in the Ministry of National Education ($M=4.84$, $SD=.12$). Additionally, correlation analysis revealed that the perception of gaps in policy and practices had a significant positive relationship with the need for clear regulation regarding character education of gifted pupils and that the education programs focused mostly on academic development and neglected the character development of gifted pupils. This means that participants who think there are gaps in the policy and practices also likely think that there is a need for clear regulations and that the education programs focused mostly on academic development and neglect character development of gifted pupils. This pattern is consistent with that of the qualitative findings.

Turning to the research context, the Head Council of Education and Morality in the Turkish Ministry of National Education has determined 10 key values to be taught to all students, including the gifted, with curriculum from within values education that corresponds to character education: (1) justice, (2) friendship (including altruism, trust, understanding, solidarity), (3) honesty, (4) self-control, (5) patient, (6) respect, (7) love, (8) responsibility, (9) patriotism (including hardworking, collaboration, compliance with rules and laws, being sensitive to historical and natural heritage, caring society), and (10) helpfulness (including generous, cooperation, mercifulness, hospitality sharing) (TTKB, 2017). The aim is here to teach students these values by associating them with learning outcomes – or educational objectives – in each discipline in an implicit way (TTKB, 2017).

In other words, the education policy sees values education as a complementary part of the curriculum. Therefore, there is a section called ‘values education’ in the introductory part of the curriculum for teachers, which is about why the values are placed in the curriculum; how they are included; how they can be taught to the students during the teaching and learning process; and which teaching methods and techniques should be used when teaching values (TTKB, 2017). However, there is no such informing part related to values education for the SAC teachers because the SACs are based on project production and development rather than following a specific curriculum. But still, the SAC teachers are responsible to integrate values education at every stage of the education programs that are implemented for

gifted pupils, to prepare a plan about the social personality services of the gifted pupil and present it to the management of the SAC where they work (MEB, 2016).

From the relevant policy aspect, although the position of the character education seems clear – even in an implicit way – in the gifted education and practices indicated above, from teachers’ perspectives, this may be perceived as a gap – or challenge – in the character education of gifted pupils since it is left to teachers’ subjective opinions and choices. In other words, from the teachers’ perspective, a policy without a scheduled time, a scientific resource for character education of gifted pupils and a separate directorate for gifted education in the Ministry of National Education that deals with teachers more closely in the education process may be seen as a gaps in this field. These gaps are also perceived as neglect by teachers as it is left to teachers’ initiative, subjective opinions, and choices.

Supportively, correlation analysis shows that leaving character education of gifted pupils to teachers’ subjective opinions and choices had a significant positive relationship with both the gaps in the policy and practices and the need for clear regulations about character education of gifted pupils. This means that teachers who agree that character education of gifted pupils is left to teachers’ subjective opinions and choices also likely agree that there are gaps in the policy and practices and there is a need for clear regulations on character education of gifted pupils. On the other hand, this gap may be perceived as a kind of exemption in character education for the gifted child or an assumption that character development is parallel to the cognitive development by families. Hence, a positive discrimination towards the identified child based on the gifted label is developed to preserve or sustain the high potential of the child by the family and environment. This has been discussed in more detail in the previous section on family training. Hence, the practices about character education of gifted pupils could be read differently by the pupil, family, and teacher. This could give rise to different but interrelated challenges and needs.

Through abductive reasoning, hypothetical ideas about teacher training, family training, and policy and practices regarding the challenges and needs in actualizing the character education of gifted pupils by seeking these hypotheses in the observable facts – the demi-regularities – in the nexus of cultural beliefs, contextual contingencies and relationships, and political and educational implementations. Although there is a separate gifted education policy that includes the identification process of gifted children and offers different educational opportunities, the absence of practices (e.g., a scheduled time, a scientific

resource, and a clear regulation) for the socio-emotional development of gifted pupils in the relevant policy and practices create a gap – or challenge – in the character education of gifted pupils in spite of an existing implicit values education policy. This gap is perceived as neglect by teachers since this field is left to teachers' initiative, subjective opinions, and choices.

On the other hand, this gap is perceived as a kind of exemption in character education for the gifted child or an assumption that the character development is parallel to cognitive development. Hence, a positive discrimination towards the identified child based on the gifted label is developed as a strategy to preserve or sustain the high potential and/or status of the child by the family and environment. The teachers think that the positive discrimination, which is gained through the identification/labelling, in the perceptions of gifted pupils negatively affect the character development of gifted pupils (see the analysis of research question 2). Therefore, it is seen that there is need for clear policy, explicitly presenting the position of character education in gifted education, in gifted education rather than providing only family training for decreasing the negative effect of positive discrimination towards the gifted child.

The lack of a clear goals and an outcomes plan for teachers for the character education of gifted pupils, in the relevant policy and practices is seen as character education of gifted pupils that depends on the initiative of the teacher. This increases the possibility of the neglect of character education since there is no clear goal and outcome expectation. Therefore, teachers agree that there is need for a separate directorate for gifted education in the ministry of national education that will lead teachers step by step and facilitates their work without leaving them solely to their personal efforts. In addition, from the perspective of teachers, not knowing how to approach gifted pupils causes teachers to feel inadequate in gifted education. This also leads the teacher to approach the gifted child on the basis of the socio-cultural profile drawn for the gifted child along with teachers' personal experiences and implications. This brings up the need of congruence between the gifted education policy and the teacher training policy into focus. Character education of gifted pupils cannot find a place in gifted education unless it is placed in teacher training and also by considering also the counselling role of teachers in the SACs.

In brief, abductive reasoning has brought to light how the challenges and needs arise in contextual beliefs, contingencies, and relationships. In other words, it allows us to see interrelationships, connections of the entities (e.g., gifted education policy and practices,

values education policy and practices, structure of the SACs, beliefs, culture, family and environment, teacher, and the gifted label) that trigger the rise of challenges and needs, and their effects on each other in our understanding of the process, rather than simply focusing on the individual challenges and needs at the micro, meso, and macro levels. This therefore offers in-depth understanding which can promote more effective suggestions or solutions for policy and practice on the character education of gifted pupils. This is explained in more detail in the concluding chapter.

CHAPTER 8 CONCLUSION

8.1 Introduction

The final chapter of this research presents a summary of the research process, the key findings in response to the four research questions, and the implications or contributions of the research for policy and practice on character education of gifted pupils in Turkey. These implications are derived from the causal mechanisms unveiled by the research questions, are presented as contextual challenges and needs in actualising character education of gifted pupils. Also, possible future practice for policymakers are suggested. Following this, the limitations of the study and recommendations for possible future research directions in the field are presented.

8.2 Summary of the research

This study was conducted to discover underlying mechanisms that help determine the views about the character development and education of gifted pupils of teachers' who work with gifted pupils in Turkey. This is done through a deep causal and interpretive explanation (rather than by a simple presentation of the observable events) and to provide realistic implications for policy and practice. The following research questions were raised in this study:

1. How do teachers who work with gifted pupils describe character?
2. How do teachers who work with gifted pupils think about the character development of gifted pupils?
3. How do teachers who work with gifted pupils think about character education of gifted pupils?
4. What are the challenges and needs in terms of teachers' perspective in actualizing character education of gifted pupils?

To be able to answer these questions, 10 focus group interviews were conducted with 48 teachers who work with gifted pupils in the SACs. In these interviews, 10 semi-structured questions, which were prepared by reviewing the relevant literature, were asked of the participants. In the first stage of the analysis, the data from focus group interviews was analysed via the identification of demi-regularities, analogous to thematic coding, within the framework of critical realism. Then, the thematic categories were transformed into a survey which consisted of 21 items. This survey was offered online to 105 teachers who work in the

SACs and did not attend the focus group interviews. In the analysis of the quantitative data, descriptive statistics (mean, standard deviation, skewness, and kurtosis of each item), in order to see the distribution of the teachers' responses, and Spearman's correlation analysis, in order to see the relationship between the items, were used.

After getting both qualitative and quantitative empirical findings for each research question, abduction (or theoretical redescription of the categories generated in the first stage), was performed for each research question. Then, retrodution (or finding causal mechanisms), which is the last stage of the critical realist analysis, was undertaken on the first three research questions. In the analysis of the last research question, only the first two stages (identification of demi-regularities and abduction) were carried out because it aimed simply to describe context-based challenges and needs rather than finding causal mechanisms that inform the teachers' views in the empirical findings. The whole process of this mixed method research design of data collection and analysis is displayed in more detail in Figure 36 below. A summary of the findings related to the research questions is presented next.

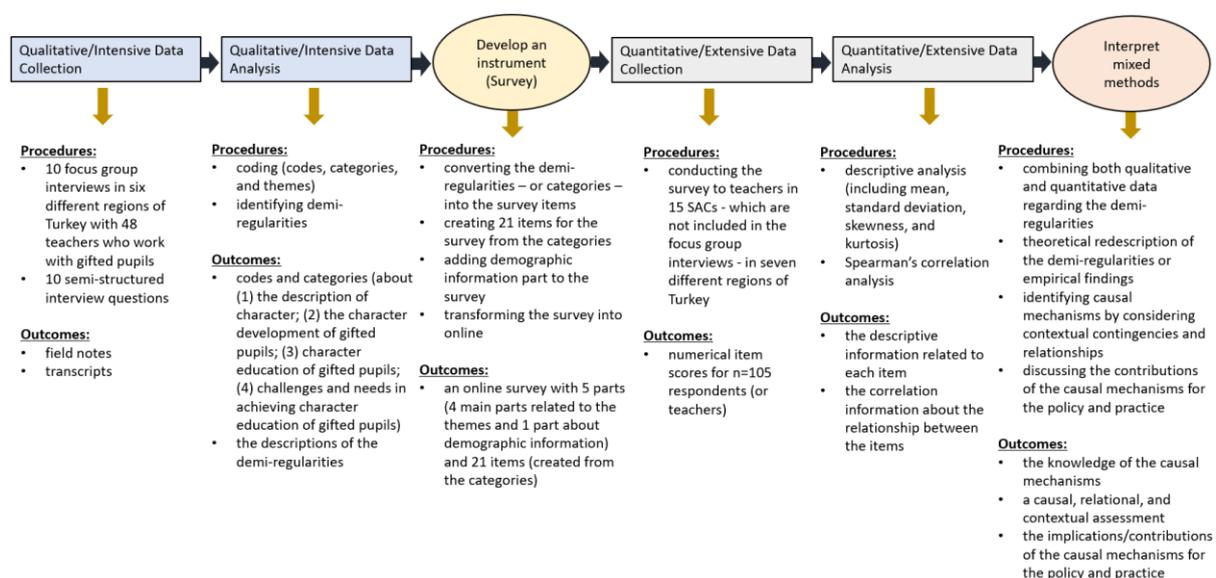


Figure 36: Mixed method design diagram

8.2.1 Research question 1

How do teachers who work with gifted pupils describe character?

The purpose of this research question was to explore the underlying foundational structure for how teachers who work with gifted pupils conceive of character; a concept that informs and directs their views about the character development and education of gifted pupils. Taking a critical realist approach, this research focused on finding the causal or generative mechanism/mechanisms positioned in the various views in the empirical findings. This was done through a stratified explanation by considering contextual conditions and relationships. A sociological assessment was made (employing the three-stage critical realist methodology of identification of demi-regularities, abduction, and retrodution) by examining the particular relationships, interactions, and causal relations between the contextual entities (e.g., culture, beliefs, and the educational policy and practice) on the phenomenon (character). Through this assessment, it was that found that the *integration of innate self into social context* was the causal mechanism (at the real layer) shaping teachers' views (at the empirical layer). The stratified contextual and sociological explanation of how teachers who work with gifted pupils describe 'character' in Turkey is illustrated in Figure 37 below.

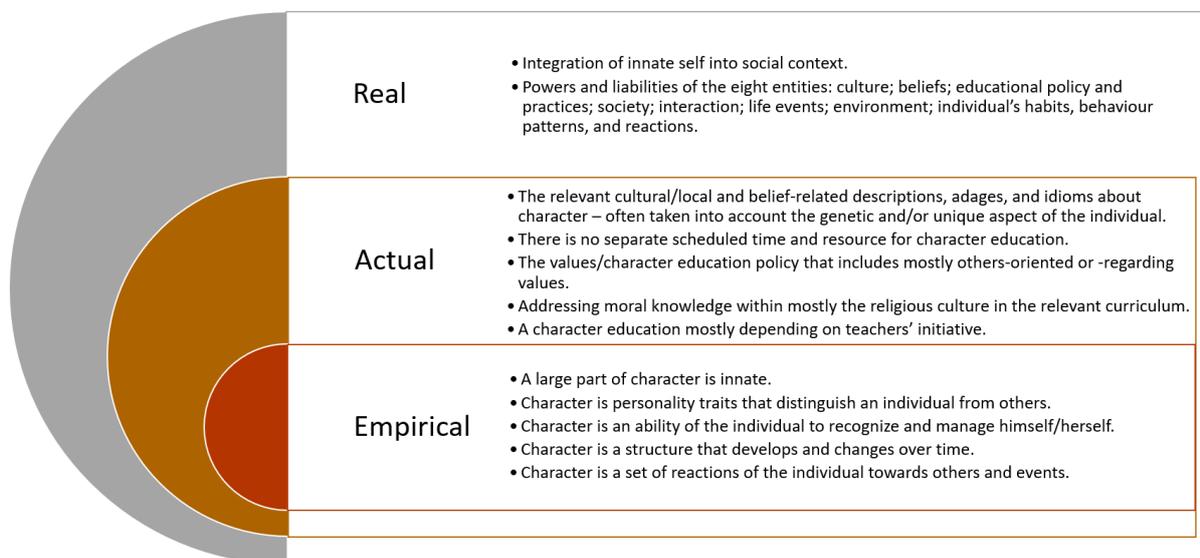


Figure 37: Stratified reality explanation of character description in Turkey

Whilst teachers do of course have different views about character (e.g., the largely innate aspect of the individual; the unique aspect of the individual; the ability of self-recognition and management; developing and changing over time; and reactions towards others and events) in the qualitative and quantitative empirical findings, they largely have the same purpose (at the real layer). This purpose is to both recognize the innate self and enable

the innate self to live in and with society; the integration the innate self into the social context. The contextual and sociological assessment of the (contextual) entities (e.g., cultural and belief-based approaches to the concept of character and character development; the relevant educational policy and practice, at the actual layer), which stem from relational and causal explanations based on the interactions (that transform into power in some entities and to liability in others) between the contextual entities, reveal this causal mechanism. This contextual and sociological assessment in Turkey's context shows that the view of the innate self and the social context are in some way both necessary to the perception of character and necessarily affecting of each other in terms of how character formation is defined. That is, the teachers in the SACs view both the innate aspect and the developable/educable/malleable aspect of character as dependent on the social context an individual lives in. By accepting the existence of the innate self of the individual, the teachers then focus on the individual learning to live in and/with society.

This causal mechanism shows that teachers use both ontogenetic and sociogenic perspectives in discussing character development (Geukes et al., 2018). However, they believe more in the necessity of awareness of others' viewpoints by going beyond ego and by employing an intersubjective assessment of what is right or just for all affected; the aim of moral philosophy (Harper, 2009; Walker & Lovat, 2017). In other words, adaptation to social life is in the foreground, it is presumed that the innate self must be shaped by societal context to be able to stay in and maintain the cycle of socialization (see Harro, 2004). In the Bourdieusian sense of cultural reproduction (Nash, 1990), it refers to the individual's strategic and relational behaviours within the social and cultural framework in which he/she lives that serve to maintain and disseminate cultural content. From this point, character bears traces of the individual's self and appears as an internalized mechanism that automatically produces strategic behaviours within the cultural or contextual codes of a society. Therefore, in this respect character serves a potentially culturally conservative goal.

Based on the conceptualization of this causal mechanism that contradicts the view of the individual acting automatically with a strategic calculation within cultural and contextual codes, the discussing of moral, immoral, and amoral behaviours through some philosophical themes/discussions, where issues may relate directly to a real-life situation or conundrum, to develop moral understanding – considering the feature of philosophy that it has the possibility for direct engagement with ethical concerns – can strengthen positive personal qualities of gifted individuals (Winstanley, 2018). That is, cultural codes and contextual

conditions organize the behaviours of the individual (in a way characterized by blending with the individual's self) in a way so that they can enable or prevent them.

It can be said that defending a nurturist understanding – transforming virtues into habits – based on knowing, feeling, and doing; relying on the exercise of reason rather than defending a universal certain moral principles (taking into consideration the post-modernist era we live in) (see Ward, 2003); and the discoveries about the connection between the neurologic structure of the brain and the moral dimension of the human being are among the reasons why the Aristotelian approach is still used in education and moral philosophy. This indicates a more in-depth intersection with a specific paradigm of character than observation of empirical findings alone would imply. This mechanism that influences the teachers' views about character is activated in specific ways and may occur differently depending on differing contextual conditions.

8.2.2 Research question 2

How do teachers who work with gifted pupils think about the character development of gifted pupils?

This research question intended to find the underlying mechanism for how teachers think about the character development of gifted pupils. In taking a critical realist approach, it goes beyond the different views of teachers in the empirical findings through a stratified explanation by considering contextual conditions with the aim of finding the causal mechanism that leads to the teachers' views. The contextual and sociological assessment (employing the three-stage critical realist methodology of identification of demi-regularities, abduction, and retroduction) was made by examining the relationships, interactions, and causal relations between the contextual entities (e.g., culture, beliefs, educational policy and practice; the structure of the SACs; and family and environment) on the phenomenon (character development). Through this assessment, I found *the labelling ideology that ignores character development while focusing on the preservation of high potential* as the causal mechanism (at the real layer) shaping teachers' views (at the empirical layer). The stratified sociological explanation of how teachers think about the character development of gifted pupils in Turkey is illustrated in Figure 38 below.

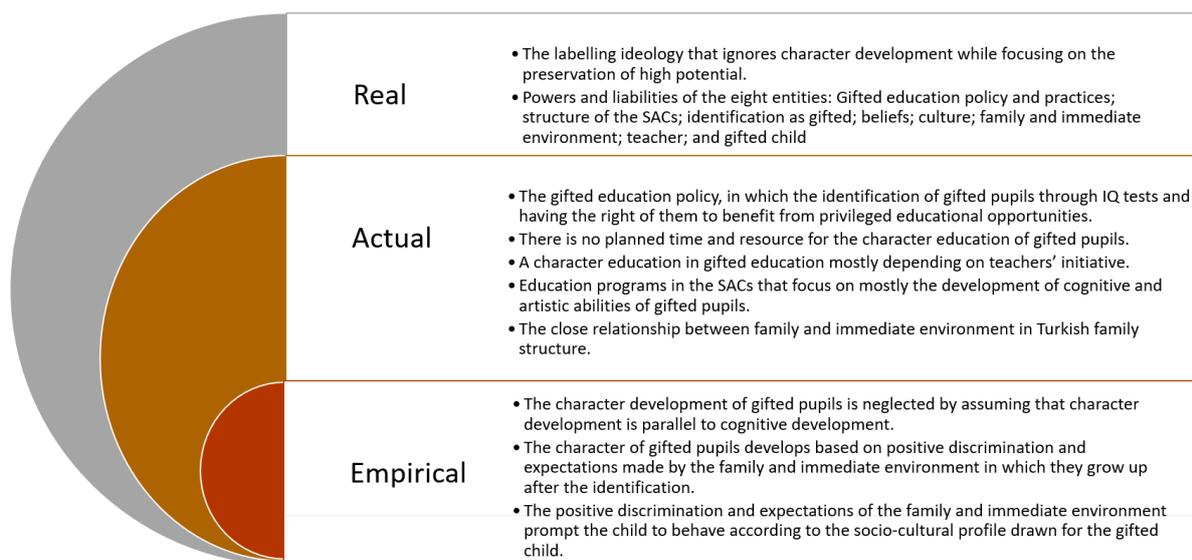


Figure 38: Stratified reality explanation of the character development of gifted pupils in Turkey

Although teachers have different views about the character development of gifted pupils in the qualitative and quantitative empirical findings (e.g., neglect based on the assumption of parallelism between character and cognitive development; developing under the influence of the positive discrimination and expectations of family and environment; and adopting to a socio-cultural gifted profile), they largely have the same tendency (at the real layer), which is that the socio-cultural manifestation/traces of the gifted label, which is to ignore character development while focusing on the preservation of high potential and status, may result in negative effects on the gifted child's character. The contextual and sociological assessment of the (contextual) entities (e.g., the gifted identification and education policy and practice; structure of the SACs, the Turkish family structure relations, at the actual layer), which are revealed from relational and causal explanations based on the interactions between the contextual entities, reveals this causal mechanism that shapes the teachers' views in Turkey context.

This contextual and sociological assessment shows that labelling creates serious changes both in the child's behaviour (Becker, 1963; Heller, 2004; Hobbs, 1975) and the behaviour of society and the environment towards the child (Becker, 1963). The socio-cultural gifted profile or labelling ideology becomes a part of the child's character in different ways (see the empirical findings). This causal mechanism suggests the strength of labelling ideology is putting character development in the background whilst academic potential is

dominant in the Turkish context. In other words, the label predicated to intellectual ability in the Turkish context, is wedded to an identification-based giftedness paradigm, although there has been movement from an identification-based paradigm to a holistic paradigm in the definition of giftedness.

This causal mechanism that ignores character development, while focusing on the preservation of high potential, is embedded in the label ideology and conditioned by power relations in the Foucauldian sense. That is, a diagnosis based on intellectual abilities and providing privileged education opportunities according to intellectual abilities are effective or have the power to bring intellectual abilities to the fore in the contextual label ideology. Therefore, not restricting the intellectual abilities that have a provision in educational practices or acting focused on preserving intellectual abilities has the power to affect the character development of gifted pupils. Hence, the conceptualization of this causal mechanism reveals that the adoption of a more holistic giftedness paradigm in education policy and practice can mitigate the effect of this label ideology on the character development of gifted pupils. This mechanism is activated in specific ways in this context and may occur differently depending on differing contextual conditions.

8.2.3 Research question 3

How do teachers who work with gifted pupils think about character education of gifted pupils?

This research question is purposed to find the underlying foundation for how character education for gifted pupils is conceived of and directed by teachers. In taking a critical realist approach, the research moved beyond the different views of teachers in the empirical findings by use of a stratified explanation that considering contextual conditions with the aim of finding the causal mechanism that leads to teachers' views, as was done for the previous research questions. The contextual and sociological assessment (employing the three-stage critical realist methodology of identification of demi-regularities, abduction, and retrodution) was made by examining the relationships, interactions, and causal ties between the contextual entities (e.g., culture, beliefs, the gifted education policy and practice, gifted label, values/character education policy and practice) on the phenomenon of character education. Through this assessment, I found the desire to transform individual potential into societal gain as the causal mechanism (at the real layer) that was shaping teachers' views (at

the empirical layer). The stratified sociological explanation of how teachers think about character education of gifted pupils in Turkey is illustrated in Figure 39 below.

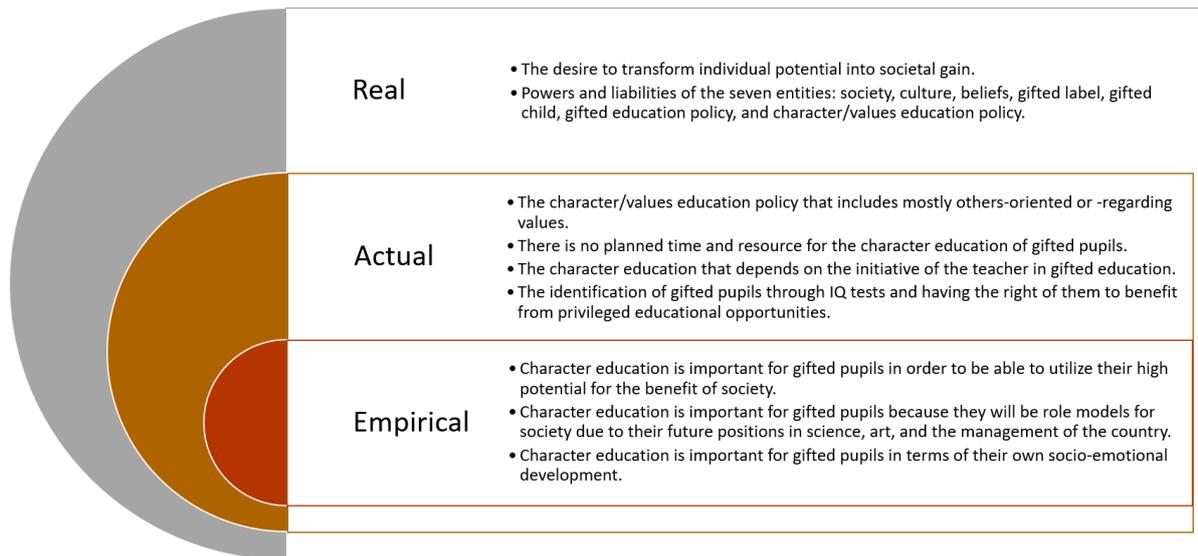


Figure 39: Stratified reality explanation of character education for gifted pupils in Turkey

Whilst teachers do of course have different views about the character education of gifted pupils, in the qualitative and quantitative empirical findings (e.g., in terms of utilizing high potential for the benefit of society; in terms of being role models for society due to their future positions in science, arts, and management; and in terms of their socio-emotional development), they largely have the same intention (at the real layer), which is the desire to transform individual potential into societal gain. There is a weight of social expectations and demands on the ability of the (gifted) individual. The diagnosis policy based on IQ tests shows that giftedness is perceived as an innate quality although the official definition of the ministry is parallel to multifaceted giftedness approaches. Therefore, the individual, who is thought to have been born ‘different and more’ than others, is seen as a social entity. From this point, it is seen as a goal to transform individual potential into societal gain by developing a social understanding in the individual through character education. This perspective underplays the self-regarding part of character education for gifted pupils.

The contextual and sociological assessment of the (contextual) entities (e.g., culture, beliefs, the gifted identification and education policy and practice, gifted label, values/character education policy), arising from relational and causal explanations based on

the interactions between the contextual entities, reveals this causal mechanism that shapes the teachers' views in the Turkish context. This mechanism shows that a societal consideration which consists of a mix of communitarianism/virtue ethics and the ethics of care that represent the foundation of the teachers' views is related to the importance of their view of character education for gifted pupils. It is a relational perspective and not based only on the individualist approach of Kantian reasoning. At the same time, this mechanism implies a perspective compatible with Sternberg's (2020) transformational giftedness approach.

Transformational giftedness refers to "giftedness that is transformative – that by its nature seeks positively to change the world at some level – to make the world a better place" (Sternberg, 2020, p. 231). It requires global moral thinking, feeling, and acting. On the other hand, transactional giftedness refers to "giftedness that is tit-for-tat in nature – an individual is identified as gifted and then is expected to do something in return, usually to perform well in academic coursework, perhaps coursework specifically targeted at the gifted" (Sternberg, 2020, p. 231). Both giftedness types do not result from someone being born in a particular way, rather they result from interaction, instruction, mentorship, role-modelling, and socialization (Sternberg, 2020). This critical realist analysis suggests a more in-depth insight into a particular paradigm of character education than observation of empirical behaviours and stated belief alone might. This mechanism is activated in specific ways in this context and may occur differently depending on differing contextual conditions.

8.2.4 Research question 4

What are the challenges and needs in terms of teachers' perspective in actualizing character education of gifted pupils?

This research question was inspired by the findings of the other three research questions. By considering the causal mechanisms explored in the previous research questions, this research question was intended to describe challenges and needs in actualizing character education of gifted pupils. The causal mechanisms show how the character development and education of gifted pupils are managed in Turkey from teachers' viewpoints by considering contextual conditions and relationships. The causal mechanisms have therefore helped as a complementary tool, to make sense, more specifically and deeply, of the challenges and needs in being able to make functional and realistic suggestions for policy and practice (to be explained in more detail in the next section). Since this question involves a more descriptive goal, only the first two stages (identification of demi-regularities and abduction) of the

critical realist analysis were actualized while seeking the answer to the question. By accepting challenges and needs as a result of a process that includes the accumulation of experiences and powers and liabilities of the contextual entities (e.g., beliefs, policy and practice, etc.) (see Shank, 1987) related to the character education of gifted pupils, the beginning of this inquiry starts by considering contextual conditions and interactions. There is no focus on finding a casual mechanism (through retroduction) in this last research question.

Both the challenges and needs in actualizing character education of gifted pupils were examined in 3 categories: (1) teacher training (at the micro-level), (2) family training (at the meso-level), (3) and policy and practice (at the macro-level). To begin with teacher training, in the context of Turkey, the gifted label ideology affects teachers, they hesitate about how to approach gifted pupils, and this causes them to feel themselves inadequate in gifted education (see Becker, 1963). On one hand, there is a specific policy and practice that cares about the education of gifted pupils, on the other hand gifted education is neglected in teacher training. That is, there is no congruence between gifted education policy and teacher training policy; a congruence that should exist in order to purposefully and effectively educate gifted pupils (Hansen & Feldhusen, 1994).

Many authorities agree that teachers working with gifted students must receive adequate training in the field of gifted education to best satisfy the characteristics and special needs of gifted students (Copenhaver & McIntyre, 1992; Feldhusen, 1997; Gallagher, 2000; Hansen & Feldhusen, 1990; Toll, 2000). If teachers do not have a professional education in gifted education, the needs of gifted students may not be fully met (Archambault et al., 1993; Westberg et al., 1993a; Westberg & Daoust, 2003). Hence, character education of gifted pupils may not find a place in gifted education unless it is well established in teacher training policy. In addition, the lack of clear/specific goals and outcome plans for teachers, from the ministry, regarding the character education of gifted pupils, results in overreliance on the teacher's initiative or personal efforts and causes a neglect of character training in gifted education. This also means that implicit or ill-defined/discussed views and beliefs may carry more weight than they would if there were publicly funded training of teachers. Hence, there is need for a study such as this to see (1) what these implicit views are that are likely carrying much more weight than they should and (2) how teacher training and policy can best build on what is the current situation for teachers.

Another challenge and need arises from the inadequacy or even absence of family training in gifted education. The lack of knowledge about giftedness in a family often expresses as positive discrimination – here refers to the framing of ‘othering’ as a strategy occurring in different forms as indicated in qualitative codes – towards the gifted child. Positive discrimination is used like a strategy by the family to preserve or provide the sustainability of the high potential of the gifted child with the perceived economic and social benefits that may accrue. That is, parenting the gifted child associates with the giftedness perceptions that are based on how parents understand giftedness (Solow, 2001). At the same time, the lack of character education in gifted education policy and practice leads to a perception of a kind of exemption from character education for the gifted child or an assumption in families that character development is concomitant to cognitive development. That is, there are a set of implicit beliefs which will be operating in the family in the absence of any more-explicit-policy and education. The implicit biases and beliefs of parents about the gifted label influence parenting practices (Shore et al., 1991); they trigger positive discrimination of the family towards the gifted child in the Turkish context. Hence, a study such as this is useful in order to see how family training and policy can best build on/improve the current situation for families and by implication the gifted. These findings also show that there is a need for guidance and support for parents with gifted children regarding their parenting issues (Colangelo & Davis, 2003; Huff et al., 2005; Rotigel, 2003; Silverman & Golon, 2008; Silverman, 2013).

Another challenge and need arises from the gaps that exist from the lack of clear regulation about character education of gifted pupils in policy and practice. The lack of a scheduled time and scientific resources for character education of gifted pupils, and the lack of a separate directorate in the ministry that takes care of gifted education (including teacher training and family training) constitute policy gaps in the Turkish context. This ‘gap’ (in a more general sense) is perceived and interpreted differently by families (generally resulting in positive discrimination) and teachers (resulting in: dependence on teachers’ initiative and subjective opinions, over focus on academic development/success, focusing on mostly others-oriented or regarding values rather than meeting self-related needs). In other words, although there is a separate gifted education policy that includes the identification process of gifted pupils and offers privileged educational/academic opportunities, there is little clear regulation or practical policy about character education in gifted education. The reflections of this gap in the relevant policy and practice at the level of family, teacher, and the gifted child; seen

empirical findings taken from teachers' viewpoints, indicate the need for: a clear regulation/directive, a scheduled time, scientific resources, and a separate directorate in the ministry for gifted education for the character education of gifted pupils.

8.3 Implications of the causal mechanisms for the policy and practice

A better understanding of paradigm shifts in the field of giftedness and talent will enable policy makers and practitioners to develop more appropriate pathways and methods by considering broader educational and societal contexts, and to develop meaningful goals and productive actions on a philosophical and theoretical basis. Parallel to this approach, the aim in this study has been to acquire a deeper understanding of how teachers think about the concept of character, the character development of gifted pupils, and character education of gifted pupils in Turkey, by considering contextual conditions and relationships so as to be able to provide realistic and functional suggestions for policy and practice. In this context, critical realism, as a very useful “underlabourer” (Bhaskar, 1979), helped to discover causal relationships, to make contextual and a causal assessments, and to realize where potential conflicts might lie. This assessment has enabled this researcher to dig deeper, that is, allowed a perception of relationality and causality – which exist independently of what we see from teachers' surface views about the phenomenon – as a whole, in the existing social context (e.g., culture, the relevant policy and practices, the structure of the SACs, etc.) of the research; rather than simply relying only on the qualitative data, quantitative data, and literature.

Through critical realism, it has been shown that the character development and education of gifted pupils are not just what teachers have noted through their experiences (in the empirical and actual layer) but that, because the character development and education of gifted pupils occur in open systems, there are a number of factors (causal mechanisms in the real layer) that interact in ways which may be affecting all of the actors involved, depending on the social context. Therefore, to fully understand how teachers think about the character development and education of gifted pupils, it is necessary to recognise that teachers' views about them are the result of a *relationality* (see Biesta, 2012) which is necessarily located in a distinctive socio-economic, political, and cultural context. Hence, to be able to address the gaps and disconnections regarding the character development and education of gifted pupils, relational properties of education (see Biesta, 2012) were considered using a critical realist

methodology in addition using to standard qualitative/quantitative data analysis and what is expressed in the relevant literature.

The causal mechanism of *integration of innate self into social context* leads to teachers' views about how they describe character. In one sense, this shows that the teachers' beliefs about character are related to the ethics of care that is based on how we are connected to others and about our ability to help or hurt them (Noddings & Slote, 2003). Although ethics of care highlights relationality (as societal reason), there is also a privileging of social conformism and/or contribution (as societal effect) in the teachers' beliefs as from the Bourdieusian perspective, such that the individual is not viewed as just an end in themselves. For example, both the causal mechanism of the desire to transform individual potential into societal gain that influences teachers' views about the character education of gifted pupils, and the causal mechanism of the need to integrate the innate self into social context that influences teachers' description of character, serve as a social contributions and reinforce societal conformism but may also have a transformative effect.

The acceptance of an innate aspect of character along with the effect of Turkish culture (e.g., emphasizing the creation and/or personalized characteristics/habits of the individual as his/her character in the relevant Turkish adages, idioms, and national dictionary; using the concepts of values, morality, and citizenship in the educational context instead of the concept of character) and focusing on mostly others-oriented or regarding living skills (e.g., values such as respect, friendship in the relevant education policy and practice) potentially influences teachers' towards an understanding of character education as an acquiring of a deep emotional understanding of the good and harmful effects of actions on the lives of other people as well as of caring for one's own life in the ethics of care (Noddings & Slote, 2003).

Hence, this causal mechanism suggests that the teachers are not thinking from the perspective of individual interest. Rather than thinking of the individual and society as two separate entities they display a perspective that expresses integration with the social context. In other words, the individual exists with the society and is incomplete without it. Therefore, the merging of these entities, rather than the keeping of them separate, is the focus of their character and character education understanding. The causal mechanism shows teachers' approach to character is essentially based on a conservatism that predicts a certain kind of societal outcome; an internalized mechanism to act strategically within cultural or contextual

codes that all individuals should be a part of fostering. The conceptualised causal mechanism both reveals how an individualist aspect is lacking in the current character approach and suggest that in the development of a character education – or values education – policy that includes both the virtues needed by the individual to be able to recognise and manage himself/herself and the values and rules of the society in which the individual lives in Turkey should be implemented. Regarding this, A Neo-Aristotelian Model of Moral Development (Jubilee Center, 2017) that includes both individual and societal purposes (intellectual, moral, civic, and performance virtues) and aims at both individual and societal flourishing may be an effective model in the Turkish context. It aims to contribute to both the subjective and communal wellbeing by a holistic approach. In addition, awareness in the school and family that character is a set of thinking, feeling, and habits of doing that provide for individual and societal flourishing, should be simultaneously raised (Lewis, 2012).

Character education addresses the developable/educable aspect of the individual, rather than aiming to interfere in the unique aspect of the individual. In this regard, a separate program/lesson called ‘character education’ that aims to gain habituation towards virtues (intellectual, moral, civic, and performance) should be constituted for gifted pupils. This would be preferable to calling it ‘values’ that generally refer to mostly context-based principles and convictions (Macintyre, 1981). Such a program could be blended into religion culture and/or citizenship education lessons. For teachers and families with gifted children, informative seminars about character education using this framework should be offered by the ministry in Turkey.

The label ideology that ignores character development while focusing on the preservation of high potential – the causal mechanism – that consists of the interactions of IQ test-based identification policy, the lack of clear/specific policy and practice on character education in gifted education and the almost exclusive focus on cognitive and academic development in educational programs in the SACs in Turkey negatively shape or ignore the character development of gifted pupils in Turkey. Both the formal assessment (e.g., the diagnosis through IQ test) and sociological assessment (e.g., high expectations and appreciations of the family and immediate environment; leaving character development to the whim of high potential) of the gifted label affects the attitudes and behaviours of the gifted child; the child tries to do what is expected of him/her in a gifted profile sociologically defined in the Turkish context. That is, labelling creates serious changes both in the child’s behaviour and the behaviour of society and the environment towards the child (Becker,

1963). Thus, the child experiences the complex emotional, social and academic effects of being labelled as gifted (Hobbs, 1975).

The critical realist approach and therefore the causal mechanism here shows that the character development of a gifted child is shaped by the power interactions and properties of contextual and situational factors (e.g., educational policy and practice, the structure of the SACs, the diagnosis by IQ test, culture, and belief at the macro-level; family and immediate environment at the meso-level; giftedness perception of the teacher and its reflection on the gifted child in teaching practice at the micro-level; and the gifted child's self-perception formed by the effect of the labelling at the micro-level). While psychological and cognitive functions play a prominent role in moral reasoning and moral judgement (well covered by the literature on the moral development of gifted children to date), contextual/situational and relational functions play a prominent role in moral action and therefore should figure in the character development that seeks to influence the habits of acting, thinking, and feeling of the (gifted) individual. The critical realist approach and the causal mechanisms draw attention to the importance of power interactions and the relationships between contextual factors on the character development of gifted child and demonstrate how this manifests Turkey.

In Turkey, to mitigate the effect of the causal mechanism that is the label ideology that ignores character development while focusing on the preservation of high potential, on the character development of gifted pupils, a clear/specific character education program – as explained above – should be established in both gifted education policy and practice in the SACs. In other words, the position of character education in gifted education should be clarified such that this position should show that character development is not an automatic result of high potential. At the same time, it should be able to mitigate parental attitudes and behaviours that target or prioritize only high academic achievement, and therefore the reflection of these attitudes and behaviours on their gifted children's behaviours – or character development. In this context, clear regulations/instructions, a scheduled time, and scientific resources about the character education of gifted pupils should be provided for the SACs. The socio-emotional development of gifted pupils as well as their cognitive and artistic skills should be included in their educational programs. Families and teachers are also entities that affect and are affected by a socio-cultural gifted label ideology. This has been seen in the relational and causal assessment of the occurrence of this mechanism in Turkey. Therefore, providing a family training program on the parenting gifted children will be a step to support the character development of gifted pupils. Family based awareness should be

raised so that character education for gifted individuals within the family should not be seen as an intervention against their potential, but rather that it provides the gifted child competency to recognise and use his/her potential.

Similarly, teachers should be informed in more detail about gifted education in every stage of their education (e.g., a course in the undergraduate program, internship implementation, and in-service training). This is also an important step that will contribute to the character development and education of gifted pupils. At this point, having a separate general directorate within the ministry that supports and deals with teachers and families on this issue will enable the relevant policy and practices to be carried out more clearly and systematically. At the same time, this causal mechanism basically draws attention to the reconsideration of the current gifted identification policy in Turkey. To mitigate the negative effect of formal and sociological labeling on the character development of gifted pupils, the identification process should not be reduced to individual intelligence tests; rather the identification policy should be more developmentally oriented and multifaceted in line with the official definition of ‘specially talented’ of the ministry.

Regarding why character education is important for gifted pupils, *the desire to transform individual potential into societal gain* is the causal mechanism that shapes the teachers’ views in the SACs on it. The causal mechanism shows that a societal consideration which consists of a mix of communitarianism/virtue ethics and the ethics of care represent the foundation of the teachers’ views related to the importance of the character education for gifted pupils. It is relational and therefore not based only on the individualist approach of Kantian reasoning. In addition, the importance of character education for gifted pupils in terms of societal gain (e.g., affecting others as role models due to their future potential positions in science, art, and management; using high potential for the needs of humanity; and preventing possible bigger harm and loss that could be created by high potential), or rather to serve societal gain, is parallel with the creating of a transformational giftedness understanding that aims to make the world a better place or to change positively the world at some level (see Sternberg, 2020). Sternberg (2020) suggests that schools should focus more on the development of transformational – which refers to seek positively to change the world at some level – aspect of gifted students and less on the development of merely transactional (academic performance/skills, argumentation, political ability etc.) abilities. This approach reinforces the position of character education in gifted education in terms of societal gain as desired by the teachers in the SACs in Turkey.

This mechanism, the desire to transform individual potential into societal gain, therefore suggests that policy which downplays such societal considerations in favour of self-regard will be less likely to resonate with teachers and be effectively translated into practice. Conversely any desire to shift practices in gifted education in Turkey, specifically in terms of character education in this field, are more likely to be impactful if this underlying causal mechanism is utilised to frame intended changes in the context of societal benefits. That is, the inclusion of virtues that will serve to positively impact society in the character education of gifted pupils as specific learning goals and learning outcomes will make the program more effective, in the view of teachers. Although the critical realist approach and this mechanism focus on societal gain, they also draw attention to the possibility of neglect such that the position of character education in gifted education is not viewed in terms of individual wellbeing or ignores self-oriented or regarding aspects of the gifted individual. Therefore, it should be emphasized and included in (possible) programs that character education for gifted pupils is not only for societal wellbeing, but also necessary for individual wellbeing.

8.4 Limitations of the study

This section presents the limitations of the study, which it is hoped will be remedied or accounted for in future research in the field. I have focused only on teachers in this study because of time and scope. This is one of the biggest limitations of the study because it has not taken account of families' views, which also could hold important information and different dimensions that could be further explored for causal mechanisms responsible for the character development and education of gifted pupils in Turkey. Additionally, case studies in addition to focus group interviews and surveys could be done to closely tease out and disentangle complex sets of factors and relationships, albeit in one or a small number of instances. Also, I assessed these different constructs – or demi-regularities – singly rather than on a scale, so I could calculate any scalar reliability. This is another limited aspect of this study. Lastly, the views of pupils, policy-makers, and families were not included in the study. Their views about the character development and education of gifted pupils could have brought complementary findings to future projects/studies.

With regard to the statistics used, Kurtosis and skewedness were implemented to see if the data was normally distributed. Since the data was generally positively skewed, indicating uneven distribution towards agreement, and excess kurtosis was almost always above or below zero, indicating data was oriented away from the center of the bell curve, it

was clear that correlations between the ordinal data and demographic data such as age and gender would not yield meaningful results. In general, kurtosis is not applicable to categorical data except to see if it may be treated as constantly variable due to a near perfect or perfect distribution. However, the impossibility of checking for these correlations might be seen as a limitation in the research design.

8.5 Recommendations for future research

The aim is here to contribute the character development and education of gifted pupils in Turkey. In this context, stemming from the findings of the present research, some suggestions are made for further research:

- A similar study could employ a case study to closely tease out and disentangle a complex sets of factors and relationships.
- Further research could employ comparative work to help identify the extent and nature of these mechanisms in terms of their ranges of variation in both process and outcome in different contexts/cultures.
- Further research could focus on parents with gifted children and/or gifted children and/or policy-makers rather than on teachers who work with gifted pupils. This could be useful to get significant information and different dimensions that could be further explored for causal mechanisms responsible for the character development and education of gifted pupils.
- A similar study could focus on how parents with gifted children and teachers think about giftedness in order to explore the underlying foundation of their beliefs and thoughts about it. This may be useful in terms of understanding causal/generative mechanisms and relationships that lead them to rational and irrational beliefs and thoughts about giftedness. This may provide more intelligible suggestions for the relevant policy and practices.
- Since it is clear outcome from the research that teachers need more policy guidance on character education and gifted education, an effective teacher training on these should be provided.

8.6 Conclusion

We need to see challenges and needs as processes or events whereby causal mechanisms interact, counteract, or remain latent (Ayers, 2011). The findings of this study indicate that

there is more about the character development and education of gifted pupils than from what is obvious from empirical observation. In this study, some causal mechanisms have been identified as having interacted, counteracted, or remained latent in the domain of the real leading to teachers' thoughts about the character development and education of gifted pupils. Understanding the character development and education of gifted pupils requires us to not only view teachers' thoughts as events in the domain of the actual that emerge from a complex interaction of mechanisms and structures in the domain of the real, but also as events with unique powers, liabilities, and properties to cause particular experiences in the domain of the empirical. In presenting suggestions for policy and practices about the character development and education of gifted pupils, therefore, ontology (the domain of the real), which enables and constrains the acquisition of knowledge, that is, learning (Brown, 2009), should be the focus. This study has determined that a critical realist approach is a robust and valid tool by considering the potentially empowering contributions of hidden causal mechanisms.

This study gave me, as a young researcher, the perspective that observed events are “a result(s)” of something(s), the causal and contextual explanation of the result(s) will make observed events understandable and clear. This study gave me, as a policy-maker candidate, the perspective that a deep explanation of causal mechanisms and contextual conditions that will help the effectiveness and functionality of future steps in policy is key.

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APPENDICES

Appendix 1: Focus group interview questions

1. Firstly, could you introduce yourself (e.g., graduation degree, year of teaching experience in gifted education, and your subject area) and tell me a little bit about your role at the school?
2. What do you think about character? Or how do you define character?
 - What does character development mean to you?
3. Could you explain how character develops in young people according to you?
 - What has influenced your approach to the development of character?
 - Is character taught, caught, or sought? If one of these, how? Could you explain it with an example or experience?
4. Relying on your experience, what do you think about the character development of gifted children?
 - What are the strengths and weaknesses of gifted children's character?
 - What do you think the generalizability of these strengths or weaknesses is for all gifted children?
5. What are the positive and negative aspects that affect the character development of gifted children?
6. In what respects is character education important for gifted children, or not? And why?
7. What should be taught to gifted children within character education?
 - Which virtues or values? And why?
8. How is the values education policy implemented within your school?
 - Have you made some changes on your education program when integrating the values in teaching? If so, how do you manage your changes into the program?
 - Which values are prioritised? And why?
 - What do you think about the clarity of the values education policy for these children?
9. What are the challenges you faced in actualizing character education of gifted pupils?
 - In your school setting, is there any supportive material for you to teach the values to gifted pupils? If any, what kind of resources are these? Where did you get these resources?
 - What do you think about the adequacy of the resources in this field?
 - What do you think about the adequacy of teacher training in this field?
10. What are your needs or suggestions for character education of gifted pupils?

Appendix 2: Transcription conventions

The transcription conventions used in this research are taken from the following source: Seedhouse (2004)

- . a full stop (period) indicates falling (final) intonation
- , a comma indicates low-rising intonation, suggesting continuation
- ? rising intonation, not necessarily a question
- ‘ ’ quotation in quotation

Additional symbols

- SAC 1: Science and Art Center 1, SAC 2: Science and Art Center 2, etc.
- T1: Teacher 1, T2: Teacher 2, etc.
- M: Moderator.

Appendix 3: Survey

Part 1: Demographic Information

Please circle the answer that is most appropriate to you.

1. Please select your gender.
 - a. Male
 - b. Female
 - c. Prefer not to say

2. Please select your age range.
 - a. 18-24
 - b. 25-29
 - c. 30-34
 - d. 35-39
 - e. 40-44
 - f. 45-49
 - g. 50 +

3. Years of teaching experience in the education of gifted and talented children.
 - a. 0-5
 - b. 6-10
 - c. 11-15
 - d. 16-20
 - e. 21-30
 - f. 31 +

4. Please indicate degrees earned.
 - a. Bachelor's degree
 - b. Master's student
 - c. Master's degree (which also includes master's non-thesis)
 - d. Doctoral student
 - e. Doctoral degree
 - f. Other: _____

5. Please list the subjects taught. (select all that apply)
 - a. Science (Maths, Physics, Chemistry, or Biology)
 - b. Social science (History, Geography, Philosophy)
 - c. Languages (Turkish, English, French, German, Spanish)
 - d. Music & Arts
 - e. Computer Science (Software, Information Technologies, etc.)
 - f. Physical education
 - g. Primary school teacher
 - h. Psychological counsellor
 - i. Other: _____

Part 2: Description of character

For each of the following statements, rate how much you agree by circling the best answer.							
As a teacher, I think, character . . .							
1	is innate.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
2	is a set of unique traits.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
3	is an ability to recognize and manage own traits.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
4	is reactions towards others and events.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
5	develops over time.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

Part 3: Opinions about character development of gifted and talented pupils

For each of the following statements, rate how much you agree by circling the best answer.							
6	The education programs, focusing mostly on academic development, neglect the character development of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
7	After a child is identified as gifted, the positive discrimination of the family and the environment towards the child is a factor that negatively affects the character development of the gifted child.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
8	The positive discrimination of the family and environment towards the gifted child creates a big ego in the child and this negatively affects the character development of the child.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

Part 4: Opinions about character education of gifted and talented pupils

For each of the following statements, rate how much you agree by circling the best answer.							
9	Gifted pupils are a valuable resource for the future of the society.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
10	Character education is necessary for gifted pupils in order to prevent possible harm and loss they can create in the future.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
11	Character education is very important for gifted pupils because they are the leaders, scientists, and artists of the future.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
12	Character education is important for gifted pupils because they are role models for others.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
13	We should have a character education programme for the complete personal development of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

Part 5: Challenges and needs in actualizing character education of gifted and talented pupils

For each of the following statements, rate how much you agree by circling the best answer.							
14	Character education of gifted pupils is left to teachers' subjective opinions and choices.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
15	There are gaps in the policy and practices about character education of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
16	There is a need for in-service training for teachers about the social and emotional development of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

17	There is a need for a family training program for the families of gifted pupils for character education of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
18	There is a need for a scientific resource including virtues descriptions and activities related to them for character education of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
19	There is a need for a scheduled time for character education of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
20	There is a need for a clear regulation about character education of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
21	There is a need for a separate directorate within the Ministry of National Education for the education of gifted pupils.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

Appendix 4: Ethics approval of Durham University for the focus group interview



Shaped by the past, creating the future

01/11/18

Kubra Kirca-Demirbaga
kubra.kirca-demirbaga@durham.ac.uk

Dear Kubra,

Character Education of Gifted and Talented Children, and Designing a Need-based Intervention for Turkey

Reference: 3193

I am pleased to inform you that your ethics application for the above research project has been approved by the School of Education Ethics Committee.

May we take this opportunity to wish you good luck with your research.

Yours sincerely,



Dr Nadin Beckmann
School of Education Ethics Committee Chair

Appendix 5: Ethics approval of Durham University for the survey

Ethical Approval: EDU-2019-05-09T13:28:50-gfsl48

Ethics <no-reply@sharepointonline.com>

Wed 29/05/2019 16:37

To: KIRCA-DEMIRBAGA, KUBRA <kubra.kirca-demirbaga@durham.ac.uk>

Cc: ED-ETHICS E.D. <ed.ethics@durham.ac.uk>; MAZZOLI-SMITH, LAURA D. <laura.d.mazzolismith@durham.ac.uk>

Please do not reply to this email.

Dear Kubra kirca demirbaga,

The following project has received ethical approval:

Project Title: *Character Education of Gifted and Talented Children, and Designing a Need-based Intervention for Turkey;*

Start Date: *01 October 2017;*

End Date: *30 September 2020;*

Reference: *EDU-2019-05-09T13:28:50-gfsl48*

Date of ethical approval: *29 May 2019.*

Please be aware that if you make any significant changes to the design, duration or delivery of your project, you should contact ed.ethics@durham.ac.uk for advice, as further consideration and approval may then be required.

If you have any queries regarding this approval or need anything further, please contact ed.ethics@durham.ac.uk

If you have any queries relating to the ethical review process, please contact your supervisor (where applicable) or departmental ethics representative in the first instance. If you have any queries relating to the online system, please contact research.policy@durham.ac.uk.

Appendix 6: Ethics approval of the Republic of Turkey Ministry of National Education for the focus group interview



T.C.
MİLLÎ EĞİTİM BAKANLIĞI
Özel Eğitim Ve Rehberlik Hizmetleri Genel Müdürlüğü

Sayı : 27250534-605.01-E.23949456
Konu : Araştırma İzni (Kübra Kırca
DEMİRBOĞA)

12.12.2018

Sayın Kübra Kırca DEMİRBOĞA
Ali Kahya Cumhuriyet Mah. Doğay Sok. E232C
No: 24 Daire:19 İzmit /KOCAELİ

- İlgi : a) 27.11.2018 tarih ve 22731469 sayılı başvurunuz.
b) Millî Eğitim Bakanlığı Yenilik ve Eğitim Teknolojileri Genel Müdürlüğünün 22/08/2017 tarihli ve 12607291 sayılı yazısı, 2017/25 sayılı Genelgesi.

"Üstün zekalı ve yetenekli (özel yetenekli) öğrencilerin karakter eğitimi ve Türkiye için ihtiyaç temelli bir model oluşturma" konulu çalışmanız kapsamında Ankara / Yasemin Karakaya BİLSEM, İstanbul/Bahçelievler-Beşiktaş-Kartal BİLSEM, Kocaeli / İzmit BİLSEM, Düzce BİLSEM, Şanlıurfa BİLSEM, Kars BİLSEM, Aydın BİLSEM ve Muğla BİLSEM'de çalışan öğretmenlerle araştırma yapma istediğinize dair ilgi (a) başvurusunuz ve email yoluyla temin ettiğiniz ek belgeler, ilgi (b) Genelge çerçevesinde Genel Müdürlüğümüzce incelenmiştir.

Söz konusu çalışmanın araştırma önerisi formunda literatürden alıntılar haricinde de "üstün yetenekli" kavramının kullanıldığı görülmüştür. Araştırmanın bahsi geçen kurumlarda yapılması, çalışmanın yapılması planlanan kurumlarda eğitim öğretim sürecinin aksatılmaması ve araştırma raporunda "üstün yetenekli" kavramı yerine daha az ayrıştırıcı olan "özel yetenekli" kavramı kullanılarak basılı ve dijital olarak Genel Müdürlüğümüzle paylaşılması kaydı ile uygun görülmüştür.

Bilgilerinize sunulur.

Ahmet Emre BİLGİLİ
Bakan a.
Genel Müdür

Bilgi:
Ankara, İstanbul, Kocaeli, Düzce
Şanlıurfa , Kars, Aydın, Muğla İL MEM

MEB Beşevler Kampüsü A Blok
Beşevler/ANKARA
Elektronik Ağ: <http://orgm.meb.gov.tr>
e-posta: btaskirec@meb.gov.tr

Ayrıntılı bilgi için:Dr. Bilge TAŞKİREÇ
Tel: (0 312) 413 25 34
Faks: (0312) 213 13 56

Bu evrak güvenli elektronik imza ile imzalanmıştır. <https://evraksorgu.meb.gov.tr> adresinden f7c6-ef09-3bf9-95a0-0cf7 kodu ile teyit edilebilir.

Appendix 7: Ethics approval of the Republic of Turkey Ministry of National Education for the survey



T.C.
MİLLÎ EĞİTİM BAKANLIĞI
Özel Eğitim Ve Rehberlik Hizmetleri Genel Müdürlüğü

Sayı : 27250534-605.01-E.9987392
Konu : Araştırma Uygulama İzin Talebi

21.05.2019

Sayın Kübra KIRCA DEMİRBAĞA
Ali Kahya Cumhuriyet Mahallesi, Doğay Sokak,
B2 32C, No 19, Daire 24, Yuvam Akarca,
İzmit / Kocaeli

İlgi: 09/05/2019 tarihli ve 9219611 sayılı dilekçeniz.

Türkiye'nin farklı coğrafi bölgelerinde yer alan ve ekli listede belirtilen 15 BİLSEM'de uygulanması planlanan "Özel Yetenekli Öğrencilerin Karakter Eğitimi ve Türkiye İçin İhtiyaç Temelli Bir Model Tasarlama" konulu araştırma önerisi talebiniz Genel Müdürlüğümüzce incelenmiştir. Söz konusu araştırmanın ekte yer alan mühürlü ölçekler kullanılarak yapılması uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Ahmet Emre BİLGİLİ
Bakan a.
Genel Müdür V.

EKLER:
1- Kurum Listesi (2 sayfa)
2- Mühürlü Ölçekler (19 sayfa)

Adres: MEB Kampüsü A Blok 06500 Beşevler /ANKARA
Elektronik Ağ: <http://orgm.meb.gov.tr>
e-posta: deniz.guler@meb.gov.tr

Bilgi için: Deniz GULER Eğitim Uzm.
Tel: 0 (312) 413 30 33
Faks: 0 (312) 213 13 56

Bu belge elektronik imza ile imzalanmıştır. <https://evrak.meb.gov.tr> adresinden 4e8f-a279-371a-a63a-d060 kodu ile teyit edilebilir.

Appendix 8: Information sheet for the focus group interview



Participant Information Sheet

Title: Character Education of Gifted and Talented Children and Designing a Need-based Intervention for Turkey.

You are invited to take part in a research study of Character Education of Gifted and Talented Children and Designing a Need-based Intervention for Turkey. Please read this form carefully and ask any questions you may have before agreeing to be in the study.

The study is conducted by Kubra Kirca Demirbaga as part of her PhD Research Project Character Education of Gifted and Talented Children and Designing a Need-based Intervention for Turkey at Durham University.

*This research project is supervised by Dr Laura Mazzoli Smith (laura.d.mazzolismith@durham.ac.uk) and Dr Stephanie Lichtenfeld (stephanie.lichtenfeld@durham.ac.uk) from the School of Education at Durham University.

The purpose of this study is to research how teachers who work with gifted and talented children evaluate character education for these children, and how they interpret and implement the legislation of values education for gifted and talented children. In this context, your views related to this field will help to determine specific challenges and shortcomings and to design a need-based intervention for Turkey. This project is also funded by a governmental scholarship.

If you agree to be in this study, you will be invited to a focus group interview and asked twelve questions about character education in the education of gifted and talented children. Your participation in this study will take approximately one hour and this focus group interview will be recorded via a sound and image recording device.

You are free to decide whether or not to participate. If you decide to participate, you are free to withdraw at any time without any negative consequences for you.

All responses you give, or other data collected will be kept confidential. The records of this study will be kept secure and will be destroyed after completion of the study. All files containing any information you give are password protected. In any research report that may be published, no information will be included that will make it possible to identify you individually. There will be no way to connect your name to your responses at any time during or after the study.

* Personal data, as defined by GDPR, will be destroyed by 01/06/2019.

If you have any questions, requests or concerns regarding this research, please contact me via email at Kubra Kirca Demirbaga, kubra.kirca-demirbaga@durham.ac.uk or by telephone at +44 7490 900390.

This study has been reviewed and approved by the School of Education Ethics Sub-Committee at Durham University (date of approval: 01/11/2018)

Kubra Kirca Demirbaga



Leazes Road
Durham City, DH1 1TA

Telephone +44 (0)191 334 2000 Fax +44 (0)191 334 8311

www.durham.ac.uk

Durham University is the trading name of the University of Durham

Appendix 9: Consent form for the focus group interview



Declaration of Informed Consent

- I agree to participate in this study, the purpose of which is to examine of views of teachers who work with gifted and talented children in the BILSEMs towards character education of these children and to design a need-based intervention for Turkey.
- I have read the participant information sheet and understand the information provided.
- I have been informed that I may decline to answer any questions or withdraw from the study without penalty of any kind.
- I have been informed that data collection will involve the use of visual recording devices.
- I have been informed that all of my responses will be kept confidential and secure, and that I will not be identified in any report or other publication resulting from this research.
- I have been informed that any personal data will be destroyed by 25/04/2019.
- I have been informed that the investigator will answer any questions regarding the study and its procedures. Kubra Kirca Demirbaga, School of Education, Durham University can be contacted via email: kubra.kirca-demirbaga@durham.ac.uk or telephone: +44 7490 900390
- I will be provided with a copy of this form for my records.

Any concerns about this study should be addressed to the School of Education Ethics Sub-Committee, Durham University via email to ed.ethics@durham.ac.uk.

Date	Participant Name (please print)	Participant Signature
------	---------------------------------	-----------------------

I certify that I have presented the above information to the participant and secured his or her consent.

Date	Signature of Investigator
------	---------------------------

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Durham University is the trading name of the University of Durham

Appendix 10: Information sheet and consent form for the survey

This research called “Character education of gifted and talented pupils and designing a need-based intervention for Turkey” is conducted by Kubra Kirca Demirbaga, who is a Ph.D. student at Durham University, and managed by Dr. Laura Mazzoli Smith (laura.d.mazzolismith@durham.ac.uk) and Dr. Stephanie Lichtenfeld (stephanie.lichtenfeld@durham.ac.uk).

The aim of this study is to investigate how teachers who work with gifted and talented children evaluate the position of character education in the education of these children, and what challenges and needs are. Hence, your answers to this survey will help to identify challenges and needs and to design a need-based intervention for Turkey. The survey questions were prepared on the basis of the results of the focus group interviews conducted with 48 teachers working in SACs in different regions of Turkey. The study consists of 5 parts and will take approximately 15 minutes.

All your answers will be kept confidential. There will be no information that would enable you to individually identify in any research report that may be published. It is not possible to establish a relationship between your name and your responses at any time during or after the study. You can refuse to answer questions and end your participation at any time. You can request a report from the researcher containing the findings of the study. If you have any questions, requests, or concerns regarding this research, you can contact me by e-mail at kubra.kirca-demirbaga@durham.ac.uk or by phone at +44 7490 900 390.

This study is carried out in 15 different cities in Turkey. For this reason, before starting to answer the survey, please write the name of the city you work in and then your name or a nickname in the username section. For example: sivaskubra

As a participant, I have been informed about the research and I agree to participate in it.

- I approve.
- I do not approve.

Appendix 11: A sample of one of the focus group transcripts (SAC 3)

M: Thank you very much for attending this focus group interview. Firstly, I would like to introduce myself as a moderator of the group. I am Kubra, a second-year Ph.D. student at Durham University in the UK. As I informed you before, this interview is a part of my Ph.D. study. My research is related to the character development and education of gifted pupils. I aim to contribute to the relevant policy and practices in Turkey through this research. That's why your answers in this interview are very important and valuable. In this sense, I have 10 interview questions related to the character development and education of gifted pupils. Before moving on to the questions, it would be great if you write your name on the tags and stick it on your collar. Approximately, we have time between 45 minutes and 1 hour for this interview, so to be able to use the time effectively, it will be great to focus you on the questions I show in the PowerPoint presentation. Is there anything you would like to ask? Okay, we can start with the first one. Could you please introduce yourself, for example, your graduation degree, your teaching experience year in gifted education, and your subject area, and tell me a little bit about your role at the school?

T1: My name is T1. I can start. I am an English teacher for 8 years. I have been working with specially talented children for 3 years. I have only a bachelor's degree.

T2: I am T2. I am a Turkish teacher. I have been working here for 3 years. This is my 10th year in the profession. I have a master's degree.

T3: I am T3. I am a class teacher. I have been working with these kids for 2 years. I have also only a bachelor's degree. Its my 10th year in the profession.

T4: My name is T4. I am a maths teacher for 5 years and I have been working with these children for 2 years. Similarly, I have only a bachelor's degree.

T5: I am T5. I am an 18-year math teacher. This year I have started working with these children. I worked in a science high school for a long time. I have a master's degree.

M: After getting to know each other briefly, we can move on to our second question. What do you think about character? Or how do you define character? And what does character development mean to you?

T2: The character is personality features.

M: Well, what are these features? Could you explain a little more?

T1: I can explain while my friend is thinking. There are education and teaching dimensions for these children. Character education is related to the education dimension. We are doing something for their cognitive development, but we are not commenting too much on their character development. There is a concept called values education. I think these values develop character, but I am not sure what we are doing in this context.

T3: I can share my opinion in addition to my friend's opinion. The concepts of the philosophers on this subject have always attracted my attention. Aristo (Aristotle) also constantly says character. This concept sounds me very mysterious. Character is like an ability to recognize oneself at all points and to nurture the current potential at all points. If I mention the program in the SAC, the self-realization of the student and starting from this realization, how to go on a better way or how to progress in this path. Character education is important for specially talented children to control their own potential. I mean that the self-realization of the high potential should be controlled. This education is not only for themselves, but also for the benefit of society.

T4: But I have identical twins, their characters are different from each other. Although they have the same parents and environment, their reactions are different. Although they are exposed to the same things, their reactions are different. Even if the same education is given to them, they have a character that originates in the innate and they reflect it on us. Therefore, I think character is innate, and everybody's character is different. Character may change, but not completely, because, I have twin children whose genetic codes are the same, but their character codes are not the same.

M: Do you mean that character is related to genetic?

T4: Absolutely, my experience depending on my children shows that. Similarly, children here also interpret everything depending on their character.

T2: So, does not it ever change?

T4: Of course, it can change over time. But I don't think it will change completely, because there are twins whose genetic code is the same in front of me.

M: What do you think, T5? how does character develop? Or how can you define it?

T5: I accept parents are role-model in the building of character, however, character consists of 90 % of the characteristics that originate in the inherent of the individual.

T1: I think, changeable aspect of character is more than 10%. I think 80% of the character development is hereditary, as my friend said, but there is still a 20% rate for education. Family is also effective but until a certain age. I accept that there is also developmental aspect of character, but it is a small part.

T2: I think character is teachable. When we say 'good character', it should be parallel to the norms of Turkey, because it may change from country to country, from culture to culture. It is flexible.

M: Does anyone want to add?

M: Okay, well, when we move on to the character development of gifted pupils, what do you want to say? What do you think the character development of gifted children relying on your experience?

T1: I think we need to give an opportunity for that to these children.

M: What do you mean? Could you explain a little more?

T5: Our time is limited here. So, I do not know how and how much we contribute to their character development. We are lacking in this topic.

T1: I mean that we have 2 or 3 hours in a week.

T2: Now, I am thinking about the relationship between character education and values education.

T3: Our children are very busy with scientific and artistic activities, so they have no time for anything. This also prevents us to provide character education.

T5: They do not accept defeat or failure.

T4: For them, success is the guide, the environment of the SACs also affects this issue.

T5: Some thoughts negatively affect them, such as 'I am specially talented, that's enough for me.' They assume that they can get something even if they don't work, so they don't care, this leads to a lack of character.

T4: Yes, absolutely.

T1: We can even see this kind of things in their families. Their families are another dimension. It is really very important.

M: Can you explain a little more with examples? For example, what have you experienced regarding that?

T1: Families here are at the top of the blockers. Because before the child realizes that he/she is gifted, the parents attach the gifted label to their child. Parents think that their children should be talented in every subject. This is very wrong. These attitudes of families challenge us.

T4: When the family witnesses a situation, family think that "my child gifted, so I should not intervene".

T2: I agree with all of them.

T5: Some thoughts negatively affect them, such as "I am gifted, that is enough for me". There is a big ego. Families think that they should release their children in terms of character.

T4: These children need guidance. They will be engineers and so on. Societal benefit is important.

T1: For example, it is important not to grow up engineers who make gas chambers. There are examples of that in history. It is important to grow up individuals who think about human benefits.

T4: Gifted children have potential, and the character education will help to shape this high potential. One of our students is very interested in the world problems, such as the world population to come to equilibrium.

T2: Based on the examples given by my friends, therefore, character education should be given to these children in order not to behave as an egoist, to take into consideration the goals of society. In the world, we need each other, the smallest thing done by each of us does affect everyone of us. For this reason, these children should be given character education, it should be a priority, and we should start with the aim of doing something good. The core purpose is to get something good for the benefit of humanity.

M: The subject came to the importance of character education for gifted pupils, which is also one of my interview questions. Could you please explain it more? In what respects is character education important for gifted children, or not? And why?

T1: I agree with T2. Character education, which makes gifted children more beneficial individuals for society rather than individuals who have made bad inventions, is necessary.

T5: In fact, high potential should be controlled for the benefit of society. There is an expression that uncontrolled power is not power. So, like this.

M: What do you think, T3 and T4?

T3: We need to tell goodness to these children, because they will come to better positions in the future. They will more affect others due to their future positions.

T4: When a normal student has bad character, he/she affects only himself and his/her family or up to 10 or 15 people, but the gifted individual affects thousands or maybe millions of people. Character education is important for these children for the future.

T2: I agree, these children have the potential to affect too many people.

T1: I absolutely agree with my friends.

T3: Right, right.

M: Well, what are the strengths and weaknesses of gifted children's character? What do you think about that?

T5: As far as I observe, their communication skills are weak. While we were in front of the door, we counted, only 2 students of 60 students saluted to us.

T2: I agree with T5. They are like robots, they come here to get academic knowledge and skill, or they focus on these rather than caring about humane things.

T3: I think they lost their humane aspects when they are not confirmed by others. They are challenged to accept different opinions and their response sometimes may be rude.

M: Well, what should be taught to gifted children within character education? And why?

T5: Cooperation and sharing are very important. But they do not close to that. It may be a result of their upbringing. The parents of these children are a problem.

T4: I agree with T5, these children are not good in terms of being open to new ideas because of their families' attitudes. Parents always approach their children like you are the best, you are the first. Hence, the child starts to behave like this.

T1: They are perfectionists because of their families. That's why they cry when they fail.

T2: I agree with T5. There is a need for good guidance.

T5: I agree with T2.

M: How is the values education policy implemented within your school? Which values are prioritised? And why?

T2: Even if we have a plan regarding values education for each month, the values education regulation is not enough and clear, 10 or 15 values cannot be enough.

T1: Definitely, 10 values cannot be enough.

T4: There is a life-long learning.

T5: Actually, our life is values.

T4: In every month, one of us tells one value in a way of a seminar to the students.

T5: We give seminars about values. We have a plan for each month. But the values education regulation is not enough for this.

T2: Materials from the internet we find do not have a scientific substructure. We need an activity handbook prepared by experts. While there is a traffic lesson in the curriculum, why there is no lesson on values education.

T1: For example, we will tell the value of responsibility and pass in this month. After that, will not we mention this value? Or can we finish in one month? In general, our teachers are trying to make integration of values into their subjects. It's entirely up to the teacher's initiative. It should be coordinated within the classroom, within the family, within the family environment. These values can be gained only in this way. In the SACs, activities related to values based on a more teacher based. The teacher may decide to add new values or take out some values. This cause a neglect in this field. The regulation is also not enough.

M: How do you manage this flexibility? What do you do about that?

T3: We focus more on academic knowledge rather than values because we give 2 or 4 hours to a child in a week, so time is limited. It should be full of more activities and cooperation with other entities. The regulation should be more detailed and include more information.

T5: We search ourselves. We find from the sources written from the internet. We are reading by ourselves. if it is logical according to us, we base (our thinking) on that. That is all. There should be a separate program called values education or character education for the SACs and it should be filtered like a funnel and given to us by a separate directorate in the ministry. Will we do the academic project or this? There is no system that helps us in this field.

T1: We are not sure the reliability of the resources. Also, there are personal differences here, which causes the complexity in transferring values. No source already, we are the source and the internet. It was left to the initiative of the teacher although teachers don't have a sufficiency in this field as we said.

T2: The related resources must be prepared by the experts, otherwise they will not be professional.

M: As far as I understand this flexibility causes some challenges. Could you explain a little more the challenges you faced in actualizing character education of gifted pupils? What kind of challenges are these?

T4: For example, we had a special education course at the university. However, our course was related to children with mental retardation or children with learning disability. There was no information about gifted children. This is a big shortcoming.

T5: Here, there are personal differences that cause the complexity in transferring the values. There is no scientific resource, the resource is us and the internet. It was left to the initiative of the teacher although teachers don't have sufficiency in this field.

M: Regarding these challenges and more, what are your needs or suggestions for character education of gifted pupils?

T1: I think there should be a separate teacher training, like an in-service training, for particularly the SAC teachers. I don't think our training is enough in this field.

T4: I want to be given the SAC teachers to have a separate training. I don't think our training is enough as well.

T2: In fact, none of us have any background related to gifted education and values education.

T3: As the SAC teachers, we all want to attend such training if it is arranged. I think it will be more effective and not waste of time.

T1: There are no courses about gifted education. There are only a small number of friends who have a master's degree or doctorate degree about gifted education.

T3: I think there should be systematic support. Firstly, in-service training should be carried out and then a co-ordinately family and teacher training. If the family does not support the teacher, it is a matter. In this sense, the Ministry of National Education should provide a coordinated training.

T4: When registering to the SACs, a condition should be, for example, completing the family training program. Absolutely, this is very important.

T1: Absolutely, there must be such a condition.

T4: Absolutely, a training should be arranged for parents.

T5: The family as important as scientific materials should be incorporated into the process.

T5: In the Ministry of National Education, there should be a unique directorate for gifted education. There should be a separate official presidential and scientific something. We need someone to lead us. Unfortunately, there is no such a thing.

M: Thank you for your answers and time. Our interview ends here. Is there anything you would like to add or ask?

T3: No, we also thank you.

T5: We hope it will be useful.

T1: We wish you good work.

M: Thank you all.