Reversing gifted underachievement in Kazakhsta	n:
Teachers' perception, experiences, and practices	S

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NUGSE RESEARCH APPROVAL DECISION LETTER

Dear Zauresh Manabayeva,

This letter now confirms that your research project entitled: **Reversing gifted**

underachievement in Kazakhstan: Teachers' perception, experiences and

practices has been approved by the Graduate School of Education Ethics Committee

of Nazarbayev University, after successfully addressing the recommended changes

made by the reviewer. The proposed study now complies with all of the requirements

of Nazarbayev University.

You may proceed with contacting your preferred research site and commencing your

participant recruitment strategy.

Yours sincerely,

NUGSE Research Committee



Acknowledgement

Having finished my thesis now, I look back and can say there were a lot of people to make happen this hystorical moment in my life. First of all, I would like to express my deepest gratitude to NUZYP community who believed in me and led me to the intial steps to become a researcher.

I would like to express my sincerest gratitude to my supervisor, professor Daniel Torrano, for his professional guidance, support, consideration, and great patience he showed during the times when I was consistently struggling in every stage of my thesis writing. I am grateful to my supervisor for his insightful and timely feedback I received to develop this study and as a result of what I was able to complete my thesis.

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Abstract

Reversing gifted underachievement in Kazakhstan: Teachers' perception, experiences, and practices.

According to a number of research, schools and teachers still face challenges in terms of gifted underachievers, specifically in identifying and understanding the reasons of gifted underachievement as well as providing efficient support for academically vulnerable students. Therefore, the aims of the current research were to explore the perception and practices of Kazakhstani teachers with gifted underachieving students in one the specialized school for intellectually gifted students. More specifically, the study aimed at exploring teachers' conceptualization on the nature of gifted underachievement as well as identifying the factors that contribute to gifted underachievement. The study also aimed at finding out the common strategies teachers use to reverse gifted underachievement. In this regard, a qualitative research design was implemented using semi-structured interviews with open-ended questions to get more insight into teachers' experience. Based on the purposeful sampling and maximal variation eight teachers who dealt with gifted underachievers in the past and those from different subject áreas were involved in the research (two English teachers (one female and one male), two Chemistry teachers (one female and one male), two Physics teachers (one female and one male), one Math teacher (a female) and one Biology teacher (a male)). The finding of the study revealed three common characteristics of gifted underachievement recognized by teachers: low socioemotional skills, different abilities and interests, and those with physiological peculiarities. Moreover, according to teachers' perception and practice, there are internal and external factors to contribute to gifted underachievement. The internal factors consider a lack of perseverance, lack of students' learning goals, and a domain-specific nature of gifted students, while the external factors refer to high curriculum demands, high parents'

expectations, as well as negative teacher-student relationships and teachers intensive workload. Finally, two main approaches to reverse gifted underachievement were identified: building a healthy teacher-student relationship based on trust and applying differentiated instructions.

Андатпа

Қазастандағы үлгерімі төмен дарынды оқушыларды қалпына келтіру: мұғалімдердің көзқарасы мен тәжірибесі.

Бірқатар зерттеулерге сәйкес мектептер мен мұғалімдер дарынды улгермеушілер мәселесіне, атап айтқанда, дарындылықтың үлгермеушіліктің себептерін анықтауға, сондай-ақ академиялық әлсіз дарынды оқушыларға тиімді қолдау көрсетуге байланысты мәселелерге әлі де кезігеді. Сондықтан да, аталмыш зерттеудің мақсаты Қазақстандағы зияткерлік қабілеті бар оқушыларға арналған бір мамандандырылған мектептегі мұғалімдердің дарынды үлгермеушілік мәселесіне көзқарасы мен тәжірибесін анықтау болды. Нақтырақ айтсақ, бұл зерттеу жұмысы мұғалімдердің дарынды балалардың академиялық үлгермеушілінің табиғаты туралы тұжырымдамасын және оған ықпал ететін факторларды анықтауға бағытталған. Зерттеу жұмысы, сонымен қатар, мұғалімдердің дарынды үлгермеуші оқушылардың жетістікке қол жеткізуге бағытталған ортақ стратегияларын анықтауға бағытталған. Осыған орай, мұғалімдердің тәжірибесі туралы көбірек ақпарат алу жолында ашық сұрақтар мен жартылай құрылымдалған сұхбаттарды қолдана отырып, сапалық зерттеу жұмысы жүргізілді. Мақсатты және максималды өзгеру іріктеу тәсілдері негізінде, бұл зерттеу жұмысына дарынды үлгермеуші балалармен жұмыс істеуде тәжірибесі бар, түрлі пәндерді оқытатын сегіз мұғалім қатысуға ерік білдірді. Атап айтқанда, екі ағылшын мұғалімі (бір әйел және бір ер адам), екі химия пәні мұғалімі (бір әйел және бір ер адам) қатысты.), екі физика пәні мұғалімі (бір әйел және бір ер), бір математика пәні мұғалімі (әйел) және бір биология пәні мұғалімі (ер адам). Зерттеудің нәтижелері дарынды үлгермеушіліктің үш жалпы сипаттамасын анықтады: төмен әлеуметтік-эмоционалды дағдылар, әртүрлі қабілеттер мен қызығушылықтар және физиологиялық ерекшеліктер. Сонымен қатар, мұғалімдердің қабылдауы мен тәжірибесі бойынша, дарынды үлгермеушілікке ішкі және сыртқы факторлар ықпал етеді. Ішкі факторлар оқушылардың табандылығы мен мақсат коюдың жетіспеушілігін және балалардың бір ғана бағыттағы дарындылығын қарастырады. Ал сыртқы факторлар оқу бағдарламалары мен ата-аналардың жоғары талаптарын, сондай-ақ мұғалім мен оқушы арасындағы жағымсыз қарым-қатынасты және мұғалімдердің жұмыс бастылығын саралайды. Қорытындылай келе, дарынды үлгермеушілерге қолдау көрсетудің екі негізгі әдісі анықталды: мұғалім мен оқушы арасында өзара сенімге негізделген жағымды қарым-қатынас құру және саралап оқыту.

Абстракт

Реверсирование неуспевающих одаренных в Казахстане: восприятие, опыт и практика учителей.

Согласно ряду исследований, школы и учителя по-прежнему сталкиваются с проблемами выявления и понимания причин неуспевающих одаренных учеников, а также оказания эффективной поддержки для успешного реверсирования академически уязвимых учащихся. Таким образом, целью настоящего исследования было изучение восприятия и практики казахстанских учителей при работе с неуспевающими одаренными учениками в одной из специализированных школ для интеллектуально одаренных учеников. А именно, исследование было направлено на изучение концептуализации учителей о природе неуспевающих одаренных учеников, а также на выявление факторов, способствующих неуспеваемости одаренных учеников. Исследование также было направлено на выявление общих стратегий, применяемыми учителями на практике для реверсирования неуспевающих одаренных участников. В связи с этим, для лучшего понимания опыта учителей при работе с неуспевающими одаренными учениками был реализован качественный дизайн исследования с использованием полуструктурированных интервью с открытыми вопросами. Основываясь на целенаправленной выборе и максимальном типе вариации участников, в исследовании были задействованы восемь учителей с опытом работы с неуспевающими одаренными учениками из разными предметов (два учителя английского языка (мужчина и женшина), два учителя химии (мужчина и женшина), два учителя физики (мужчина и женшина), один учитель математики (женщина) и один учитель биологии (мужчина)). Результаты исследования позволили выявить три общие характеристики одаренных учеников, которые были признаны учителями: низкие социально-эмоциональные навыки, различные способности и интересы, а также учащиеся с физиологическими особенностями. Кроме того, в соответствии с восприятием и практикой учителей, были выявлены внутренние и внешние факторы, способствующие к неуспеваемости одаренных детей. К внутренним факторам относятся отсутствие настойчивости, отсутствие целей обучения учащихся и способность, проявляющаяся в олном направлении, в то время как к внешним факторам относятся высокие требования к учебной программе, высокие ожидания родителей, негативные отношения учителя и ученика, а также загруженность учителей. Наконец, были определены два основных подхода применяемые учителями для реверсиврования неуспевающих одаренных учеников: построение здоровых и доверительных отношений учителя с учеником и применение дифференцированного метода обучения.

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Chapter one: Introduction

One of the biggest concerns of gifted education is to elicit students' potential and help them to instill a sense of civic responsibility, which will allow students in the future to more readily tackle acute problems our current society is exposed to (Renzulli, 2012; Steenbergen-Hu, Olszewski-Kubilius & Calvert, 2020). Unfortunately, research states that almost half of the gifted learners underachieve while generating new ideas and new perspectives to existing world issues (Bennett-Rappell & Northcote, 2016; Montgomery, 2009; Siegle & McCoach, 2005). Besides, there is a high tendency for gifted learners with high potential to underachieve due to their socio-emotional peculiarities and specific learning abilities (Reis & McCoach, 2000; Ritchotte, Rubenstein & Murry, 2015). As a result, teachers might easily give up on these children, mistakenly referring to them as "a difficult child." These students are referred to as gifted underachievers since they might not only perform lower academically, but also stay at their average performance, meaning somewhere between non –achieving and achieving students (Montgomery, 2009). According to a number of research efforts, schools and teachers still face difficulties in their attempts to understand the nature of the gifted underachievers, identify the causation of underachievement and address the needs of these academically vulnerable gifted groups (McCoach & Siegle, 2003a; Montgomery, 2009; Reis & McCoach, 2000). Since Nazarbayev Intellectual Schools (NIS) schools are the special school to work with selected gifted children, this research is aimed at contributing to understanding Kazakhstani teachers' conceptualization of gifted underachievement, their perception about the factors leading to underachievement as well as explore their practices as teachers of gifted underachievers.

The purpose of this chapter is to present the background information about gifted education in the international context, as well as in Kazakhstan, in order to better

understand the rationale of the research. The first section will introduce the importance of gifted education, characteristics of gifted students, and discuss some myths about high ability students. Moreover, it will introduce the term of gifted underachievement, and discuss some factors leading to the underachievement of gifted students. The second section will reveal the historical aspects that influenced the formation of current gifted education and discuss how NIS schools are pioneering gifted education in Kazakhstan. This is important to reveal the problems related to gifted underachievement in NIS schools, as well as in mainstream schools. Finally, I will finish the introduction part by presenting the purpose of the study and research questions, as well as the significance of the study.

1.1 Background

Supporting and developing gifted students has never had such an important role as in the 21st century since, according to Siegle and McCoach (2005), it is strongly supported that every student has the inner potentiality to be developed and properly implemented for the prosperity of a society. Examining the role of gifted education in society, Renzulli (2012) argues that gifted students deserve a quality education that meets their needs since they have the potential to contribute to the development of the society in multiple areas. He believes that gifted students need opportunities to develop and utilize their superior potential or potentials in the form of special programs and services.

Every gifted child is unique, but some authors have proposed a list of traits that are used to define gifted students as a collective. For example, Clark (2002) argues that gifted students typically demonstrate certain cognitive characteristics, such as retention of large quantities of information, advanced comprehension, varied interests, and high curiosity. In the affective domain, gifted students are often described as unusually sensitive, having a great sense of humor, idealists, and preoccupied with social justice issues. Other

characteristics associated with gifted students in the literature are creativity, strong motivation, eagerness to learn, and high performance (Clark, 2002).

On the bases of these characteristics, there is a widespread myth that gifted students, having high learning capacity, do not face challenges and do not require any support at school (Clark, 2008; Renzulli, 2012). Moon (2009) disputes this myth by stating that often a mismatch between the educational environment in the form of content and curriculum and the ability of a gifted student leads to boredom and demotivation. As a result, a student whose potential was not disclosed is often found as underachieving. Therefore, some scholars claim that gifted students need additional support and encouragement by special programs (Mofield & Parker Peters, 2019) while other scholars believe a gifted student's background or the environment in terms of family and school is often neglected, resulting in underachievement (Montgomery, 2009; Siegle & McCoach, 2005).

Reis and McCoach (2000) believe that underachieving students are those who show a great difference between their performance results in cognitive tests and their actual performance that is shown to teachers and revealed in their grades. Schultz (2005) found that almost 50% of students with high thinking capacity are actually underachieving according to this definition. More recent studies suggest that 15% to 40% of gifted students perform academically lower than their potential allows (Figg, Rogers, McCormick & Low, 2012). Moreover, dropouts among those identified as gifted are increasing, puzzling educators all over the world (Montgomery, 2009).

Despite increasing research on gifted underachievers in the last few decades, studies on addressing and reversing gifted underachievement remain limited (Reis & McCoach, 2000). Therefore, this study aims at examining teachers' understanding and practices with gifted underachievers in a specialized school for gifted students in

Kyzylorda, Kazakhstan. More specifically, this study will explore Kazakhstani teachers' conceptualizations about the nature of gifted underachievement and the factors that contribute to gifted underachievement. Moreover, the study will identify the strategies that teachers use in the classroom to reverse the pattern of gifted underachievement.

1.2 Context: The Education of Gifted Students in Kazakhstan

The education of gifted students in Kazakhstan has a long tradition and has been strongly influenced by the particularities of the education system during the Soviet era (Yakovets, 2014). The Soviet education system focused mainly on three domains of learning: math, sport, and arts. These domains were typically developed in special schools with their own recruitment criteria and clubs that would provide additional educational opportunities, usually after school time (Grigorenko, 2017). Working with gifted children was generally aimed at preparing children for academic Olympiads (Yakovets, 2014), and attracting more gifted students in order to increase the number of scientists and engineers in technology. Competitions within the Soviet Union and with the West was a further incentive (Grigorenko, 2017). Specialized schools for high-ability students in math and science and preparation to succeed in Academic Olympiads are still the main approaches for the education of gifted students in the current Kazakhstani education system (OECD, 2014).

In 2008, a project was launched to create 20 intellectual schools under the Autonomous Educational Organization 'Nazarbayev Intellectual Schools' (NIS) as an attempt to adjust to the fast-developing global market requirement and increase the quality of education in the country. The NIS became an experimental platform to change the way education for the gifted is delivered in the country by developing a curriculum in collaboration with international experts and translating its experience throughout the country (Yakovets, 2014, p. 523). The NIS implements today several programs, including

physic-mathematical (FM), chemical-biological (CB) directions, and an international baccalaureate (IB) program, developed in cooperation with a strategic partner - the International Examination Council of the University of Cambridge. Twenty NIS schools and one IB school were opened all around the country from 2009 to 2016 (National report, 2017, p. 172). These schools have advantages above other mainstream schools in terms of autonomy in finance, resources, developing, and implementing their programs. In order to be enrolled in NIS schools, learners of 12-13 years old should pass the John Hopkins Center Talented Youth (CTY) tests on logical thinking, math, and three main languages in Kazakhstan: Kazakh, Russian and English. Enrolled students get an opportunity to get deep learning into STEM-related subjects (mathematics, biology, physics, and chemistry) compared to mainstream schools (OECD, 2015, p. 95) in addition to the in-depth development of language and critical thinking skills. The contribution of NIS schools in the development of gifted education in Kazakhstan is in part dependent on the professional development of NIS teachers in teaching and developing differentiated programs for gifted learners. Between 2014 and 2017, in collaboration with professors from the John Hopkins University, NIS teachers were trained on 'The Development of Gifted Children' program. There are now 47 trainers on the program and 9 experts to evaluate the program implementation (NIS Annual Report 2017, p. 25). This number is increasing every year.

1.3 Statement of the problem

Such substantial attention by the Kazakhstani government to its top-performing individuals could be questioned in terms of its benefit to the growth of human capital. Unfortunately, international assessments do not confirm the positive effects of involving the top-performing students to improve the position of Kazakhstan in PISA competition, due to the lower performance of Kazakhstani students compared to their peers from other countries (OECD, 2014, p. 106). Kazakhstan had 881 school-aged winners of international

science competitions in 2010 but only 0.2% of its 15-year-olds scored at the top two levels of PISA science assessments in 2012, compared to the OECD average of 8.4% (OECD, 2014, p.106).

Furthermore, OECD experts argue that this unequal grouping of academically high and low performing students is partly the result of teachers' interest in preparing students for Olympiads in order to get bonuses and incentives in case their students are prize-winners (OECD, 2014, p. 105). However, there is accumulated research evidence that this segregated and highly specialized approach to the education of gifted students can result in academically weaker students who are frequently neglected and 'pensioned off', instead of looking for better ways to disclose their potential or reverse that potential (Clark, 2008; Renzulli, 2012; Steenbergen-Hu et al., 2020). According to Little (2001), the reason for the poor performance of gifted students should be scrutinized and requires some theoretical knowledge from a teacher to understand it (p.47). For example, a student might have difficulties understanding the instructions due to his or her developmental domains, while this learner could be an expert on bugs although he or she does not have good reading skills (Little, 2001, p.47).

Specifically, NIS provides every student with access to high standard academic programs and curriculum developed in cooperation with local and Cambridge experts aimed at preparing students equipped with 21st-century skills (NIS Annual Report 2017). Despite a short history, these schools are considered to be top-performing, where each individual student is under the close supervision of experienced and selected teachers. It should be noted that, in order to be admitted to such schools, students should pass a screening examination developed by CITY specialists, which means students are tested in Math and logical tasks as well as in their knowledge of three languages: Kazakh, Russian and English (https://www.nis.edu.kz/ru/applicants/otbor/). There is some evidence that

even such selected gifted students are not always academically successful in all academic subjects. Thus, some students might underachieve in some specific subjects, while achieving in others, which often confuse and puzzle teachers of different subject areas of these schools. International practice shows that even gifted learners in such special schools like NIS can struggle academically and often be under the threat of dropout. Therefore, this brings us to the conclusion that NIS schools are not excluded to encounter the issue of gifted underachievement phenomenon. It is not difficult to imagine what the situation looks like in mainstream schools when even well-equipped NIS students encounter challenges and experience gifted underachievement.

1.4 The purpose of the study

The purpose of this study is to examine teachers' understanding and practices with gifted underachievers in a specialized school for gifted students in Kyzylorda, Kazakhstan. More specifically, this study will explore Kazakhstani teachers' conceptualizations about the nature of gifted underachievement and the factors that contribute to gifted underachievement. Moreover, the study will identify the strategies that teachers use in the classroom to reverse the pattern of gifted underachievement.

1.5 Research questions

- 1. What characteristics define gifted underachievers in the opinion of teachers?
- 2. What factors contribute to the underachievement of gifted students in the eyes of teachers?
- 3. What strategies do teachers use in the classroom to reverse the pattern of gifted underachievement?

1.6 Significance of the study

Since every student is unique in nature and potential, this research will be most beneficial for those students who are struggling academically due to a variety of factors, as well as for different stakeholders involved in their educational process. School administrations have the potential to benefit from this study as well since the research will reveal the factors that might lead to gifted underachievement. This information will help the school administration to better prepare teachers in improving their ability to identify and support gifted underachieving students. Looking at the analysis of the best practices of reversing gifted underachieving students in the international context provided in this research, school administrators can encourage the improvement of teachers' approach in reversing patterns of gifted underachievement. Moreover, the results of the study can be beneficial for teachers, who will have an opportunity to self-reflect on their own experience of working with gifted underachievers and consider the reversing patterns identified in this study. Overall, the results of this research have the potential to benefit all NIS schools throughout the country, since it can raise awareness on the nature of gifted underachievers and factors hindering the reverse pattern of gifted underachievers.

1.7 Conclusion

This chapter provided an introduction to the thesis, focusing on the statement of the problem, purpose, and significance of the study, research questions, and structure of the thesis. The researched topic is of immense importance because identifying and encouraging gifted students to reach their highest potential can contribute positively to the development of a young country like Kazakhstan. The outcomes of the research will reveal some of the root causes of gifted underachievement, and offer ways to reverse this phenomenon. The next chapter will provide an analysis of the literature in the international context related to gifted education as well as gifted underachievement.

Chapter two: Literature Review

The purpose of this chapter is to provide an analysis of literature in the international context related to gifted education as well as gifted underachievement. The chapter also includes a review of various books on the nature of gifted underachievers, factors, and intervention patterns used recently. The chapter is divided into 6 sections. In the first section, the chapter provides insight into the roots of gifted education and critically analyzes different conceptualizations of the construct of giftedness. The second section is devoted to the description of gifted students. The third section provides insights into understanding the phenomenon of gifted underachievement. The fourth section describes the peculiarities and characteristics of gifted underachievers. The fifth section considers the factors contributing to gifted underachievement. The chapter ends with the theoretical framework guiding this study and the conclusion of this chapter.

2.1 What is giftedness?

There are more than 200 definitions developed throughout the world in the attempts of identifying what giftedness is and to what extent one should be distinguished as gifted. This variety of definitions of giftedness proposed by the founders of gifted education brings a lot of debate to find the most effective one to make an accurate selection of children for special programs (Renzulli, 2012). Lewis Terman (1925), considered the grandfather of the field, defined giftedness as "the top 1% level in general intellectual ability, as measured by the Stanford-Binet Intelligence Scale or a comparable instrument". Tanennbaum (1983) (as cited in Feldhusen, 2005) defined giftedness from a psychological perspective, making a special emphasis on non-intellectual and environmental factors as the main constructs impacting on developing giftedness. More recent definitions view giftedness as the product compatible with the requirements of the modern world, where knowledge producers with their outstanding ideas are in need. Within this context, Marland

(1972) presented six categories of high abilities the gifted should possess: 1) general intellectual abilities, 2) specific academic abilities, 3) creativity, 4) leadership skills, 5) artistic aptitudes, and 6) psychomotor abilities. One of the more recent definitions was presented by Renzulli (2012), based on his three-model of giftedness (Renzulli, 2002), where he states:

Giftedness consists of an interaction among three basic clusters of human traits — these clusters being above-average general abilities, high levels of task commitment, and high levels of creativity. Gifted and talented children are those possessing or capable of developing this composite set of traits and applying them to any potentially valuable area of human performance. (p. 69).

There is also a growing agreement that giftedness is a social construct (Lo, Porath, Wu, Yu, Chen & Tsai, 2018; Preiffer, 2012), since it is based on the knowledge constructed as an impact of specific culture and context (Kim, 2001; Lo et al., 2018). According to the history of the understanding of giftedness by Galton (1869) and the perception of other founders at his period of time, it was based on the strong correlation of intelligence with giftedness and intelligence tests as well, while the next generation of founders modified this idea, extending the spectrum of abilities according to which gifted students were identified. Today giftedness is considered through a developmental concept according to the requirements of the modern world where educators understand the importance of early identification and nurturance of every child.

Stenberg and Davidson (2005) devoted a whole book called 'Conceptions of Giftedness' to the definition of giftedness and identified that the construct and formation of giftedness have passed several stages, each with its concept of understanding giftedness getting its basis from the previous one. The first generation of founders considered giftedness as a domain-general construct and defined it as a high and rare intellectual capacity inherited only genetically (Kaufman and Stenberg, 2008). During this period, at the turn of the twentieth century, the first attempts of developing intelligence tests to

identify and measure giftedness were made. Later, in contrast to the first generation, scholars proposed multiple and independent domains in terms of which gifted can be identified and further nurtured (i.e, domain-specific). A founder of this view was Louis Thurstone (1938) who identified seven independent intellectual abilities: 1) verbal comprehension, 2) verbal fluency, 3) number, 4) perceptual speed, 5) inductive reasoning, 6) spatial visualization, and 7) memory. The conceptions of domain-general and domainspecific giftedness further got developed by psychological aspects of giftedness to nurture a gifted child. In this stage, the concept of giftedness was regarded as a system where creative behaviors were the main indicator of a gifted student. One of the influential representatives of this idea is Joseph Renzulli (2002), who proposed a three-ring model of giftedness consisting of well-above-average ability, creativity, and task commitment. A more recent generation of scholars widened the lens of giftedness considering external factors that affect the formation of giftedness in a person. The first attempt to represent this idea was made by Monks (Mönks & Katzko, 2005) who adopted Renzulli's three-ring model by simply adding environmental factors like family, school, and peers. Finally, other scholars like Tannenbaum, Feldman, and Feldhusen consider giftedness based on talent development (Stenberg and Kaufman, 2008).

2.2 Who are the gifted students?

Councill, and Fiedler (2017) state that teachers often mistakenly believe that a gifted child is always academically successful. However, giftedness contains within it a great range of skills and attributes and each gifted child has a unique way to reveal or display his or her giftedness (Hodge & Kemp, 2000; Shaklee, 1992). Still, some scholars propose some characteristics that are common to most gifted students. From an early age, gifted children tend to acquire and process information faster, showing exceptional memory. During school years, gifted children excel, relative to their peers, at languages,

memorizing, reading, art, and music (Davidson, 2012). Furthermore, gifted children can be characterized as those who are naturally fast to navigate and develop learning aptitudes (Davidson, 2012; Kimberly et al., 2017). Excelling is not only characteristic of a gifted child; the ability to question an issue and find creative answers using different strategies are usually considered as other signposts of giftedness (Kimberly et al., 2017).

While some studies claim that gifted children differ from their peers with high accomplishments in one or more domains, others believe that these students have the potential to be successful in the future (Robinson, 2008). For example, the US Congress defined gifted and talented students as highly intellectual and who display high leadership skills and perform skillfully and creatively in any academic area (Davidson, 2012). This definition again brings back the importance of the support needed for gifted children and the role of schools in gifted children's upbringing and learning.

Working with gifted children during their learning process is extremely demanding, as they are not necessarily similar in their abilities, interests, and learning styles (Heyder, Bergold, & Steinmayr, 2018). Moreover, most gifted children can perform higher in only one subject area while performing lower in another. Gifted children also can show high potential and performance even while having some health issues (Davidson, 2012). These groups of gifted students are now recognized as "twice exceptional" children and adolescents. For instance, there are many cases when children with dyslexia or autism were recognized to have outstanding abilities in mathematics and STEM subjects (Walker & Shore, 2011). This group of students is found to be vulnerable to fall behind their peers academically when their school and teachers do not take into account their asynchronous nature of living (Hands, 2009). Moreover, special attention should be given to the difference in social and emotional behaviors of gifted children. Davidson (2012) explains that the higher intellectual capacities and abilities are, the greater asynchronous

development they have compared to their peers. It brings us to the conclusion that gifted children's emotional maturity and social behaviors usually drop behind their cognitive abilities, which leads to the inability of a gifted child to socialize with peers and to cope with emotions.

2.3 Who are gifted underachievers?

Although there is no common definition of underachievement, Reis and McCoach (2000) reviewed operational and conceptual definitions and proposed three categories of gifted underachievers. The first portrayed gifted underachievement as the discrepancy between ability and achievement; the second depicted underachievement as the mismatch of anticipated and substantial achievements, and the third category described underachievement as a failure of individuals to self-realize their potential. Schultz (2005) also identified three categories of underachievement. These included (1) a mismatch between existing potential and actual potential, (2) a disparity between expected potential and actual achievement, and (3) a failure to develop potential.

While scholars rely on these three conceptualizations of gifted underachievement, the first category seems more widespread in the revised literature. For example, Reis and McCoach (2000) defined underachievement as a temporal disparity between a student's actual capacity and accomplishment going along with aggressive and disengaged behavior. Hence, in defining underachievement of gifted students, scholars asserted that these students usually have above average intelligence and creativity that does not correspond with their academic achievement (Mönks, Boxtel, Roelofs, & Sanders, 1986; Montgomery, 2009). Based on these definitions, gifted underachievers are usually found to be at risk of dropping out of school (Ritchotte et al., 2015).

While referring to the different nature of gifted underachievers, it should be noted that the level of their task engagement and accomplishments also differs compared to

gifted high achievers. Montgomery (2009) defines talented underachievers as "rhinos" who attend school just for the sake of attendance, being ready to escape the school environment at any time. Interestingly, many successful entrepreneurs came out from this kind of past while the rest stay with an unknown future (Montgomery, 2009). Additionally, there are also 'selective consumers' and 'conventional' talented underachievers defined by Delisle and Galbraith (as cited in Figg et al., 2012). In the case of selective consumers, underachievement takes place because they do not care about the grades and results, they rather care about their own interest and interest in the task (Figg et at., 2012). In contrast, conventional underachievers are willing to accomplish any task when looking for new knowledge, although they are usually unaware of their own abilities and have lower academic self-perception (Figg et at., 2012).

Furthermore, the difference in the level of underachievement among gender is also observed. Thus, Weiss (1972) (as cited in Schultz, 2005) reported that there have been more underachieving gifted males (50%) than gifted underachieving females (25%). Although the data show a 2:1 ratio between underachieving boys and girls, some research finds it useful to support more girls while others claim the importance of emphasizing the reverse of boys (Schultz, 2005).

Combining prior research findings, Montgomery (2009) presented a common checklist to aid identification of gifted underachievers:

- Large gap between oral and written work
- Poor literacy skills
- Failure to complete schoolwork and homework
- Poor execution of work
- Refuses to do work
- Dissatisfaction with own achievements

- Avoidance of trying new activities
- Perfectionism and extreme self-criticism
- Sets unrealistic goals and aspirations
- Does not function well in groups or subverts group work
- Lacks concentration
- Poor attitudes to school
- May have difficulties with peers
- Low self-image
- Performs satisfactorily in all areas at a level with peers.

Other characteristics of gifted underachievers include lower self-esteem, as well as negative attitude to school and low motivation to be academically successful (Mönks et al., 1986). Montgomery (2009) explained that this happens because of the internal motives and misfocus of gifted underachievers, who usually over-focus on what they cannot do rather on what they can do. Mofield, Parker Peters & Chakraborti-Ghosh (2016) connect these issues with perfectionism used as a defense mechanism from failure. Similarly, Reis and McCoach (2000) described gifted underachievers as perfectionists who do not have trust in themselves, self - critique and are over-concerned about their own image.

2.4 Why do gifted students underachieve?

Gallagher (1991) and Rimm (1997) indicated that gifted underachievers are sensitive to external and internal factors. External factors include issues related to schools, teachers and peers, while internal factors are connected to family and personal issues.

External factors. Schultz (2005) revealed that peer impact on academic achievement as well as the social behavior of gifted underachievers is strong and should be taken into consideration during the implementation of intervention programs. Peer influence can lead to both underachievement and achievement depending on the

experience and outlook a friend holds for a gifted student. As an example of negative influence, Landis and Reschly (2013) claim that gifted underachievers mostly dropped out of school as a result of their closeness with peers who had the same experience of dropping out. At the same time, a positive influence of peers was acknowledged by a study of Chen (1997) (as cited in Reis & McCoach, 2000), where 88 percent of low achieving students demonstrated better academic success as a result of interaction with high achieving friends.

Teachers as well play a crucial role in students' motivation to be successful academically. If teachers have low self-efficacy, they will probably go through stress, depression and experience professional issues, like burnout and misbehavior, contributing to gifted underachievement (Kalyar, Ahmad & Kalyar, 2018). Therefore, it should be acknowledged that only those teachers with high self-efficacy tend to be able to support and increase underachieving and misbehaving students' motivation (Thoonen, Sleegers, Peetsma & Oort 2010). However, there is research evidence that teachers' self-efficacy belief in coping with gifted underachievement can be negatively affected by their overall school workload, which includes the organization of students' work and its assessment backed up with relevant feedback and students' preparation for high-stakes tests, which goes along with reports and analyses. For example, Kimani, Kara & Njagi (2013) found that an increased teacher workload negatively affects how effective teachers can be in supporting their students' academic achievement.

Along with this, a friendly classroom atmosphere and school environment created by the teacher encouragement and support during the class are of high priority. The more encouragement presented, the stronger the motivation is in leading students to better academic achievements (Khouya, 2018). Furthermore, teachers' enthusiasm and their ability to guide and praise students will reinforce students' curiosity and interest in

learning. In the study of Davis and Ashley (as cited in Koca, 2018) students showed better performance and relatedness when they felt a positive attitude from their teacher.

Consequently, teacher attitude directly affects not only students' involvement but also their competence and relatedness to that particular class (Skinner & Belmont, 1993).

The irrelevance of school goals, values and curriculum content is another critical external factor impacting on the increasing number of underachieving talented students. In general, there is a great irrelevance of what the schools are preparing students for and the global market requirements (Montgomery, 2009; Feldhusen, 2005). Students who attend classes with irrelevant content not corresponding to their interest and learning style frequently report being bored, frustrated and experience drops out (Landis & Reschly, 2013), while the students who seemed to be slow and reluctant in a classroom showed rapid learning skills when they had high interest in what they learned (Reis & MCCoach, 2000).

Similarly, a mismatch between school curriculum content and the potential of gifted students leads to demotivation and a boring atmosphere (Montgomery, 2009). Within this context, McCoach and Siegle (2003) studied the differences between gifted achievers and gifted underachievers on academic self-perception, attitudes towards school and teacher, motivation, and goal valuation using the School Attitude Assessment Survey-R. The results indicated that although gifted underachievers have similar self-perceptions with achieving one, they struggle. Mofield et al., (2016) supported this idea by stating that even when having goals and setting requirements for themselves, gifted underachievers still lack a high level of motivation to accomplish those goals. Moreover, the results of a four-year study in elementary and middle school years with gifted students showed that teachers working with mastery content several years earlier might result in boredom among

the students when they go to high school where they have a bigger probability to become an underachieving student (Reis & McCoach, 2000).

More specifically, schools and teachers probably fail to meet the needs of gifted in terms of not satisfying the learning style needs of students, which is another reason for gifted underachievement. For instance, in the study of Neumeister and Hebert (2003) (as cited in Figg et al., 2012) a student whose name was Sam skipped classes with a teacher-centered approach and a rigid structure where he was not given the opportunity to study independently by himself. Moreover, students who prefer a more flexible learning atmosphere probably will find it too difficult to sit still and focus on writing big essays due to the school structure (Montgomery, 2009). Reuneri, Gerber, and Wiley (2006) (as cited in Figg et al., 2012) revealed that the role of understanding learning style is crucial, especially to reverse any level of underachievement. Therefore, teachers need to understand the learning style of every student to provide efficient and preferred ways of learning.

Internal factors. Internal factors refer to family relationships where parents have no skills or knowledge to support the giftedness of their offspring, as well as have negative attitudes to schooling and academic skills (Landis & Reschly, 2013; Schultz, 2005)

According to Rimm (1997) and Clark (1983) (as cited in Reis & McCoach, 2000), underachievement of students was common in families where parents had contrary views on upbringing of their child, e.g., where one would overuse restriction and punishment while the other refuses child punishment as an effective tool of upbringing.

The domain-specific nature of gifted underachievers has also been found to be a reason for underachievement. Hence, some scholars believe underachievement might occur due to the domain-specific nature of gifted children, where a student can underachieve in a single subject while achieving in others (McCoach & Siegle, 2003). Based on this idea, Fong &

Kremer (2020) asserted that by identifying which specific subjects gifted underachievers perform, lower intervention methods would be more effective.

2.5 Can gifted underachievement be reversed?

There is widespread agreement that gifted underachievement can be reversed when individuals get additional support. Strategies that have been effective in reversing gifted underachievement include assigning a tutor or a coach and placing students into special programs (e.g., summer programs) and assigning a supervisor. For example, Dowdal and Colangelo (1982) identified counseling and instructional categories of intervention for gifted underachievers. Counseling intervention has demonstrated effectiveness in boosting giftedness through fostering personal and family changes that usually hinders goal achievement. Instructional interventions, on the other hand, address healthy, flexible, and less traditional classroom environments to give more freedom to a gifted underachiever (Reis and McCoach, 2000). Since there is no strong empirical evidence of the effectiveness of counseling and instructional categories, it is difficult to compare the preferred one.

Weiner (1992) distinguished four different categories of interventions, which include rewarding, developing cognitive and emotional aspects, focusing on educational content, and reshaping aggressive behavior. Probably, the most specific plan of intervention program had been presented by Fine and Pitts (1980) (as cited in Schultz, 2005), who suggest:

- develop a constructive plan of student support clarifying the problem, steps to tackle those problems and expected outcomes;
- assign an individual to take responsibility for the implementation of the plan;
- involve family members of a student to work in close with school representatives;
- keep accountability of the working process with regular conferences and group meetings;

The literature does not possess a coherent and complete model of gifted underachievement going along with the corresponding model of intervention due to the variety of factors leading to underachievement. However, certain attempts involving all stakeholders in the school environment show positive results in the form of assigning mentors or counselors. Rimm (1997) presented a three-pronged approach involving school administration, parents, and teachers to reverse underachieving students. In addition, model-based intervention is believed to be effective as a consistent type of mentoring and coaching, allowing to diagnose and prescribe specific steps to reverse underachieving students (Reis & McCoach, 2000). Role-modeling, where a gifted underachiever gets support and models an adult, would be adequate, especially if this student lacks this model in their family life (Cavilla, 2017; Hébert, Olenchak, & Richard, 2000). For example, empirically positive examples include such programs as Check and Connect (Landis & Reschly, 2013), where a mentor navigates and monitors parents and family members in understanding the school mission and vision that is efficient in tackling an underachieving student's everyday school-related issues.

Teachers unquestionably are the most influential people to reverse underachievement, not only because they can identify gifted underachievers in their classroom (Moon & Brighton, 2008; Monks et al., 1986), but also because they can be the ones to encourage learning and build effective engagement. (Landis & Reschly, 2013). In this regard, Renzulli (2012) concluded that a systematic intervention is possible with building healthy teacher-student relationships, referring to self-monitoring strategies providing a student with an opportunity to work with the topics on areas of interest according to favored learning style. Additionally, Cavilla (2017) emphasized the crucial role of teacher-student healthy relationships that focus on the overall well-being of a student without excluding cognitive skills.

This brings us to the conclusion that reversing underachievement is effective when appropriate educational and interpersonal opportunities are given to a student. Moreover, recent studies refer to differentiated instruction (DI) as a tool used by teachers to organize individual learning tasks according to the interests and learning goals of gifted, underachieving students (Maddox, 2014). Correspondingly, in the study of Bennett-Rappell and Northcote (2016), where two cases involving two underachieving students' interventions were described, it was revealed that the differentiated instruction, based on modeling, timing, and pacing of the learning process according to individual abilities of students, had a considerable positive effect on students results. However, despite such positive impact and acknowledgment of differentiated instruction as a successful facilitator of achievement in gifted underachievers, it is poorly implemented while working with gifted students (VanTassel-Baska & Stambaugh, 2005). Hence, it should be concluded that differentiated approaches for teaching gifted underachievers might be useful and valid when it is addressed properly and professionally.

As for the role of special gifted programs in reversing gifted underachievers,

Landis and Reschy (2013) concluded that it would be more useful to prevent

underachievement by placing gifted students into special programs at any grade level.

Matthews and McBee (2007) revealed that those gifted underachievements who

participated in a special summer enrichment program improved their academic attainment
as well as attitude to school and behavior. This shows the importance of providing gifted

underachievers with appropriate conditions and enriching the environment with a

commitment to students' learning styles and interests.

2.6 Theoretical framework

Motivation is a core factor that has a direct impact on students' academic success (Maulana, Opdenakker, & Bosker, 2014), and it is found to be essential for gifted students'

achievement as well (Siegle and McCoach, 2005). Along with these, student motivation is distinguished between intrinsic and extrinsic motivation where the former is believed to have more positive outcomes as it is driven by students' interest or joy to accomplish the task, while the latter is driven by external factors as to get better marks or rewards (Deci & Ryan, 2008; Lucariello, Nastasi, Dwyer, Skiba, DeMarie & Anderman, 2016). Motivational goals also consist of mastery goals focused on developing skills, and performance-avoidance goals focusing on demonstrating the skills. Furthermore, according to Deci and Ryan (2008), there are two more important types of motivation. The first one is autonomous, where a student is given trust and choice, while the second one is controlled and a student experiences pressure to achieve specific learning outcomes. Autonomous motivation is believe to enhance students' conceptual perception, improve creative thinking, increase commitment and perserverence as well as increase students' interest in other activities (Deci & Ryan, 2008). Based on the above-mentioned characteristics of motivation, it is essential for teachers to promote students' intrinsic and autonomous motivation. Students' learning motivation is usually rendered by someone who models and communicates competence as well as social skills (Koca, 2018). In addition, the motivational belief of a student indicates to what extent teaching and learning are effective (Koca, 2018).

Recent studies in gifted education conducted on the theory of motivation were based on the AOM (Achievement Orientation Model) theory introduced by Siegel and McCoach (2003a). The AOM theory is based on Bandura's self-efficacy theory, Weiner's attribution theory, Eccles' expectancy-value theory, person-environment fit theory, and Rotter's locus of control theory (Siegle, McCoach & Roberts, 2017). According to AOM theory, students' motivation in a combination of all three areas: student's self-efficacy, goal – valuation, and environmental perception will positively result in student's task

engagement and academic achievement. Seigle et al., (2017) stressed that these three areas can be developed in different levels, but should not be missing at all since it negatively impacts on self-regulation as well as achievement (See Figure 1.).

Self-efficacy addresses a student's belief to be skillful and capable to complete a task where a student might ask himself "Am I smart enough?" (Siegle, Rubensein & McCoach, 2020). Researchers agree that students with low self – efficacy tend to avoid task accomplishment, therefore, the higher self-efficacy students possess, the stronger task engagement they show (Rubenstein, Siegle, Reis, Mccoach, & Burton, 2012; Siegle et al., 2017; Siegle et al., 2020).

Goal-valuation/task meaningfulness is critical for gifted underachievers (Siegle&McCoach 2003a) even when they have self-efficacy, they still might not be engaged in the task until they find it meaningful to contribute to their goals (Rubenstein et al., 2012). Despite the variety of reasons for students to value tasks, Siegle et al., (2017) identified four common categories of students' goal valuation. According to these researchers some students are interested in the accomplishment of tasks because they simply want to stay the best, others understand the importance of these tasks for their future aspirations, while others have a high interest in them, and finally because they see its practical use and benefit for them.

Environmental perception refers to a student's motivation or demotivation as a result of student's interaction with peers, parents and teachers as well as the expectation from parents and teachers, and the scale of support a student gets from the outside world (Rubenstein et al., 2012). It is assumed that students get false perceptions and find themselves in an unsupportive environment assuming nobody believes in their success, therefore these students often lack or do not develop enough learning skills important to be academically productive (Ritchotte, Matthews & Flowers, 2014).

Achievement Orientation Model Del Siegle and D. Betsy McCoach **Neag School of Education** University of Connecticut Expects to Succeed (Environmental Perceptions) Sets Realistic Expectations and Implements Possesses Task Appropriate Engagement Adequate Strategies to Skills to and Successfully Achievement Perform the Complete Goals Task Values the Task Confident in One's (Self-Regulation) or Outcome Ability to Perform (Goal Valuation) the Task (Self-Efficacy) CULTURE CULT E CULTURE TURE CULTUP CUL **IRF** TURE CUL RE TURE COLIONE COLIDRE CULTONE

Figure 1. Achievement Orientation Model (Siegle et al., 2017).

2.7 Conclusion

The chapter provided insights into a variety of literature in gifted education to understand the giftedness as well as gifted children phenomenon discussing its roots, conceptualizations and definitions provided at different times until these days. Moreover, based on the number of prior research on gifted underachievement, the chapter examined the characteristics of gifted underachievers, considered factors impacting on developing gifted underachievement as well as looked at the reversing patterns of gifted underachievement that study address. The next chapter will describe the methodological approaches used to conduct the current research.

Excellent chapter

Chapter three: Methodology

This chapter presents the methodological approach used to address the research purpose and research questions of this study, which aimed to examine teachers' understanding and practices with gifted underachievers in a specialized school for gifted students in Kyzylorda, Kazakhstan. More specifically, this study will explore Kazakhstani teachers' conceptualizations about the nature of gifted underachievement and the factors that contribute to gifted underachievement. Finally, the study will identify the strategies that teachers use in the classroom to reverse the pattern of gifted underachievement.

This chapter is organized into seven sections. The first section describes the epistemological approach used to conduct the research. The second section presents information about the research design. The third section considers the participant sample and explains the sampling approach and the fourth section provides details about the research site. The fifth section contains information about the data collection tools as well as describes the procedure of getting access to the research site. The sixth section presents information about the data analysis process. The seventh section addresses the ethical issues considered during the data collection and its analysis process. The chapter ends with the conclusion summarizing the main points made in the methodology chapter.

3.1 Positionality Statement

From an epistemological point of view, this research follows a constructivist approach where the findings are literally constructed from the interaction of a researcher and an object of investigation, in my case with teachers (Guba & Lincoln, 1994, p. 111). Consequently, the reality will be built based on the findings emerging from the multiple perceptions of the informants. Moreover, according to constructivism, I consider my role as an inquirer as central in facilitating the research process and the one who interacts with participants (Guba & Lincoln, 1994, p. 113).

3.2 Research design

A qualitative interview-based research approach is justified for this study because it was helpful in listening and understanding in depth the words of participants involved in the interview (Glesne, 2011). Since the central phenomenon of the study is the nature of gifted underachievers, it is meaningful to listen to the participants' experiences on supporting gifted underachievers and to know strategies teachers applied to reverse gifted underachievement (Miles, Huberman, & Saldaña, 2014). Therefore, I considered it useful to listen and to study the perspectives of about 10 NIS teachers from different subject areas who were expected to give in-depth answers during the semi-structured interview. Semi-structured interviews were used in this study, since the questions in the interview were open-ended and the participants were able to answer them in various ways, generating new ideas and concepts for me as a researcher to further develop my interview (Miles, Huberman, & Saldaña, 2014).

3.3 Participant Sample

The population of the study was teachers from a Nazarbayev Intellectual School in Kyzylorda for gifted and talented schools. In my study, I used a purposeful sampling strategy to recruit participants. Purposeful sampling was deemed appropriate in this study since the selected individuals and the research site could best help to understand the central phenomenon (i.e., gifted underachievement) (Creswell, 2014). Thus, the teacher-participants could provide the information on their own understanding of gifted underachievement, factors leading to underachievement, as well as share their experience and approaches to reverse gifted underachievement. More specifically, the study implemented maximum variation sampling procedures to recruit a diverse sample of teachers with experience interacting with gifted underachievers in the areas of English, Maths, Biology, Chemistry, and Physics in the selected NIS school (Creswell, 2014). The

participant sample included teachers who had experience in preparing 10th-grade and 12th-grade students for the Cambridge International Exam since this was one of the high-stakes tests students in this school encountered. Eight participants were finally involved in the study: two English teachers (one female and one male), two Chemistry teachers (one female and one male), two Physics teachers (one female and one male), one Math teacher (a female) and one Biology teacher (a male) who dealt with gifted underachievers in the past.

3.4 Research site

The research took place at Kyzylorda NIS school for gifted and talented children since I work in this school as an English teacher and am familiar with the issue of gifted underachievers in this site. Furthermore, I was interested in the school's peculiarities in working with gifted students, since I passed the training of the gifted program developed by the NIS system myself. Moreover, it is more likely that the teachers of this particular school have relevant experience working with gifted students and deal in everyday practice with gifted underachievers. Finally, even though the school has selected a community of gifted students, there were still students who struggled academically and performed below expectations, and school administration and teachers paid special interest in finding effective ways to reverse underachievement patterns.

3.5 Data collection tools

Semi-structured one-on-one interviews were used as the main data collection tool in this study. The main rationale for choosing one-on-one interviews was that the participants would be able to share in-depth information giving details from their own teaching experiences and approaches (Creswell, 2014). The interview contained open-ended questions since they are useful in retrieving answers from the participants that were not influenced by any viewpoints of the researcher or prior research findings (Glesne, 2011).

Also, a semi-structured interview was used in this study, since the open-ended questions would allow the participants to answer them in various ways, generating new ideas and concepts for me as a researcher to further build an understanding of the central phenomenon (i.e., gifted underachievement) (Creswell, 2014). The questions of the interviews were directed to obtain data on the nature of gifted underachievement and factors to reverse the pattern of underachieving students.

After ethical clearance from the GSE Research Committee was granted, I approached a gatekeeper to request access to the research site and the participants (Creswell, 2014). The gatekeeper who granted access to the school was the school principal, who was introduced with the details of the research by the Ethical approval form of this study (Creswell, 2014).

After gaining access to the site, the participants were identified. Since I work in the research site, it was easier for me to find relevant participants for the interview among my colleagues. All participants were first informally approached individually, provided with an overview of the study, and invited to take part in an interview to share their experiences in helping and supporting gifted underachievers. The participants that indicated an interest to participate in the research study were provided with a hard copy of the informed consent to make an informed decision to participate in the study. The informed consent form described the purpose of the research study, what participants participation involves, risks and benefits of the study, and the rights of the participants in terms of their voluntary participation and the possibility to refuse answering any questions during the interview and discontinue their participation at any stage of the research process with no consequences to their employment or career. Participants were requested to read the informed consent form, and if interested in participating in the study, to contact the researcher for further details or possible questions. Those teachers interested in participating in the study were

invited to an individual interview at a time that was convenient for them and at a preferred location for the participant. During the interview, I introduced the research study, provided a copy of the informed consent form, and asked if the participant had any questions that needed clarification. If the participant was still interested in participating in the study, the researcher kindly requested them to sign two copies of the informed consent forms and return one of them to the interviewer. Interviews were audio-recorded with the permission of the participants, in the Russian or English language. By the end of the interview, the participants were informed that when the interview is completed and the possibility to obtain a summary with the findings and results of the study after the study has been submitted.

3.6 Data analysis

Content analysis was used to analyze the collected qualitative data following the six steps proposed by Creswell (2014). First, after the data was collected, I transcribed the field notes and read them carefully in order to identify the research statements (Miles, Huberman, & Saldaña, 2014). Second, I translated the transcripts into English language verbatim since the interviews were conducted in Russian. Third, I placed and organized the text under relevant categories according to research questions. Fourth, highlighted the core ideas and organized them in a matrix table (see Appendix 3). Fifth, I highlighted the similar ideas in the text to develop statements of the findings. Sixth, I read and analyzed the colored ideas to identify the final statements, which are the findings of the research. Overall, the qualitative data analysis brought an in-depth understanding of the nature of gifted underachievement and helped to explore the factors hindering the pattern of gifted underachievement at the research site.

3.7 Ethical issues

To ensure that the study followed ethical principles of research, an informed consent form was given to the participants of the study two days before the interviews. This way the participants were informed that the interviews would be held on a voluntary basis, that all the participants had rights not to answer any of the questions that they considered not appropriate, and that there was an opportunity for the participants to withdraw from the study with no consequences for their future career and employment. Further, to avoid any duress while approaching the participants for interviews, the importance of the research and its benefits were explained orally. All participants were given a consent form, which contained information about the aims of the study, the duration of interview, as well as the anonymity of the data and its further usage. The interviewees were asked to sign the consent form afted reading it.

Although the anonymity of the participants and research site could not be completelty ensured, since it could be revealed at the time of the interview, the confidentiality of the data was protected by not including in the research report any information that could reveal the participants' identity (e.g., name, position). This information was substituted with a code (e.g., T1), T2, which were used in the further findings and discussions of the current master's thesis and any other research report derived from the study. Also, in cases when the names of particular students were discussed during the interview, they were disclosed in the research report. Moreover, all the voice files and transcriptions were saved on my password-protected personal computer. Only my thesis supervisor and I had access to the collected data.

This research did not pose more than minimal risks to participants with regard to their safety and personal and professional lives. The interviewees were informed about the confidentiality of the current research and were aware of pseudonyms used to replace the orginal names. Moreover, the potential risk that should be taken into consideration was the overload of the participants with their own commitments at work. Therefore, I accommodated their schedule in order to set the interview at a convenient time and location of the participants.

3.8 Conclusion

The chapter addressed the methodological approach used to conduct the research. More specifically, the chapter addressed the chosen research design, selection of the research site and participants sampling, as well as data collection process and its analysis. The section ended with the consideration of the ethical approach to provide the participants' anonymity. The next chapter will provide the findings as a result of the collected data.

Chapter four: Findings

The information shared in this chapter is a result of a synthesized data analysis process that was gained from eight teachers of English, Physics, Biology, Maths, and Chemistry in one of the NIS schools in Kazakhstan about their understanding of the nature of gifted underachievement and practices to reverse underachievement as well as the factors that contribute to gifted underachievement. The participants were selected according to the purposeful variation, taking interviews from those experienced teachers who can share with the relevant practice of working with gifted underachievers. Along with this, maximum variation was implemented, aiming to get extended findings from different subject areas as well as involving males and female teachers. The process of data collection was held through face-to-face interviews with teachers based on the following research questions that guided the study: RQ1: What characteristics define gifted underachievers in the opinion of teachers? RQ2: What factors contribute to the underachievement of gifted students in the eyes of teachers? RQ3: What strategies do teachers use in the classroom to reverse the pattern of gifted underachievement?

In order to keep confidentiality of the names of the interview participants, the names of teachers were coded as T1, T2, and up to T8, according to the overall number of interviewees. The analysis of the data revealed three major categories aligned with the research questions: the characteristics of gifted underachieving students, major factors contributing to their underachievement; and common reversing patterns of underachievement.

4.1 Characteristic of gifted underachievers

This section will indicate the definition and the identification of gifted underachievers as well as highlight the main characteristics of gifted underachievers according to the teachers' perspective.

In general, the participants of the study found it difficult to define gifted underachievement and identify the characteristics that differentiate them from their non-underachiever gifted peers. Several teachers considered that gifted underachievers are those that were high achievers in the past but are now performing comparatively low. For example, one teacher acknowledged that "these underachieving gifted students used to be achieving. Otherwise, I would not recognize them as underachieving gifted students."

(T5). Other teachers thought that this kind of student has the potential to perform high but do not do so because they do not make enough effort, as stated by T8:

"I consider students usually as talented and gifted. The first does not have a natural predisposition but due to hard work achieves a lot. The last group is difficult to work with since they require a lot of support from teachers. Mostly they are self-confident but lazy"

However, most teachers indicated that there is no single profile of gifted underachievers and that gifted underachievers are a diverse group. T7 admitted it as follows "It is difficult to be precise in defining these children because in my practice there were differences of them with different behavior and character as well."

Still, there are five main characteristics that seem to be common across gifted underachievers in the opinion of teachers. These include low socio-emotional skills, uninopotentiality, learning disabilities, very narrow interests, learning styles, and preferred modes of expression, and lack of commitment and perseverance.

4.1.1 Reserved, introvert, and independent.

Some teachers depicted gifted underachievers as students who prefer to stay silent and show little initiative to participate in the class: "As teachers, we do not pay attention to such children. These students prefer to be invisible and mostly sit at the back seats of the classroom. They are mostly silent during the lessons." (T3). Similarly, teachers referred to

this group of students as "strange" because they prefer their own company and being engaged with the things they like. To support this T2 claimed:

"It is difficult to put these students into one specific cliché because they are different from their peers and "strange". They are not outgoing and do not speak a lot and laugh running around the class just like other students do. Mostly these kinds of students are engaged with the things they personally like, for example, reading or drawing."

In addition to that, some teachers referred to gifted underachievers as self—confident and stubborn followed by rebellious behavior in case the teacher did not pay enough attention in the class. Moreover, these students were depicted as self-reliant, not afraid to protest against commonly accepted facts supported by the majority of students, and even their teachers. Hence, the participant T8 confirmed it by saying: "...some are not afraid of criticizing the teacher's decision in class. This is because they are so self-confident that they want to check teachers' knowledge as well as the true fact is important for them. They are stubborn."

Moreover, teachers admitted that this group of students tends to be sensitive, and express their thoughts and behave in a very different way. Sometimes this can cause problems since some teachers, who are not aware of socio-emotional peculiarities of their students, might rush with prejudice and misunderstand the students' natural behavior as a rude action. This has been identified by T4: "Another common factor of underachievement is a teacher-student conflict that might occur no matter how gifted a student is because they tend to be stubborn. This often looks like rudeness shown to a teacher."

4.1.2 Monopotentiality/Unipotentiality

Second, the analyses of the interview transcripts suggest that teachers tend to believe that achieving gifted students are typically good at many things (i.e., multipotentiality). In other words, they are able to perform high in several domains or school subjects. On the contrary, gifted underachievers seem to be characterized by

teachers as those who are only good at one thing (i.e., unipotentiality). They might be extraordinary critical thinkers, as it was stated by T8: "During the discussion in the class, I see that gifted underachievers think differently. Often their thinking is not clear for the rest of the students while I see a blink of critical thinking this student shows." However, gifted underachievers are considered to be good only in one dimension, either humanities-related subjects or science subjects. T6 provides an example based on her personal experience: "I believe underachieving students in my class might be achieved in another subject. For example, in math, there are many such students, who are good in humanitarian subjects." Another example is provided by a male teacher, who indicated: "In my practice, there was a girl who had lower marks on summative tests in physics. As a result of my observation, I noticed that she is good at art and draws ethically good and quality pictures." (T4).

4.1.3 Learning disabilities

The analysis also revealed that gifted underachieving students might have learning disabilities in completing the tasks in terms of requiring time to accomplish it rather than other students as stated by T1:

"Usually the tasks we prepare are for gifted children; however the practice shows that some gifted children might require much more time to accomplish a task. It does not mean he/ she is not capable of doing the task, but it just requires them to finish 60 minutes than the planned 40 minutes."

Moreover, they might experience difficulties in expressing their thoughts due to some physiological peculiarities, such as speaking difficulties which was mentioned by T2: "In my class, I have a student who expresses his thoughts in written form in a much better way than speaking. While speaking he seems to be nervous and emotional so he starts losing a track of his thoughts"

Consequently, a majority of teachers agreed that gifted underachievers require additional support from different stakeholders like parents, teachers, and their peers as well.

4.1.4 Very specific interests, learning styles, and preferred modes of expression

It was also identified that gifted underachievers might put their preference and interests over their academic achievement, which means they might be strongly engaged with something away from academic life. For example, T2 declared: "...they do things they like despite the place and time. They do not care about their marks as much as the passion and great interest they have to a specific activity or a thing"

Additionally, it was identified that their learning styles also differ in terms of not only getting the information but also expressing their understanding where some might prefer speaking rather writing as stated by T4: "They are different in character and nature. In my practice, the student preferred to answer in a written form rather than in speaking."

4.1.5 Lack of motivation, commitment, and perseverance

The last category of gifted underachievers was described as those who skillfully tackle the given information in the class due to high thinking ability, but cannot use the received information in high stakes tests. As one of the teachers explained, this happens due to the lack of commitment and perseverance of the gifted underachievers:

"These children are usually fast in understanding the material and can grasp it at once, but the only problem with such children is they do not take time to sit and revise the material. As a result, they fail the summative tests" (T7).

4.2 Factors contributing to gifted underachievement

This section will present identified factors that considerably contribute to the underachievement, according to teachers' perspectives. Accordingly, the following major sub-categories have been identified: high curricular demands, high parents' expectations,

lack of learning skills, lack of timely identification of underachievement and support, teacher-student conflicts, and domain specification.

4.2.1 Increase in curricular demands

The analysis revealed that, according to teachers' beliefs, the major factor leading students in specialized schools like in NIS to underachievement, specifically for newly admitted 7th-grade students, who experience transitioning from secondary school to NIS school, is their unpreparedness for a high demanding curriculum. Teachers acknowledged that most of the students show their unpreparedness for the higher demanding curriculum content, which is different contextually as well as required criteria from that secondary school they arrived at NIS. This occurred clearly in T3's explanations:

"Speaking about our school, for 7th-grade students, it is a new environment. They experience shock after changing the school, finding themselves in a highly competitive environment with new school rules and requirements. Children are usually not prepared for such situations due to the high competition with other children who also passed the selection. There are children who immediately fit into this high working stream, and there are children who are physically and mentally unprepared for the level of tasks and the criteria by which they are evaluated."

This example shows that newly admitted students are overwhelmed by the school's high demanding curricula as well as a highly competitive environment. As a result, students suffer physically and experience health issues that negatively affect their academic performance. Thus, T4 stated: "When there is too much information, students cannot always cope with such requirements lacking enough sleep and rest. This can bring to the physical well-being of students and overall burnout."

Along with this, there were teachers who highlighted the amount of stress the students get due to school rules and requirements, according to which they have to be on time, stay at school for the whole day, cope with the big amount of tasks and be ready for them. Teachers believe this kind of stress from a high working level students are exposed

to on a daily basis directly results in demotivation and in low academic performance. Thus, T2 acknowledged:

"Sometimes students cannot resist and follow as robots the rules and requirements of NIS school. I feel these students are burnout since these requirements are always reminded not only by their curator but also by their teachers, sometimes even by their parents".

4.2.2. A mismatch between parents expectation and child's interest and lack of goals

Most teachers assumed that students tend to underachieve due to the mismatch of their real interest with the chosen subject ruled by the influence of their parents. According to the explanation of one teacher, senior gifted students often experience demotivation as a result of anxiety and stress trying to deliver their parents' hope and expectations in terms of their future careers. It comes out that those students' actions are not interest-driven but dictated by their parents' expectations. At this point T2 confirmed saying:

"In terms of academic subjects, parents might put on some pressure or influence a lot of in chosen interest subjects, this way making a choice for their child. As a result, their child does not achieve because his or her interest subject is completely different."

Almost all the participants agreed that unless students have not set academic goals clearly, it is useless to do something else to help the students. According to teachers, gifted underachieving students tend to struggle in setting those academic goals, therefore teachers believe this is the part of motivational work to be done. Correspondingly, T8 highlighted:

"The first thing I notice about these academically vulnerable students is that it is difficult for them to set learning goals as well as career goals. That's why the first thing I do at the beginning for the academic year is that I personally approach each student to ask about their plans for future, otherwise these students spend their time for a procrastination"

At this point, T7 also emphasized the importance of setting clear learning goals for students, especially in middle school when according to their age peculiarities students usually do not take a serious approach to identify their future career goals.

In the 7th-grade, children are not yet formed and they do not think about what they will associate their future with. This is good when you come across a child who has decided on his goals. For example, I have a student who tells me "I want to be a neurosurgeon" and I have been working with this girl for two years now and she is able to solve assignments that are difficult even for 11 graders. She went to the Olympiad this year to network in chemistry, although she is 8th grade, she went as a 9th-grade student.

4.2.3 The importance of extrinsic motivation

The data analysis also showed that gifted underachieving students are not involved in the learning process until they have a motivation or interest to do this, which means that students need extrinsic motivation to achieve better academic results. This was shared from the experience of T8: "My practice showed that gifted underachievers might be underactive just because they do not see the reason to do this especially when they do not connect the subject with their future career." At the same time, the analysis identified that gifted underachievers can show low performance as a result of lack of commitment and perseverance which means they do not have learning skills about how to study well. For example, T7 stated:

These children are usually fast in understanding the material and can grasp it at once, but the only problem with such children is they do not take time to sit and revise the material. As a result, they fail the summative tests.

4.2.4 Teachers role and teacher-student relationships

It was also revealed that a lack of timely identification of learning gaps and students' needs are essential factors resulting in underachievement. According to teachers, identification often is not addressed due to working in such demanding schools, where teachers find themselves with a big workload. At this point T3 acknowledged:

"Another factor, probably the lack of time for teachers due to workload. Sometimes a teacher does not recognize a student who is revealed only by low results of summative work or when the student is on the list of drop-out students."

It came out also that even when teachers have timely identified a vulnerable student, they cannot always provide effective support since it requires a dedication of hours of work to prepare materials focused on the needs of the student. This was presented by T4: "...but it requires quite a lot of time to prepare materials in terms of the individual approach that suits the learning style of a student."

It is important to note that timely identification and support seem to be important at the younger stages of students' school life as well, especially in acquiring math skills. This means students who do not get enough support at the early stages might grow less confident in their knowledge which negatively affects their subject performance. To support this T6 reported: "Vulnerabilities in their education arise at the junior and middle school because they might not have received enough support to acquire math skills. When growing they may feel uncomfortable in this situation and may get stuck."

Another factor identified by the data analysis is teacher-student relationships, which is found to be crucial on gifted students' performance. The majority of teachers confessed that the attitude of students to the subject they teach lies in the level of students' relationship with the teacher of that specific subject. Here is an example provided by T7: "...until the teacher does not have a good relationship with the student, this student will not have a desire to deal with the subject that this teacher presents. There will be no motivation at all."

4.2.5 One domain vs multiple domains

All teachers pointed to one domain specification of students as one of the main factors naturally leading to underachievement. This means students show above-average performance in a few subjects while showing low performance in other subjects. For example, language teachers claimed that often underachieving students in their classes are good at one of the STEM-related subjects, while science teachers on the contrary stated

that the underachieving students in their classes are usually good in humanitarian subjects. In this regard T2 provided an example:

"For example, there is a student who is the best in science subjects, and there is no one better than him. But he has physiological difficulties in terms of speaking and writing, naturally, this problem slows him down very much in humanitarian subjects."

Further, teachers agreed that student's subject choice as a major focus might be at the same time an obstacle to motivate students to work on the other subjects as well since these students spent all their energy in one direction only. This was evidence from T1 as well:

"... some students have decided what subject area to focus on related to their future career. For example, the one who does not achieve in biology achieves very well in geography, because this student is naturally predisposed into that subject."

4.3 Interventions to reverse underachievement

This section will present the methods suggested by the participants as the main tools they used or to reverse underachievement, as well as share some of their success stories. Although current education does not have an implicit answer as to what kind of interaction is effective to reverse underachievement, the analysis revealed that no matter what teachers do, they direct those class activities to boost students' motivation.

Accordingly, two main subcategories from the experiences of the teachers were identified: building teacher-student relationships based on trust and student-centered tasks or differentiated approaches.

4.3.1 Building teacher-student relationships based on trust

Due to the socio-emotional peculiarities of gifted underachievers, all teachers acknowledged the importance of building trustworthy relationships with their students as a key strategy to reverse underachievement. Teachers believe that this is an essential aspect of awakening students' academic motivation and any interaction should first start from

building a positive atmosphere in the class where students are sure they can trust their teacher and can rely on their teacher's support. At this point, T6 admitted:

There is no unique way to work with such students since they are different in nature and have different abilities. Some might need group work while others a pair or individual work. They do not need to be taught according to some specific framework as they are quite mature and value good relationships based on trust.

Respectively, T7 also pointed out the importance of a good teacher-student relationship:

Here you need to have a complex approach. First, you should build relationships based on trust, and only then a student will start to approach you and ask questions. It is important for a teacher to be trustworthy. In case you do not have time to work with that at the time you promised, set another specific time, and be on time. A child will rely on you completely.

As long as teachers' role is emphasized here positively to boost students' motivation and overall subject performance, it is important to highlight that the teacher's role is essential as well in helping students to set goals. Helping students clarify their academic goals, especially connecting them with future careers, come out to be one of the aspects of positive interventions. Therefore, T6 expressed this:

Usually it is difficult for students in math classes to connect math with their future career, therefore, I usually brainstorm on some specific aspects of life where math skills must be applied. This way I make goal-oriented motivation in my students, whose work then makes sense not only for them but for me also.

4.3.2 Individual/ Differentiated approach

The second major intervention revealed by the teachers is implementing a differentiated approach, reasoned by the difference and uniqueness in the nature of gifted underachievers. In this regard, T3 claimed: "Since we work with different students, there are different approaches needed. Each individual is unique and the methods correspondingly will be unique, therefore current education cannot directly answer this question." More specifically, an individual approach developed according to the individual

learning preferences of gifted underachievers was found to be one of the most effective methods to reverse underachievement, as indicated by T7: "...a teacher should have a good sense of feeling the needs of the particular student in his class to find individual approach taking into account the students learning peculiarities. Only then the situation can be reversed."

An example of successful intervention using individual approach was shared by T1, which included providing a student with the differentiated tasks addressed to prepare the student for high stake test only, without overwhelming him with extra information:

I had a student whose chosen subject was not biology and therefore the student struggled in biology. However, as soon as I prepared tasks according to the level of this student-focused on subject objectives only, but nothing extra, this student successfully passed external summative tests while graduating the school.

Furthermore, interest-driven tasks based on the individual abilities of the students were also recognized as effective by the majority of teachers. Thus, T4 provided the following example:

At first I observed the student find out what kinds of skills and interest she/he has. As a result, I notice that this student always draws during the class. I noticed that the pictures are really good in terms of techniques. Therefore, during the material explanations, I picked attention grasping pictures and connected the topic with a specific problem.

Finally, providing students with a choice was essential so far since this would give a feeling when students' voices matter for teachers. As an example, T2 said: "Students should be given a kind of freedom in choosing the tasks and the learning styles they prefer. For example, a teacher can ask if a student wants to work in pairs or in groups or prefers individual work." With regards to this T4 noted that teachers' collaboration would be helpful in keeping time-management to prepare individual tasks since it is time-consuming.

4.4 Conclusion

Overall, according to the first research question and teachers' perspective, five common characteristics were identified, which include low socio-emotional skills, unipotentiality, learning disabilities, very narrow interests, learning styles, and preferred modes of expression, and lack of commitment and perseverance. As for the second research question addressing the factors, the following major sub-categories have been identified: high curricular demands, high parents' expectations, lack of learning skills, lack of timely identification of underachievement, and support, teacher-student conflicts and domain specification. Finally, based on the third research question, teachers indicated two main subcategories of methods they apply to reverse gifted underachievement: building teacher-student relationships based on trust and student-centered tasks or differentiated approaches. The next chapter will present the analysis of the findings in light of both empirical data and insights from relevant literature.

Chapter Five: Discussion

The purpose of this study was to examine teachers' understanding and practices with gifted underachievers in a specialized school for gifted students in South Kazakhstan. It was hoped to explore Kazakhstani teachers' conceptualizations about the nature of gifted underachievement and the factors that contribute to gifted underachievement which would provide insight about the patterns to reverse gifted underachievement.

This research used a qualitative interview-based research design to collect data by using maximal variation purposeful sampling strategy. Participants in this study included overall eight teachers across different subject areas, who have dealt with gifted underachievers in the past. The data was collected by semi-structural one-on-one interviews and contained open-ended questions. The content analysis was based on six major steps, where the field notes were transcribed, translated, and organized into a matrix table to identify main and subcategories and organized according to the following research questions: RQ1: What characteristics define gifted underachievers in the opinion of teachers? RQ2: What factors contribute to the underachievement of gifted students in the eyes of teachers? RQ3: What strategies do teachers use in the classroom to reverse the pattern of gifted underachievement?

This discussion takes into consideration the literature in an attempt to understand the characteristics of gifted underachievers, the factors contributing to underachievement, and interventions to reverse it. The implications of these findings are intended to understand the perception of NIS teachers about gifted underachievement, reasons for the occurrence of gifted underachievement as well as identify the best practices that have been helpful in reversing underachievement.

The chapter is organized into three main sections in close alignment with the research questions. In the first section, socio-emotional, abilities, and physiological

peculiarities of gifted underachieving students' characteristics are discussed. In the second section, factors contributing to gifted underachievement (e.g., domain-specific nature of gifted underachievers, lack of learning goals, curriculum demands, and external factors by parents and teachers) are considered. The chapter concludes with a discourse about the interventions in the form of building healthy teacher-student relationships and applying individual and differentiated instructions to reverse gifted underachievement.

5.1 Characteristics of gifted underachievers

In general, the research identified different characteristics of gifted underachievers that teachers face on a daily basis, which was expected since gifted underachievers tend to be different in nature (Ritchotte et al., 2015). Teachers indicated that it is difficult to define and specify gifted underachievers with only one profile due to the diversity of gifted underachieving profiles. Overall, the analysis of the findings revealed three main profiles of gifted underachievers according to what teachers believe, characterized by low socioemotional skills, different abilities and interests, and those with physiological peculiarities.

Gifted underachievement as low socio-emotional skills vs self-confidence. The first group of gifted underachievers was described as those having low socio-emotional skills, prefer their own company, and avoid group work. The issues teachers noticed with such students was that they put their own interests above their academic life and tend to be unfocused in the class, being engaged with completely different things (e.g. drawing, looking at the window, reading a book) which make them silent and invisible from the rest of the class, as well as from their teachers. Teachers believe it is important to focus on this gap to avoid late identification of gifted underachieving students and provide timely support to help those students to focus on their academic life. These characteristics strongly align with the description by Montgomery (2009) who illustrated gifted underachievers as those who refuse to work and lack concentration, show avoidance of

trying new things, subvert group work, and have a poor attitude to school. Gifted underachievers of this type tend to put their interest and preference on the top of everything, as a result such strong engagement strongly distracts gifted underachievers from schoolwork. Figg et al. (2012) specified such students as "selective consumers" who put their own compassion and interest over grades and results.

A sharp contrast to students with low socio-emotional skills were gifted underachievers represented as self-confident who are mature enough to realize their own potential. An issue, in this case, was that such students were not afraid to express their opinion against the majority belief, even teachers. Such self-confidence and self-reliance might cause misunderstanding and conflict between gifted students with their peers and teachers especially. Referring to the sensitive nature of gifted underachievers, who have socio-emotional peculiarities being sensitive to people and things around, as it has been highlighted by Desmet et al. (2020) and Schultz, (2005) that such kinds of stress resulted from conflicts and misunderstandings and will probably negatively impact on the academic attainment of gifted students.

Gifted underachievement as different in their abilities. Moreover, gifted underachievers might be good at critical thinking, good in abstract thinking, have a good sense of ethics, and other specific peculiarities that make them different from the rest of the class. Heyder et al., (2018) warn that those skills might be missed by teachers where gifted underachievers might "suffer", and on the contrary "prosper" when relevant opportunities are provided to disclose those skills and abilities during a learning process. Therefore, it seems to be essential that teachers recognize the natural potential and skills of gifted underachievers and put enough effort to incorporate those skills into learning. Yet, it also came out that students can over-rely on their quick study skills during the classes and be completely unprepared for high stakes tests at school. These kinds of students have good

thinking predispositions, which allows them to grasp and understand class materials very well, however, they mostly lack the perseverance to review materials they learned during classes so that they could show their whole potential during tests. Richotte et al., (2015) confirmed that gifted underachievers of this type can face academic difficulties just because they do not have enough perseverance and highlights the importance of fostering learning skills in managing his or her own learning.

Gifted underachievers as physiological peculiarities. It is important to mention here that teachers recognize gifted underachieving students in those who experience physiological issues in expressing their thoughts as well as deal with health issues in their academic life. Teachers realize the importance of teacher's support for such students who might require additional time for task accomplishment due to students' physiological difficulties. Walker and Shore (2011) referred to such children as "twice-exceptional" and asserted they can still show outstanding abilities in such complex subjects like Math and STEM. However, in case the "twice-exceptional" peculiarities of gifted students are not taken into proper consideration it can result in their underachievement (Hands, 2009). On the other hand, gifted underachievers might show preferences on some specific learning styles. This case was supported by the example of Figg et al. (2012) who also highlighted the importance of identifying learning styles of gifted underachievers since students might just skip the class of the construct and teaching mode that does not correspond to student's learning preference.

5.2 Factors contributing to gifted underachievement

The findings of this study suggest that, according to teachers, gifted underachievement is a result of several factors at the student, curriculum, and environmental level.

5.2.1 Factors contributing to gifted underachievement at the student level

Unipotentiality and lack of goals. At the student level, the unipotentiality of gifted underachievers and lack of learning goals are the main factors to contribute to gifted underachievement. For example, a humanitarian student tends to be weak in Math and STEM subjects, while a science student struggles in language subjects because it is difficult for that student to properly express ideas or opinions. Likewise, teachers also emphasized that students' subject choice is mostly based on their natural predisposition to a subject and this time teachers often face difficulty in motivating students to equally work hard in other subjects as well. Although McCoach and Siegle (2003) considered a domainspecific nature of gifted students as a factor of underachievement, a recent study by Fong and Kremer (2020) contradicts it, asserting that this gives teachers a chance to clearly focus on what specific subjects to provide more support for students. Correspondingly, the inability of gifted underachievers to set goals is another main factor to feed gifted underachievement. Almost all the participants of the current study confirmed a negative footprint of not setting goals by students' in their academic achievement, life career pathway, and overall academic commitment. Similarly, another teacher highlighted that gifted underachievers usually struggle on setting academic goals. While McCoach and Siegle (2003) support the importance of teachers' role in helping gifted underachievers to set learning goals, Mofield et al. (2016) and Richotte et al. (2015) argue against emphasizing that setting goals will be still ineffective if students have not enough level of motivation and commitment.

High curriculum demands. The particularities of the NIS curriculum also emerged as a critical factor of gifted underachievement according to teachers. Highly demanding curriculum requirements caused burnout and decreased motivation, especially for newly admitted students, who were accepted to NIS middle school after they finish 6th grade in the secondary schools. It is important to consider the different backgrounds of

students at this stage, as well as curriculum content and intensity of school life that students are accustomed to in their prior schools, where the curriculum was less demanding. Therefore, NIS newly admitted 7th-grade students, who have transitioned into a completely new environment with higher learning demands and highly competitive environment, meet stricter rules and bigger amounts of tasks. As a result, students are often exposed to stress and anxiety, which directly cause demotivation and underachievement of students who were initially accepted as gifted. The research by Richotte et at. (2015) confirms this finding and explains that school curriculum with complex levels of content might be difficult to handle for middle school students who still lack perseverance and self-regulation of their own learning. Consequently, students very soon find themselves less effective, which according to AOM theory by Siegle and McCoach (2003a) can be interpreted as a lack of self-efficacy, which in turn influences students' low task accomplishment and demotivation to study.

5.2.2 Environmental factors: parents' and teachers' influence

Parental influence on gifted underachievement. According to teachers' perception, there is a big possibility for students underachieving because their commitment and interest do not fit their parents' expectations. Sometimes this disconnection can have a long-term negative effect on students' academic life from middle school up to high school. In the same way, high school students also experienced pressure from their parents when choosing a major subject directly related to students' future careers. As a result, some students showed almost zero motivation as well as stress and anxiety while studying a subject that does not correspond to their interests. This finding aligns with the AOM theory (Rubenstein et al., 2012; Siegle et al., 2017) that focuses on the importance of students' motivation affected by environmental perception, in this case, parents' expectations that do not correspond with their child's motive and put them in an unsupportive environment. It is

interesting that Reis & McCoach (2000) explained this gap as an internal factor which might be a result of a contradictory parenting style where over restriction by one parent would be constantly followed by overprotection of another. Finally, this may be also explained by Schultz (2005) and Landis and Reschly (2013) who suggested parents might not have enough skills and knowledge to provide enough support in schooling. Therefore, schools can play an essential role in explaining and clarifying for parents their children's true commitment and how to effectively direct their children's interest into a successful future career, since parents might not be aware of their offspring's academic potential and interests.

Teacher influence on gifted underachievement. Alongside this, teachers can serve as precursors of gifted underachievement in at least three ways. First, a lack of effort from teachers to increase the extrinsic motivation of students may contribute to gifted underachievement. However, Koca (2018) indicated the importance of teachers as role models and boosted students' extrinsic motivation by communicating students' academic competence and nurturing their social skills. This was confirmed by the findings of the study, where extrinsic motivation addressed by teachers in the form of verbal praise and actions could motivate and increase students' commitment to a subject. Teachers asserted that they can contribute strongly to increase students' self-efficacy and academic competence. As argued by Montgomery (2009), gifted underachievers are vulnerable to have lower self-esteem, which leads them into false beliefs about their self-efficacy in their academic life. Moreover, based on the AOM theory (Siegle & McCoach, 2003a), the more positive self-efficacy students possess, the better commitment and perseverance they show. This suggests the essential role of extrinsic motivation, where teachers offer support and show consideration to reverse gifted underachievement.

Second, negative teacher-student relationships is another key factor contributing to gifted underachievement, based on the findings of this study. The importance of positive student-teacher relationships on gifted underachievers' academic success has been highlighted in previous studies (e.g., Desmet et al, 2020; Koca, 2018). Correspondingly, the majority of teachers responded that the students' attitude to a subject mostly lies through their relationship with the teacher instructing that subject. This is consistent with previous literature in other contexts, which suggests that negative teacher-student relationships should be considered as a crucial factor contributing to gifted underachievement. For example, in the study of three gifted underachieving girls by Desmet et al. (2020), almost all participants pointed to the importance of having a positive relationship with their teachers. This was one of the first research efforts to demonstrate the vulnerability of gifted students to their relationship with teachers when students' commitment and motivation depended on the attitude their teachers showed towards them. Also, this gap may be explained also with the environmental perception constructed as a result of student and teacher interaction, reflecting the students' motivation or vice versa demotivation according to the AOM theory presented by Rubenstein et al. (2012). The AOM theory highlights that students might not develop relevant skills due to the lack of motivation resulting from a student's false perception of external factors (e.g. teachers). Hence, it can be concluded that teachers in this NIS school have a critical understanding of their own role in their students' motivation and overall academic achievement, which is a promising pattern of the teachers' work with gifted underachieving students.

Third, teachers' indicated that their busy workload is another factor that makes them ineffective in identifying underachievement and reversing it. NIS teachers encounter some challenges related to spending quite a lot of their time developing quality lessons, preparing lesson materials, writing reports, and conducting action research and lesson

study sessions to improve their teaching practice. As a result of such a busy workload, teachers admitted missing timely identification of gifted underachievers, as well as late identification at the stage of being under threat of dropout. Although teachers realize the importance of their role in successfully reversing gifted underachieving students, they also admitted they cannot always physically dedicate time for grounded support of gifted underachievers because it requires a lot of time for individual approach and detailed preparation of differentiated tasks. Although there is no direct research addressing the correlation of teachers' workload with the students' underachievement, the negative effect of heavy teacher workloads on students' academic achievement has been observed in previous studies (e.g., Kimani et al., 2013). Moreover, these findings can be explained by the insights of the teachers about the special needs gifted underachievers require (Davidson, 2012), which is reasonable due to the myth that gifted learners do not encounter learning difficulties and do not need support from their teachers due to their high learning capacity (Clark, 2008; Renzulli, 2012).

5.3 Interventions to reverse gifted underachievement

The intervention patterns identified as a result of the study and analysis involves a complex approach where teachers put emphasis on the emotional and cognitive aspects of their students. Weiner (1982) concluded that interventions aimed at academic and behavioral enhancement should always be based on complex approaches, which include not only the improvement of cognitive aspects but also the rewarding and emotional consideration of gifted underachievers. As a result, two main intervention strategies were commonly suggested by NIS teachers: building teacher-student relationships based on trust and individual and differentiated teaching approaches.

Positive teacher-student relationship. The perception of the overwhelming majority was that a positive teacher-student relationship is the most helpful and effective

way to reverse underachievement. Teachers believe any interaction to reverse underachievement should start with building healthy relationships with students. This finding is important since all participants claimed that having a positive relationship with their students allows them to motivate students and set future learning goals. Hence, any interaction may have only limited effect until teachers have initially built a trustworthy relationship with their students, as gifted underachievers' sensitive nature to external factors do not allow them to approach a teacher for any request in case there is mistrust between them. This finding appears to be consistent with Moon and Brighton (2008), which considers teachers as the most influential agents, who closely interact with students on a daily basis, and therefore can identify underachievement, boost students' motivation and provide effective engagement of learners in the learning process. Additionally, according to Cavilla (2017), teacher-students' positive relationships can allow for successful academic intervention, where teachers are aware of students' learning styles and interests as well, as a result, this helps teachers develop relevant instructional environments for those gifted underachievers. Finally, it might be explained by the study of Schultz (2002), where it was identified that teacher-student healthy relationships promote selfconfidence and motivation in students since students feel they are important and valued. Schultz (2002) also argues this kind of approach strongly impacts on developing not only cognitive skills but also interpersonal and social skills of students.

Individual and differentiated approach. The final learning strategy that emerged from the analysis was differentiated instruction of gifted underachievers. Teachers disclosed their preference for implementing differentiated instructions due to two main reasons. First, the unique nature of gifted underachieving requires unique (i.e., differentiated) instructions, therefore teachers need to develop tasks, which address students' learning needs, preferences, and interests. Second, differentiated instructions

allow teachers to consider timing and task scale, as a result of providing equal opportunity for students. This appears to be consistent with previous studies in this context, which suggests that individualized approaches to underachieving students facilitate the learning addressing the interests and learning goals of students (e.g., Maddox, 2014). Additionally, Bennett-Rappell and Northcote (2016) identified that differentiated instructions were essential when gifted underachievers required modifying time and the volume of work for them, and the results of such implementation were successful. At the same time, one teacher indicated the difficulty of preparing differentiated instructions due to the big amount of additional work and time it requires. Although VanTassel-Baska and Stambaugh (2005) did not indicate the teacher's workload, they pointed to the importance of appropriate implementation of differentiated approaches while working, especially with gifted students.

5.4 Conclusion

The results of the study are consistent with other international studies. The teachers, who participated in my study share almost the same conceptualization about gifted underachievers and their characteristics. Having indicated the different nature of gifted underachievers, teachers highlighted the socio-emotional and physiological peculiarities of gifted underachieving students. Furthermore, teachers implied that such internal factors as a lack of learning skills and goals, and unipotentiality, might contribute to underachievement. External factors included parents' expectations, curriculum demands, and teachers' support and their relationship with students. Finally, teachers pointed out two main approaches they use to reverse underachievement: building healthy and positive relationships with students and differentiated instructions. The following final chapter will summarize the results of the current qualitative study.

Chapter Six: Conclusion

6.1 Introduction

This chapter presents the final conclusions of the study, as well as its implications, limitations, and recommendations for future research. This qualitative research study aimed at investigating the perceptions and experiences of teachers working with gifted underachieving students to find out the factors contributing to the gifted underachievement as well as reversing common patterns implicated by teachers in their practice. The research was guided by the following research questions: RQ1: What characteristics define gifted underachievers in the opinion of teachers? RQ2: What factors contribute to the underachievement of gifted students in the eyes of teachers? RQ3: What strategies do teachers use in the classroom to reverse the pattern of gifted underachievement?

The chapter is organized into five sections. In the first section, I provide an answer to the research questions in light of the findings of the study and discuss to what extent the study provides an understanding of the research problem. In the second section, the implications of the study are addressed. In the third section, the limitations and the strengths of the study are highlighted, and in the fourth section recommendations for future research based on these aspects are provided. In the fifth section, a concluding statement recapping the most relevant findings and implications are provided to close this thesis.

6.2 Revisiting research questions

The purpose of this qualitative study was to explore teachers' understanding and practices with gifted underachievers as well as identify the factors that contribute to gifted underachievement and reversing patterns teachers apply in their everyday practice. The findings from this study allow us to respond to the research questions that guided this study as follows.

RQ1: What characteristics define gifted underachievers in the opinion of teachers?

The findings of this study suggest that teachers can recognize common characteristics to identify gifted underachievers, despite the fact that none of the teachers did provide a precise definition of gifted underachieving students. Nevertheless, the synthesis of the findings revealed three common characteristics that teachers addressed: low socio-emotional skills, different abilities and interests, and those with physiological peculiarities. Considering gifted students with low socio-emotional profile two subcategories of gifted underachievers were revealed. The first category includes reserved gifted underachieving students, who show narrow interests and are socially isolated from their peers and other stakeholders. Teachers simply referred to them as "strange" students. The second category of students show a high level of confidence in their abilities but underachieve due to the lack of social skills, which often brings to conflict and misunderstanding between students and teachers. Furthermore, gifted underachievers also demonstrate different abilities showing unipotentiality in one domain. The challenge with such students is to develop multipotentiality which will allow them to become academically exceptional. Finally, gifted underachievers might encounter physiological challenges that impede them to achieve at a level according to their intellectual abilities. A conclusion to be drawn from these findings is that gifted underachievers represent a diverse group of students with different characteristics and behavior. In this regard, gifted underachievers are vulnerable socially and physiologically due to natural peculiarities of their behavior and personality, who, therefore, demand additional academic support from teachers than other gifted students.

RQ2: What factors contribute to the underachievement of gifted students in the eyes of teachers?

A major finding of this study was that gifted underachievement might arouse due to factors at the student, curriculum, and environmental level. Participants indicated that

students might provoke themselves underachievement because they lack perseverance and internalized learning goals. Moreover, teachers imply that students' domain-specific potentiality contributes to hinder their academic attainment. At the curriculum level, teachers indicated that students may experience challenges, stress, and anxiety as a result of transitioning from a mainstream secondary school into NIS, characterized from an increasingly demanding curriculum. This challenging curriculum decreases students' selfefficacy beliefs and results in underachievement. Among environmental factors, parents' influence on major subject choice is considered to cause anxiety and stress, which might result in underachievement. It was also found that teachers also play an important role in gifted underachievement. Thus, gifted underachievement can be a result of teachers' lack of support and encouragement, negative teacher-student relationships, and teachers' inability to provide early identification, support, and intervention due to busy workload. A conclusion emerging from the findings is that gifted underachieving students are sensitive to both internal and external factors and therefore, require corresponding support at every level from peers, parents, and teachers. A related conclusion is that in order to avoid gifted underachievement or timely reverse underachievement, teachers need to conduct a complex analysis to be able to timely identify and provide support for their gifted learners.

RQ3: What strategies do teachers use in the classroom to reverse the pattern of gifted underachievement?

A common practice to reverse underachievement included a complex approach where teachers put emphasis on the emotional and cognitive aspects of their students. As a result, two main intervention strategies were commonly suggested by NIS teachers: (1) building positive teacher-student relationships based on trust and (2) individual and differentiated teaching approaches. The perception of the overwhelming majority was that a positive teacher-student relationship is the most helpful and effective way to reverse

underachievement. Teachers believe any interaction to reverse underachievement should start with building healthy relationships with students. A differentiated instruction of gifted underachievers was commonly addressed to reverse gifted underachievement as well as it was considered as the most effective approach to support gifted students.

6.3 Implications for theory and practice

This study offers interesting insights for the understanding of the practice of NIS teachers working with gifted students who are also not excluded to encounter underachievement. Moreover, the study revealed the perception of teachers about the common characteristics of gifted underachievers, possible factors to contribute to underachievement as well as common approaches implemented to reverse underachievement.

The findings from the present study strongly support the theory-based predictions suggested by Siegel and McCoach (2003a) and Rubenstein et al. (2012), who argued that students' motivation is the core aspect to impact on gifted underachievement. According to AOM theory, students' motivation in a combination of all three areas: student's self-efficacy, goal – valuation, and environmental perception will positively result in student's task engagement and academic achievement. Seigle et al., (2017) stressed that these three areas can be developed in different levels, but should not be missing at all since it negatively impacts on gifted students' self-regulation as well as achievement. Using the lenses of the AOM theory, the study also identified external factors as high curriculum demands as well as parents' and teachers' important role in students' motivation level to regulate students' academic performance.

The study consistently indicated that teachers' role as essential to support and navigate gifted underachievers at any level of their development and academic life. In this context, the findings have the following implications. First, by reading through the

characteristics explored in this study, teachers can better understand the nature of gifted underachieving students they have in their classes. Second, teachers can self-reflect on some gifted underachieving students in their classes and practices they have been applying to reverse them after reading the explored factors and reversing approaches presented in this study. Moreover, on the basis of findings presented in this study, teachers can better understand the importance of motivation and support provided by teachers for students' academic commitment. Collectively, this study has the potential to bridge the gap of reversing patterns for gifted underachievers.

School principals should consider the findings of this study in order to review the approaches used for newly admitted students during their transition from secondary schools into NIS and consider providing additional support in terms of acquiring new curriculum demands in a less stressful way for students. Accordingly, school administration might include some professional development opportunities on the reversing approaches for gifted underachievers into annual methodological sessions conducted among teachers to improve their practice.

Policymakers can also consider the findings of this study to update the overall approach to the identification and education of gifted students in Kazakhstan. Traditional approaches to the education of gifted students, which include demanding curriculums and participations in academic Olympiads, should be complemented with opportunities for diverse gifted students to manifest their talents in multiple areas of knowledge in less academic areas such as music, sports, and the arts.

6.4 Limitations of the study

The results of the study should be interpreted in light of several limitations. First, the limitation is the research site which is a specialized school for selected gifted students, and therefore NIS teachers' experience on gifted underachievement may not reflect those

in secondary schools. Thus, it is believed in case of conducting this research among secondary schools, the research results would be wide and broad as well as address some major issues that this current research might have missed. Second, the number of participants of this study was limited and the participants themselves were purposefully selected. It should be noted that the views of other teachers who did not participate in this study might have provided different and considerable results. Third, the research gap in the context of gifted underachievement practices in Kazakhstan might not have been completely disclosed due to the chosen research design. The research has involved only teachers' voices while mixed research with quantitative would have probably provided a broader picture involving other stakeholders as well.

6.5 Future research

Based on the findings of the study and the limitations indicated above, some recommendations for future research can be outlined. For example, future studies could replicate the findings of this study using a mixed approach, where students' voices might be involved to identify the correlation between teachers' workload and students' academic attainment. Also, other studies should consider exploring the practice of gifted underachievement in Kazakhstan by examining the voices of secondary school teachers in order to provide broader and accurate information on the topic.

6.6 Conclusion

The present study highlights the importance of supporting and encouraging the learning of gifted underachievers mainly by their teachers. Overall, the study suggests that gifted underachieving students are different in behavior and in characteristics. Teachers believe students might underachieve at the student level due to a lack of perseverance and learning goals, as well as due to their domain-specific nature. Among external factors, teachers pointed out high curriculum demands, parents' expectations, and teacher-student

negative relationships. It is believed that gifted underachieving students require more attention and support from their teachers as well as a differentiated approach in teaching.

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Appendix 1

INFORMED CONSENT FORM

(for teacher-participants)

Reversing gifted underachievement in Kazakhstan: Teachers' perceptions, experiences, and practices.

DESCRIPTION:

You are invited to participate in **a research study** on exploring the nature of gifted underachievement, factors leading to gifted underachievement approaches to reverse pattern gifted underachievement in the NIS Kyzylorda.

You will be asked to participate in a one-on-one interview with your permission to audio record it. Your anonymity and confidentiality will be protected since the data will be protected not including in the research report any information that can reveal your identity (e.g., name, position). This information will be substituted with pseudonyms of codes, such as T1, T2, which will be used in the further findings and discussions of the master's thesis and any other research report derived from the study. Also, if the names of particular students are discussed during the interview, they will not be disclosed in the research report. Moreover, all the voice files and transcriptions will be saved on the researcher's password-protected personal computer and deleted after the research work is complete. Only the thesis supervisor and the researcher will have access to the collected data during the analysis process. As the process of interviewing starts, you will have an opportunity not to answer any of the questions that you will find not appropriate.

TIME INVOLVEMENT: Your participation will take approximately 30 minutes.

RISKS AND BENEFITS: There are no potential risks in this study concerning your personal and professional life, due to the confidential nature of the research being conducted and the pseudonyms that you will be assigned to. However, during conducting the interview there may occur some minor risks concerning the participants' time that you will spend for the interview, as you will be interrupted from your everyday activities. From these considerations, it is up to you when and where to appoint the meeting for the interview, the researcher will try to fit in with your plans.

The benefits which may reasonably be expected to result from this study are (1) the self-reflection on your own experiences as a teacher working with gifted underachievers, (2) the rise of your awareness on nature and factors gifted underachievement.

Your decision whether or not to participate in this study will not affect the status of a teacher in school.

PARTICIPANT'S RIGHTS: If you have read this form and have decided to participate in this project, please understand your **participation is voluntary** and you have the **right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The**

alternative is not to participate. You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals.

CONTACT INFORMATION:

<i>Questions:</i> If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the Master's Thesis Supervisor for this student work,, phone +7
Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the NUGSE Research Committee to speak to someone independent of the research team at +7 7172 709359. You can also write an email to the NUGSE Research Committee at gse_researchcommittee@nu.edu.kz
Please sign this consent form if you agree to participate in this study.
• I have carefully read the information provided;
 I have been given full information regarding the purpose and procedures of the study;
 I understand how the data collected will be used, and that any confidential information will be seen only by the researchers and will not be revealed to anyone else;
• I understand that I am free to withdraw from the study at any time without giving a reason;
 With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.
Signature: Date:

The extra copy of this signed and dated consent form is for you to keep.

ЗЕРТТЕУГЕ КАТЫСУҒА КЕЛІСІМ ФОРМАСЫ

(қатысушы мұғалімдер үшін)

Қазастандағы үлгерімі төмен дарынды оқұшыларды қалпына келтіру: мұғалімдердің көз қарасы, тәжірибесі және практика.

Сипаттама:

Сіздерді Қызылорда қаласындағы НЗМ-де үлгерімі төмен дарынды балаларды табысты түрде қалпына келтірудің тәсілдерін анықтап, дарындылықтың төмен деңгейіне экелетін факторларды зерттеуге қатысуға шақырамын.

ЗЕРТТЕУ УАҚЫТЫ: Сұхбат шамамен жарты сағатқа созылады және өзге адамдар оны естімеуі немесе бөгет болмауы үшін сұхбат оқшауланған оңаша сыныпта өтеді.

ЗЕРТТЕУ ҚАІУІПТЕРІ ЖӘНЕ АРТЫҚШЫЛЫҚТАРЫ: Сұхбаттасу барысында біршама психологиялық қауіптер болуы мүмкін. Сұхбаттасу мектепте орын алатындықтан, ақпараттың тарап кету қаупі бар және сұхбат беруші ретінде сіздің жеке мәліметтеріңіз анықталуы мүмкін. Осындай қауіп-қатерлердің алдын алу үшін, егер де сіз зерттеуші тарапынан қандай да бір қысым сезінсеңіз немесе оның сұрақтарын ыңғайсыз деп тапсаңыз, кез-келген уақытта сұхбат беруден бас тартуға немесе кейбір сұрақтарға жауап бермеуге құқығыңыз бар. Зерттеушінің мақсаты - үй тапсырмасы туралы сіздің көзқарастарыңызды зерделеу. Сіздің жауаптарыңыз сіздің мектеппен қарым-қатынасыңызға немесе сіз бен зерттеуші арасындағы қатынасқа әсер етпейді. Сізге осы сұхбаттың транскрипт көшірмесі беріледі.

Анонимділікті сақтау және өзгелер сізді танып қалмау үшін бірқатар әдістер қолданылады. Сіздің есімдеріңіз жасырын аттармен құпия түрде жасалады (мысалы, сіздің есіміңіз 1-мұғалім, 2-мұғалім және басқалар ретінде кодталады). Зерттеу нәтижелерін ғылыми жетекші оқып, қорытынды тезисте және конференцияларда немесе баспаларда жариялауға ұсынылатын болады. Алайда сіздің есіміңіз жобаның ешбір есебінде жарияланбайды. Транскрипциядан кейін зерттеуші барлық аудиожазбалар мен транскрипттерді парольмен қорғалған дербес компьютерде сақтайды және оларды 2020 жылдың шілдесінде жояды. Сонымен қатар сұхбат алушының құпиялығын сақтау үшін барлық бастапқы деректер зерттеушінің үйінде бөлек сақталады. Жиналған ақпарат жоғарыда аталған мақсаттарда ғана пайдаланылады және басқа ешқандай мақсаттарда пайдаланылмайды. Сіздің атыңыз бен кез-келген басқа жеке мәліметтеріңіз ешқандай мәліметтерде көрсетілмейді.

ҚАТЫСУШЫНЫҢ ҚҰҚЫҚТАРЫ: Егер сіз осы құжатты оқып, аталмыш жобаға қатысуға шешім қабылдаған болсаңыз, онда сіздің қатысуыңыз ерікті екенін түсінуіңізді өтінеміз, және де сіз келісімді кері қайтарып алуға немесе қатысуды кез келген уақытта еш айыппұлсыз тоқтатуға құқылысыз. Бұған қоса, сіздің жауаптарыңыз болашақта сіздің балаңыз оқитын мектеппен және Назарбаев Университетімен қарым-қатынасыңызға еш әсер етпейді. Ұсынылған балама таңдау ретінде зерттеу жұмысына қатыспауға еріктісіз. Сіздің нақты сұрақтарға жауап беруден бас тартуға құқығыңыз бар. Осы зерттеу жұмысының нәтижелері ғылыми

немесе кәсіби жиналыстарда ұсынылуы немесе ғылыми журналдарда жариялануы мүмкін.

БАЙЛАНЫС АҚПАРАТЫ:

Сұрақтар: Егер сізде осы зерттеу жұмысының өту барысына, қауіптері мен артықшылықтарына қатысты сұрақтарыныз немесе арыз-шағымдарыныз болса, магистрлік тезиз жетекшісіне хабарласыныз.

Тәуелсіз байланыс: Егер сіз осы зерттеудің қалай жүргізілетініне қанағаттанбасаңыз, немесе сізде зерттеуге қатысты мәселелер, шағымдар я жалпы сұрақтарыңыз туындаса, +7 7172 709359 нөмірі бойынша NUGSE Зерттеу Комитетімен байланысыңыз. Сондай-ақ, gse_researchcommitet@nu.edu.kz мекенжайы бойынша электрондық поштаға хат жазуға да болады.

Осы зерттеуге қатысуға келіссеңіз, мына келісімге қол қойыңыз.

Зерттеу тақырыбы: «Қазақстандағы бастауыш мектептердің біріндегі атааналар мен мұғалімдердің үй тапсырмасына көзқарасы».

- Мен осы зерттеу жұмысына өз еркіммен қатысуға келісемін.
- Мен қазір зерттеу жұмысына қатысуға келісімімді берсем де, кез келген уақытта келісімімді қайтарып ала алатыным немесе кез-келген сұраққа ешқандай салдарсыз жауап беруден бас тарта алатыным туралы хабардармын.
- Маған зерттеудің мақсаты мен сипаты түсіндірілді және зерттеу жұмысы туралы сұрақтар қою мүмкіндігіне ие болдым.
- Зерттеуге қатысудың түпкі мәні баламның үй тапсырмасына қатысты тәжірибесі төңірегіндегі сұрақтарға жауап беруді көздейтінін білемін.
- Мен осы зерттеуге қатысудың өзіме тікелей пайдасы болмайтынын түсінемін.
- Мен сұхбатымның аудио жазбаға жазылуына келісемін.
- Мен осы зерттеуге берген барлық ақпаратым құпия түрде сақталатынын түсінемін.
- Осы зерттеу нәтижелері туралы кез-келген есепте менің жеке басым туралы ақпарат жасырын болатындығын түсінемін. Бұл менің атымды өзгертіп, сұхбаттағы менің жеке басымды анықтайтын кез-келген мәліметтерді жасыру арқылы жүзеге асырылады.
- Қол қойылған келісім қағаз зерттеуші қауіпсіз деп тапқан жерде, ал сұхбаттың аудиотаспасы зерттеушінің құпия сөзбен сақтандырылған жеке компьютерінде сақталатынын білемін.

Менің барлық жеке ақпаратым құпия сақталған сұхбат транскрипциясы ағымдағы зерттеу жұмысы аяқталғанға дейін сақталатынын түсінемін.

• Мен берген ақпаратқа кез келген уақытта қол жеткізе алатынымды білемін.

• Қосымша ақпарат алу мақс хабарласа алатынымды біле		зерттеуге н	қатысқан	кез-келген	адамға
Зерттеуге қатысушының қол	Ы				
Қатысушының қолы	Күні				

ФОРМА ИНФОРМАЦИОННОГО СОГЛАСИЯ

(для учителей-участников)

Реверсирование неуспевающих одаренных в Казахстане: восприятие, опыт и практика учителей.

ОПИСАНИЕ:

Вы приглашены принять участие в исследовании по изучению природы неуспеваеющих одаренных, факторов ведущих к неуспевающим одаренным, выявылению подходов для успешного реверсирования неуспевающих одаренных детей в НИШ Кызылорда.

Вам будет предложено принять участие в индивидуальном интервью с вашим разрешением на аудиозапись. Ваша анонимность и конфиденциальность будут защищены, поскольку данные будут защищены, не включая в отчет об исследовании любую информацию, которая может раскрыть вашу личность (например, имя, должность). Эта информация будет заменена псевдонимами кодов, таких как Т1, Т2, которые будут использоваться в дальнейших выводах и обсуждениях магистерской диссертации и любого другого исследовательского отчета, полученного из данного исследования. Кроме того, если имена отдельных студентов обсуждаются во время интервью, они не будут раскрыты в отчете об исследовании. Все голосовые файлы и транскрипции будут сохранены на защищенном паролем персональном компьютере исследователя и удалены после завершения исследовательской работы. Только руководитель диссертации и исследователь будут иметь доступ к собранным данным в процессе анализа. Во время интервью вы имеете права не отвечать ни на один из вопросов, если считаете их не подобающим или не нужным.

ВРЕМЯ УЧАСТИЯ: Ваше участие потребует около 30 минут.

РИСКИ И ПРЕИМУЩЕСТВА:

В данном исследовании нет потенциальных рисков в отношении вашей личной и профессиональной жизни, так как характер конфиденциальности исследования и назначенные псевдонимы обеспечат вам гарантию безопасности. Тем не менее, во время проведения интервью могут возникнуть некоторые незначительные риски, касающиеся времени участников, которое вы потратите на интервью, так как вы будете прерываться от вашей повседневной деятельности. Исходя из этих соображений, выбор времени и места интервью остается за вами.

В качестве ожидаемых преимуществ в результате исследования можно рассматривать следующие моменты: (1) саморефлексия о вашем собственном опыте учителя, работающего с неуспевающими одаренными учениками, (2) повышение вашей осведомленности о природе и факторах ведущих к неуспеваемости одаренных учеников.

Ваше решение о том, участвовать или не участвовать в этом исследовании не повлияет на вашу работу школе.

ПРАВА УЧАСТНИКОВ: Если Вы прочитали данную форму и решили принять участие в данном исследовании, Вы должны понимать, что Ваше участие является добровольным и что у Вас есть право отозвать свое согласие или прекратить участие в любое время без штрафных санкций и без потери социального пакета, который Вам предоставляется. В качестве альтернативы можно не участвовать в исследовании. Также Вы имеете право не отвечать на какие-либо вопросы. Результаты данного исследования могут быть представлены или опубликованы в научных или профессиональных целях.

КОНТАКТНАЯ ИНФОРМАЦИЯ:
Вопросы: Если у Вас есть вопросы, замечания или жалобы по поводу данного исследования, процедуры его проведения, рисков и преимуществ, Вы можете связаться с исследователем, используя следующие данные:phone +7
Независимые контакты: Если Вы не удовлетворены проведением данного исследования, если у Вас возникли какие-либо проблемы, жалобы или вопросы, Вы можете связаться с Комитетом Исследований Высшей Школы Образования Назарбаев Университета по телефону +7 7172 70 93 59 или отправить письмо на электронный адрес gse researchcommittee@nu.edu.kz
Пожалуйста, подпишите данную форму, если Вы согласны участвовать в исследовании.
• Я внимательно изучил представленную информацию;
• Мне предоставили полную информацию о целях и процедуре исследования;
• Я понимаю, как будут использованы собранные данные, и что доступ к любой конфиденциальной информации будет иметь только исследователь;
• Я понимаю, что вправе в любой момент отказаться от участия в данном исследовании без объяснения причин;
• С полным осознанием всего вышеизложенного я согласен принять участие в исследовании по собственной воле.
Подпись:
Дата:

Appendix 2

INTERVIEW PROTOCOL

Date:	
Participant code:	
School code:	
Interview components:	

- Greeting the participants and thanking for cooperation and collaboration
 - Informing the issues of confidentiality, risks, and benefits
 - Informing the duration
 - Informing how the interview will be conducted, including audio recording
 - Giving the hard copy of the consent form
 - Asking if the participants have any questions
 - Interview itself
 - Saying goodbye

The Semi-structured interview questions for teacher-participants: Interview questions

- 1. What subject do you teach?
- 2. How long have you been working here in NIS Kyzylorda?
- 3. What is your understanding of the term giftedness and gifted children?
- 4. How do you understand the term 'gifted underachiever'?
- 5. What are the characteristics of those gifted underachievers?
- 6. How often do you recognize gifted underachievers in your classes?
- 7. What is the difference between gifted underachiever and gifted achievers?
- 8. What factors do you think led those students to underachieve?
- 9. Do you believe it is possible to reverse gifted underachievement? Why?
- 10. What approaches have you tried to support and help your underachieving students? How?
- 11. Do these approaches equally work for all of your underachieving students?

Мұғалімдерге арналған жартылай құрылымданған сұхбаттың сұрақтары

- 1. Қандай сабақтан дәріс бересіз?/ сабақ бересіз?
- 2. Қызылорда Назарбаев Зияткерлік мектебінде ұстаздық еткеніңізге неше жыл болды?
- 3. Сіздің дарындылық немесе дарынды балалар деген ұғымды қалай түсінесіз?
- 4. "Білім алуда үлгермейтін дарынды оқушылар" деген ұғымды қалай түсінесіз?
- 5. Сыныпта сабаққа үлгермейтін дарынды оқушыларды қаншалықты жиі анықтай аласыз?
- 6. Сабаққа үлгермейтін дарынды оқушылар қалай сипаттар едіңіз?
- 7. Білім алу үдерісінде үлгеретін және үлгермейтін дарынды оқушылардың айырмашылығы неде?
- 8. Үлгермейтін дарынды оқушыларға қандай факторлар теріс әсер етеді деп ойлайсыз?
- 9. Сыныптағы үлгермейтін дарынды оқушылардың санын азайту мүмкін деп сенесіз бе? Қалай / Неге?
- 10. Сыныптағы үлгермейтін дарынды оқушыларға көмек беру мақсатында қандай әдіс-тәсілдерді қолдандыңыз ба? Қалай?
- 11. Аталған әдіс- тәсілдер үлгермейтін дарынды оқушылардың барлығына бірдей нәтижелі жұмыспен аяқталды ма?

Вопросы интервью для учителей-участников:

- 1. Какой предмет вы преподаете?
- 2. Как долго вы работаете в НИШ Кызылорда?
- 3. Что такое по вашему одаренность и кто такие одаренные дети?
- 4. Как вы понимаете термин «неуспевающие одаренные»
- 5. Как часто в вашей практики встречаются неуспевающие одаренные ученики?
- 6. Как бы вы характеризовали неуспевающих одаренных учащихся?
- 7. В чем различие между одаренным неуспевающим и одаренным успевающим?
- 8. Какие факторы по вашему мнению повлияли на то чтобы одаренные учащиеся стали неуспевающими?
- 9. Вы верите в то, что можно помочь данной группе учащимся стать снова успевающими учениками?

- 10. Какие методы или приемы вы применяли (бы) в своей практике для поддержки и помощи неуспевающим одаренным детям?
- 11. Одинаково ли эффективно работают все приемы и методы для всех неуспевающих одаренных ?

Appendix 3

Data coding matrix

	T1	Quote	T2	Quote	T3	Quote	T4	Quote
*Characteristi cs of gifted underachiever s	*Slower and might require additional time to complete the tasks	"Usually the tasks we prepare are for gifted children; however the practice shows that some gifted children might require much more time to accomplish a task. It does not me he/ she is not capable to do the task, but require 60 minute than planned 40 minute."	*strange * lack social skills *prefer to be alone *prefer doing things they like	"It is difficult to put these students into one specific cliché, because they do what they want regardless of the marks. They do not pay attention to the notifications from their teachers. They are not outgoing, and do not speak a lot and laugh running around the class just like other students."	*silent *invisible *do not show initiative	"As teachers we do not pay attention to such children. These students prefer to be invisible and mostly sit at the back seats of the classroom. They are mostly silent during the lessons."	*different in nature *prefer writing rather than speaking *stubborn and self-relevant *good in arts *good in logical thinking	"They are different in character and nature. In my practice the student preferred to answer in a written form rather than in speaking.
	T5	Quote	T6	Quote	T7	Quote	Т8	Quote
	*they were achieving in the junior and middle school	"These underachieving gifted students used to be achieving. Otherwise I would not recognize them as	*gifted only in one dimension *humanitarian vs science subjects *require support from	"I believe underachieving students in my class might be achieving in another subject. For example, in math there are many such students, who are good in humanitarian	*difficult to define them since they are different. *fast in understanding the material, but not persevering	"These children are usually fast in understanding the material and can grasp it at once, but the only problem with such children is they do not take time to sit and revise the	*gifted and talented *gifted do not make much effort to achieve, while talented work hard to achieve	"I consider students usually as talented and gifted. The first does not have a natural predisposition but due to hard work achieves a lot. The last group difficult to work with,

underachieving	teachers,	subjects."	material. As a result	*sensitive to	since they require a lot
gifted students"	parents and		they fail the	what teacher says	support from teachers.
	peers"		summative tests."	·	Mostly they are self-
	1			*require attention	confident but lazy"
				from teachers	
				- rebellious and	"I observed two types
				stubborn if they	of students: those who
				lack attention.	work hard and achieve
					those who do nothing
				*too much	but achieve"
				confidence to	
				argue against	"Some are stubborn and
				teacher and class.	might not even attend
					additional lessons,
				*critical thinkers	while some of them are
				and brave to	not afraid of criticizing
				express their	the teacher's decision in
				opinion.	class. This is because
					they are so much self-
				*silent, prefer to	confident that they want
				be at the same	to check teachers'
				level as the	knowledge as well as
				majority of the	true facts are important
				class, not better	for them. Sometimes
				not worth.	this kind of critique
					from them helps us in a
				*good in science	class, and comes up to
				but struggle with	be proven right."
				language subjects	

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*Factors that	*	" some	*too much	"In terms of	*stress for	"Speaking	*good in one	
contribute to	humanitarian	students	requiring	academic	newly	about our	domain rather	
underachieveme	and science	have	parents	subjects,	admitted 7th	school, this is	than in several;	
nt	children	decided		parents might	grade students:	often a new	humanitarian	
		what	*parents	put on some	higher	environment.	and science	
	*has chosen	subject	decision, not	pressure or	requirements,	I'm talking	students	
	specific	area to	the child's	influence a lot	competition,	about 7th		
	subject area	focus		of in chosen	unprepared	grade. It	*socio -	
	and focuses	related to	*too much	interest	morally and	happens that	psychological	"Difficultie
	mostly on	their	pressure and	subjects, this	physically to	children	issues; family	s might be
	that	future	stress: school	way making a	such an	experience	issues	as a result
		career. For	requirements	choice for	environment.	shock when		of family
		example,	and rules,	their child. As		they change		issues, for
	*teacher and	the one	teachers.	a result, their		their position		example,
	student poor	who does		child does not		of study, a		when
	relationship	not achieve		achieve		new		somebody
		in biology		because his or		environment		in the
	*socio-	achieves		her interest		appears, new		family can
	psychologica	very well		subject is		people.		be seriously
	1 factors	in a		completely		Children are		ill or pass
	(family	geography,		different."		usually not		away."
	issues)	because	*physiologic			prepared for	*teacher -	
		this	al problems			such a	student conflict	
	*teachers'	student is	•	"For example,		situation due		"These
	overload	naturally		there is a		to the high		students
		predispose		student who is		competition		can easily
		d into that		the best in		with other		get into
		subject"		science		children who		conflict
				subjects, and		also passed		with their
				there is no one		the selection.		teacher
				better than		There are		since they
								•

no the exp of a they get and a pratte	perience a teacher by might t tired d not pay proper ention to tudent's *overloaded teachers, busy teachers	him. But he has physiological difficulties in terms of speaking and writing, naturally this problem slows him down very much in humanitarian subjects ". "Sometimes teachers are overloaded and cannot provide equal attention to all students to notice any changes, analyse and reverse it on time."	*early identification is missed as a result of teachers' overload. *students' overload: students cannot handle all the subjects	children who immediately fit into this stream, and there are children who are physically and mentally unprepared for the level of tasks and the criteria by which they are evaluated." "Another factor, probably the lack of time for teachers due to workload. Sometimes a teacher does not recognize a student who is revealed only by low results of	*too much material and information to handle	stubborn and self- relevant, they also tend to require attention from the teacher when they don't get it it they go backwards. " "When there is too much informatio n, students might not handle all lacking enough sleep and rest. This can bring to physical well-being of students
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					at once. This affects their health. *achieving gifted might 'over shine' the underachievin g, as a result they become withdrawn.	summative work or when the student is on the list of drop-out students " "at the same time students in NIS have so much tasks that sometimes they cannot handle all the subjects."		and overall burnout."
--	--	--	--	--	---	--	--	-----------------------

T5	Quote	T6	Quote	T7	Quote	Т8	Quote
*demotivatio		*developmen	"These	*lack of in	"A student	*lack of	
n as a result		t in one	students'	time support;	underachieves,	motivation	
of student		dimension:	giftedness is	the student	when he/she		
overload and		humanitarian	developed	missed the	simply did not	*development in	
<mark>burnout;</mark>		rather than	mostly in one	explanation of	understand the	one dimension;	
students do		science	dimension.	the topic	explained	good in science	
not have			This means		material, or	and weak in	
enough sleep			they achieved		he/she did not	languages	
			in one subject		listen		
*age			area only		attentively the	*conflicts with	
peculiarities;		*Lack of	while		material. And	teachers;	
being		early	underachieved		if the student	misunderstandin	
interested		development	in others."		does not	g	
with		and support			approach the		
something			"Vulnerabiliti		teacher, does		
out of			es in their		not try to		
school.			education		fulfill the gap		
			arise from the		by himself or		
			lower grades,		the teacher		
			because they		does not take		
			do not have		time for this		
			any skills.		student, the		
			They may feel		situation gets		
			uncomfortable in this		worth and		
			situation and	*lacks the	affects the		
					summary work"		
			may get stuck"	aims/ goal to achieve	WOLK		
					"In the 7th		

			grade	
			children are	
			not yet	
			formed and	
			they do not	
			think about	
			what they will	
			associate	
			their future	
			with. This is	
			good when	
			you come	
			across a child	
			who has	
			decided on	
			his goals. For	
			example, I	
			have a	
			student who	
			tells me "I	
			want to be a	
			neurosurgeon	
			" and I have	
			been working	
			with this girl	
			for two years	
			now and she	
			even solves	
			problems that	
			are difficult	
			for 11	
			1/1 11	

			graders. She
			went to the
			Olympiad
			this year to
			the network
			in chemistry,
			although she
			is 8th grade,
			but she went
			to 9th grade."

Methods to	T1	Quote	T2	Quote	T3	Quote	T4	Quote
reverse	*differentiated	"Once I had a	*building	"There is no	*individual		*observing	"At first I
	approach	student whose	relationship	unique way to	work based	"Since we work	to find	observed the
		chosen	with a	work with	on trust	with different	relevant	student to
		subject was	student	such students		students, there	approach in	find out what
		not biology	based on	since they are		are different	learning	kinds of
		and therefore	trust.	different in		approaches		skills and
		the student		nature and		needed. Each	*provide	interest
		struggled in	*provide a	have different		individual is	differentiated	she/he has.As
		biology.	choice of the	abilities.		unique and the	tasks	a result I
		However, as	tasks	Some might		methods	according to	notice that
		soon as I		need group		correspondingly	the interest	this student
		prepared		work while		will be unique,	of the	always draws
		tasks		others a pair		therefore	student	during the
		according to		or individual		current		class. I
		the level of		work. They		education		noticed that
		this student		do not need to		cannot directly	*connect the	the pictures
		focused on		be taught		answer this	discussed	are really
		subject		according to		question."	topic with	good in terms
		objectives		some specific			specific	of
		only, but		framework as			problem to	techniques.
		nothing extra,		they are quite			use logical	Therefore,
		this student		mature and			and critical	during the
		successfully		value good			thinking	material
		passed		relationships				explanations
		external		based on			*to prepare	I picked
		summative		trust.			differentiated	attention
		tests while		Therefore, as			tasks	grasping
		graduating		soon as the			ste .	pictures and
		the school."		teachers gains			*to put	connected
				the trust it is			directing	the topic with

			important to give a choice on selecting tasks."			question leading to a correct answer	a specific problem. As a result, this student showed higher result for the rest two terms
T5	Quote	T6	Quote	T7	Quote	T8	Quote
*boost motivation		*relationship build on trust *set goals	"Usually it is difficult for students in math classes to connect math with their future career, therefore, I usually brainstorm on some specific aspects of life where math skills are must be applied. This way I make goal-oriented motivation in	*individual approach: students' learning peculiarities and *set goals	"a teacher should have a good sense of feeling the needs of the particular student in his class to find individual approach taking into account the students learning peculiarities. Only then the situation can be reversed."	*increasing students' motivation through relationships based on trust	"At the beginning of each academic year I try to increase students' motivation. It starts with simple conversation where I ask about their choice of the future profession, giving them suggestion to achieve that. These kind of conversations
			my students,		with a child		make

	whose work then makes sense not only for them but for me also."		who is clear with the goals to achieve. For example, I have a student now who told me what she wants to achieve in chemistry. For two years continuous work she has achieved a lot and even participated in subject Olympiad for	students closer to me, which mean they become close to my subject I teach as well."
		*relationship build on trust	"Here you need to have complex approach. First, you should build relationship based on trust, and only then a student will	

			start to approach you and put questions. It is important for a teacher to be trustworthy. In case you do not have time to work with that at the time you promised, set another specific time and be on time. A child will rely on you completely"
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