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SOCIAL ATTRACTIVENESS OF CHILDREN WITH DISABILITIES

in the opinion of nondisabled
first-grade elementary school students
and their parents in Kazakhstan



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CONTENTS

INTRODUCTION	7
1. ATTRACTIVENESS OF STUDENTS WITH DISABILITIES – A LITERATURE REVIEW	11
1.1. Idea of inclusive education in Kazakhstan	11
1.1.1. Education of students with special needs in Kazakhstan	11
1.1.2. Developing the concept of inclusive education	17
1.1.3. State of Kazakh inclusive education	21
1.1.4. Creating conditions for inclusive education in Kazakhstan	24
1.1.5. Summary	29
1.2. Social attraction of student – a factor promoting inclusive education	31
1.2.1. Nature of attraction and its structure	31
1.2.2. Research on human attractiveness according to social and cognitive theories	39
1.2.3. Summary	49
1.3. Public perception of people with disabilities	50
1.3.1. Attitudes toward people with disabilities	50
1.3.2. Child with disabilities in an inclusive setting as perceived by children without disabilities and their parents	53
1.3.3. Summary	60
2. RESEARCH DESIGN	63
2.1. Research subject and objectives	63
2.2. Problems and hypotheses	65
2.3. Methods, techniques, and tools	67
2.4. Variables and indicators	69
2.5. Sampling criteria and research site	70
2.6. Organization and course of research	81
3. SOCIAL ATTRACTIVENESS OF STUDENTS WITH DISABILITIES – STUDY RESULTS AND THEIR INTERPRETATION	83
3.1. Description of the sample and educational environment	83
3.1.1. Description of the study group	83
3.1.2. Participants’ education	84
3.2. Social attractiveness of peers with disabilities as assessed by nondisabled first-graders in inclusive and noninclusive education	88
3.2.1. Children’s knowledge of disabilities – Essence of disability and sources of knowledge	89

3.2.2. Conversations parents have with their children about disabilities – Children’s accounts	94
3.2.3. Behaviors toward peers with disabilities declared by nondisabled children regarding various probable interactions	98
3.2.3.1. Starting a conversation with a peer with disability	99
3.2.3.2. Playing with a peer with disability	104
3.2.3.3. Learning with a peer with disability	109
3.2.3.4. Making friends with a peer with disability	114
3.2.3.5. Inviting a peer with disability to a birthday party	119
3.2.3.6. Direct evaluations of peers with disabilities	124
3.2.3.7. Inviting a peer with disability to a colored or black-and-white house – Indirect evaluation	131
3.2.4. Social attractiveness level of peers with disabilities as viewed by first-graders in an inclusive school and in a noninclusive school – Hypothesis testing	135
3.2.5. Discussion of the findings and summary	140
3.3. Social attractiveness of peers with disabilities as assessed by Kazakh parents of nondisabled first-grade students in inclusive and noninclusive education	144
3.3.1. Parents’ knowledge of disability (CC)	144
3.3.2. Conversations parents have with their nondisabled children about disabilities (CC)	148
3.3.3. Parents’ attitudes toward their nondisabled children’s interactions with peers with disabilities	153
3.3.3.1. Conversation with a peer with disability	153
3.3.3.2. Playing with a peer with disability	158
3.3.3.3. Learning with a peer with disability	163
3.3.3.4. Evaluation of a child with disability as a friend and as a student	168
3.3.4. Position of parents of nondisabled children on inclusive education	170
3.3.4.1. Type of school for students with disabilities	170
3.3.4.2. Advantages and disadvantages of inclusive education	176
3.3.5. Social attractiveness level of a peer with disability in the opinion of parents – Hypothesis testing	183
3.3.6. Discussion of the findings and summary	189
CONCLUSIONS FROM THE STUDY AND RECOMMENDATIONS FOR PEDAGOGICAL PRACTICE	197
REFERENCES	207
APPENDIX	229
Appendix 1	229
Appendix 2	232
Appendix 3	233

INTRODUCTION

The research on the social attractiveness of children with disabilities was inspired by the social integration idea, which spread globally in the seventies of the 20th century, but in Kazakhstan, it has been intensively implemented for a short time only. Kazakhstan's aspirations to create an open, democratic society, enter global sociocultural space, and give priority to human rights and freedoms are the factors that have had an impact on changing the way of thinking about people with disabilities and problems they contend with.

Integration means including people with disabilities in various areas of social life and granting them the same rights as other citizens. the right to education with nondisabled peers is one of the most important ones. Including children with disabilities in education provided in mainstream schools is now the priority of Kazakhstan's educational policy. the official term used in Kazakh pedagogy is children/students with "limited health abilities" (LHA). However, following global trends, the term students with "special educational needs" is in increasing use. In this work, the term students with "special educational needs" (SEN) will be used interchangeably with the term students/children with disabilities.

The national educational policy of Kazakhstan is aimed at creating optimum conditions for including children with SEN. Guidelines are set out in the *State Program of Education Development in Kazakh Republic for 2011–2020 (State Program ...*, 7 October, 2010, No. 1118). Forming a normative and legal basis for an inclusive educational system was the starting

point. So far, basic documents assuring educational and social rights and support have been prepared and approved, including: *Act on Children's Rights in the Republic of Kazakhstan* (8 August, 2002, No. 345-II); *Education Act of the Republic of Kazakhstan* (as amended and supplemented, 24 October, 2011); *Act on Social, Correctional, Medical, and Educational Support for Children With Limited Health Abilities* (11 June, 2002, No. 343); *Act on Social Protection of Disabled Persons in the Republic of Kazakhstan* (13 April, 2005, No. 39), *Act on Special Social Services* (29 December, 2008, No. 114-IV) (<http://adilet.zan.kz/eng>), and *Conceptual Approaches to the Development of Inclusive Education in the Republic of Kazakhstan* (2015) (<https://special-edu.kz/normativno-pravovaya%20baza/4/mat001.pdf>).

A lot of studies have been conducted recently in Kazakhstan on issues relating to the inclusion of children with disabilities. They have been carried out by the following Kazakh researchers, among others: A.A. Baytursynova, A.N. Autayeva, A.K. Zhalmuhamedova, and Z.A. Movkebayeva. They investigated in detail the theoretical and organizational basis of inclusive education, the issues relating to managing the integration of educational systems (special and mainstream) in the context of inclusive schooling as well as methodological aspects.

Russian researchers (S.V. Alehina, L.N. Davydova, E.I. Leongard, D.M. Malloyev, N.N. Malofeyev, N.N. Nazarova, L.M. Shipitsyna, N.D. Shmatko), whose lines of thoughts dominated the development of education practiced in Kazakhstan for many decades of the 20th century, analyzed the organization of education for children with disabilities in mainstream settings, attitudes to inclusion among participants of education, teachers' qualifications, etc. Numerous psychologists and educators, including: S.V. Alehina, L.N. Davydova, E.I. Leongard, D.M. Malloyev, N.N. Malofeyev, N.N. Nazarova, L.M. Shipitsyna, and N.D. Shmatko, argued that attitudes and interactions between nondisabled children and their peers with disabilities are important factors that ensure successful inclusive education. The analysis of sources showed, however, that the issue of the social perception of children with disabilities as playmates, friends, and students is not described exhaustively in the Russian literature, while the Kazakh literature does not provide enough reports on this topic either.

Research on social attraction in the world literature has been carried out mainly with reference to adults, while the view of the world and people around

is shaped in children's minds from the earliest age; it is when first social interactions are initiated, which are the basis for developing stable attitudes. That is why it is very important to explore the image of children with disabilities and nondisabled students' opinions on the social attractiveness of their peers with SEN as early as possible. This will allow producing educational recommendations on how to foster mutual, valuable peer relationships among students in inclusive settings.

The issue of the attractiveness of children with disabilities is therefore relevant not only in terms of the educational policy of the Kazakh government – the transformation of the educational system, but it is also crucial for long-term social policy. This being so, research was undertaken to explore the social attractiveness of children with disabilities as perceived by nondisabled children and their parents in two educational settings: a mainstream school without children with disabilities (a non-inclusive school) and a mainstream school with children with disabilities (an inclusive school). Based on previous source analysis, a hypothesis was formulated that Kazakh children in the inclusive setting and their parents would find children with disabilities more attractive than those in the non-inclusive setting. The hypothesis will be tested further on in the research process¹.

The book is divided into three parts: theoretical and empirical aspects, research design, and findings. In the first part, sources are analyzed with focus on the state of inclusive education in Kazakhstan, the phenomenon of attraction according to various concepts, and the state of research on the attractiveness of adults and children with disabilities in the opinion of other adults and children.

The second part looks at the methodological aspects of the research project. Cognitive and practical objectives as well as hypotheses were formulated; methods and techniques were selected based on the classification by Polish author M. Łobocki (2011); variables, indicators, and sampling criteria were

¹ Research on disabled children's social attractiveness was conducted as a part of bilateral cooperation between the Maria Grzegorzewska University in Warsaw and the Abai Kazakh National Pedagogical University in Almaty. The cooperation resulted in a doctoral dissertation by Laura A. Butabayeva entitled *Social Attractiveness of Children With Disabilities as Seen by Kazakh Students and Their Parents* (2016), written under the direction of Ewa M. Kulesza. This book was based on the materials in the dissertation and complemented with new theoretical and empirical analyses.

determined; the area and organization of research in the educational settings were described.

The third part presents the results obtained through analysis of documents, an interview, a survey, and a sociometric test. the research data are discussed according to the order of the research problems. Each significant passage of Chapter 3 ends with a discussion of the findings and a summary. the chapter closes with conclusions and recommendations for pedagogical practice. References, a list of tables, charts, and diagrams as well as appendices are provided at the very end.

The findings of the research have theoretical and practical value. They increase and specify knowledge of the social “appeal” children with disabilities hold for nondisabled peers in inclusive and mainstream schools and for their parents. They also provide a basis for making educational recommendations as to improving the social attractiveness of children with disabilities, which will promote shaping a tolerant, sensitive, and partnership-oriented society in the long term.

CHAPTER 1

ATTRACTIVENESS OF STUDENTS WITH DISABILITIES – A LITERATURE REVIEW

1.1. IDEA OF INCLUSIVE EDUCATION IN KAZAKHSTAN

1.1.1. EDUCATION OF STUDENTS WITH SPECIAL NEEDS IN KAZAKHSTAN¹

BASIC TERMINOLOGY ADOPTED IN THE BOOK

For many decades of the 20th century, Kazakh education, including special education, developed in line with social science practiced in the Soviet Union (USSR). It drew largely on the achievements of Russian scholars, but Kazakh scientists, too, had a part in co-creating the theoretical and methodological basis of special education. In 1991, when Kazakhstan became independent from Russia, a new period began in political and social development as well as in the development of education targeted at children/students with special educational needs.

The term people with limited health abilities (LHA) was adopted in Kazakh legal acts on education and social policy. The term refers to both adults and children whose health prevents them from following curricula if they are provided outside of special education settings (Borisova, 2009). Statistical data show that children with developmental disorders constitute 10–12% of

¹ Similar issues were presented in Kulesza, E., & Butabayeva, L. (2016): Students with special needs in the Kazakh educational system. *IJPINT*, 3 (2), 26–31, doi: 10.5604/01.3001.0009.5081

the child population in developed countries. In Kazakhstan, 2.8% of developmental disorders in people up to 18 years of age are detected. That shows that it is necessary to further develop the assessment and consultation system as well as to implement screening for young children.

The concept of a person with limited health abilities covers all people diagnosed with functional limitations due to illness, developmental impairments or defects (disabilities) or atypical state of health. Functional limitations are often the reason for social and educational exclusion due to the fact that the outside environment is not adapted to the basic needs of people with disabilities, and also due to negative stereotypes and prejudice (Bondarenko, 2009). One of the objectives of this research is to explore the school environment of first-graders to find out about their perception of a peer with disability as a friend and about the possibility of including students with disabilities in the mainstream schooling system.

In general and special education in Kazakhstan, also the term students with special educational needs (SEN) is used with reference to students with LHA, as they require specialist educational and psychological assistance to overcome academic difficulties and to participate in the mainstream/traditional schooling process.

The term children with special educational needs was proposed in 1978 by English specialists who regarded needs as a changeable property and not a personality trait, and thus limitations or disabilities are treated dynamically, depending on the context in which a given person's difficulties in fulfilling developmental tasks arise. The authors of the document called the *Warnock Report* write: "(...) we have adopted the concept of special educational need, seen not in terms of a particular disability which a child may be judged to have, but in relation to everything about him, his abilities as well as his disabilities – indeed all the factors which have a bearing on his educational progress" (*Warnock Report*, 1978, p. 38). The authors of this book share this understanding of special educational needs.

In the part of this book presenting our research findings, students with disabilities will be interchangeably referred to as students with special educational needs. However, it should be considered that the term children with special educational needs is broader in terms of content than the term children with limited health abilities or children with disabilities, as it covers not only people

experiencing difficulty in communication, socialization, cultural adaptation, and academic learning but also gifted people (Kulesza, 2015). Scientific discussions show that the process of creating appropriate terminology referring to people that need psychological and educational support has not finished.

BASIC CLASSIFICATIONS OF DISABILITIES AND DISORDERS IN KAZAKHSTAN

There are a lot of criteria at the root of classifications of disorders and disabilities, including: causes of disorders, types of disorders and symptomatology or consequences of disorders that become apparent later in life. The educational system in Kazakhstan is based on a typology according to types of disorders/disabilities; that is why this work presents current classifications using this criterion. One of them is A.R. Maller's classification, which is based on the type of disability or disorder and lists the following groups of people with SEN:

- deaf,
- hard-of-hearing,
- with hearing loss acquired later in life,
- blind,
- with low vision,
- with motor disabilities,
- with emotional and volitional disorders,
- with intellectual disabilities,
- with delayed mental development (children with learning difficulties),
- with severe speech disorders,
- with severe developmental defects (after Lebedinskaya, 2007).

The classification proposed by V.A. Lapshin and B.P. Puzanov (after Luchkov & Pevzner, 1981) distinguishes the following groups of children:

- 1) with sensory impairments (hearing and visual impairments),
- 2) with intellectual disabilities (mental disorders and delayed mental development),
- 3) with speech disorders,
- 4) with motor disabilities,
- 5) with multiple disabilities,
- 6) with uneven (disharmonious) development.

G.N. Kobernik and V.N. Sinev (after Kiseleva & Levchenko, 2005) came up with a similar classification. They distinguished the following groups of children:

- 1) with permanent hearing impairments (deaf, hard-of-hearing, and those who deafened later in life),
- 2) with visual impairments (blind and with low vision),
- 3) with permanent intellectual disabilities resulting from organic damage to the central nervous system,
- 4) with severe speech disorders,
- 5) with multiple disabilities,
- 6) with motor disabilities,
- 7) with delayed mental development,
- 8) with psychopathic behaviors.

The examples cited above show that differences between the classifications are subtle – when, for example, the cause is pointed out or a few disabilities are integrated into one group (e.g.: hearing and visual impairments – sensory impairments). The classifications by A.R. Maller, G.N. Kobernik, and V.N. Sinev will be mainly used in this work, as the typology of the education system in Kazakhstan is based on them.

In the context of social support, the approach presented in the *Warnock Report* (1978) seems interesting and prospective. It makes it possible not only to distinguish various groups of students with special educational needs in a more precise way, but also to define the nature and range of each person's special educational and social needs in a more precise way. Moreover, it allows determining, with a sufficiently high degree of probability, the special needs of a given person with SEN that are socially significant, and consequently – the direction of social rehabilitation. In the process of determining the special needs of a person and the direction of social integration, the following are taken into account:

- 1) orientation in the physical and social environment,
- 2) physical independence and mobility,
- 3) ability to perform various activities,
- 4) potential for social integration,
- 5) potential for socioeconomic independence (Solodyankina, 2007).

It would be reasonable to take this approach into account while developing social policy tasks in Kazakhstan, especially as regards students with special educational needs.

SYSTEM OF EDUCATION FOR STUDENTS WITH SPECIAL EDUCATIONAL NEEDS IN KAZAKHSTAN

Students with special educational needs are students whose health prevents them from following curricula outside of special education settings. These are people with disabilities or others who are younger than 18 and who are not considered disabled under the established procedure but have temporary or permanent impairments in physical and (or) mental development that require special conditions for education and care. The group of students with SEN – as it appears from the classifications cited above – is heterogeneous. The range of differences in the development of students with SEN is remarkably broad: from those with virtually typical development who experience temporary difficulties that are relatively easy to resolve to those with permanent severe damage to the central nervous system; from gifted students who can realize their full potential with specialist support, at the same time learning together with their typically developing peers, to children who need an individualized education program adapted to their abilities.

The present system of education in Kazakhstan distinguishes three types of settings in the general system (except homeschooling) which students with special educational needs can attend. These are:

1. Special preschools and schools (including residential special needs schools and sanatorium- and hospital-based facilities);
2. Special classes and groups in mainstream settings (preschools and schools) – inclusive education;
3. Preschools and schools with groups and classes with up to three children with SEN – inclusive education.

The two last types of settings provide inclusive education – as defined by Kazakh pedagogy – which is aimed at children with SEN. It should be emphasized that this type of education is one of the priorities of the *State Program of Education Development in the Republic of Kazakhstan in 2011–2020* (*State Program...*, 2010). Also distance learning is available for students with special educational needs. It is frequently used if homeschooling is necessary, when students cannot learn at school.

In 2014/2015, over 15,000 preschoolers attended 39 special preschools and 315 special groups. Approximately 25,000 children studied in 106 special

schools and in 1,219 special classes in mainstream schools. A network of special organizations is composed of 119 psychological and educational centers, 15 rehabilitation centers, 283 speech therapy points, and 58 medical, psychological, and educational counseling centers.

Since 2011, homeschooled children with SEN have been receiving learning resources (textbooks, workbooks, etc.) and technical resources as part of the *State Program...* (2010) to facilitate their following their individual educational paths. For children with motor disabilities – apart from personal mobility aids – special keyboards and manipulation appliances are purchased; for children with hearing impairments – personal hearing aids and sound amplification equipment with microphones; and for children with visual impairments – special technical aids. To provide access to learning, information supply facilities are provided, i.e. hardware, including Braille printers and monitors, reading devices, magnifying devices, electronic magnifiers, portable combined screen readers and magnifiers, and others.

At present, 43% of special education settings have educational multimedia systems (*Eduplay, Multikid, Sound Beam*) that stimulate the cognitive development of children with special educational needs. Interactive whiteboards are available in 20% of special schools. As many as 46 sets of computer hardware for low vision people were purchased for children with visual impairments (Abayeva, 2012). Approximately 95% of special schools have Internet access, 41% – software for speech therapy, and 37% – voice simulators.

In technical and vocational schools, an enrollment limit was set for people with disabilities – 0.5%, and in higher education – 1%. People with visual impairments, people with hearing impairments, orphans, and children that are not in the custody of their parents and those placed in social welfare institutions are entitled to a higher state scholarship (+75%) (Abayeva, 2012).

New educational standards in Kazakhstan take into consideration the special educational needs of students with SEN, and in particular – the need to develop individualized education plans. Depending on their developmental disorders, children have different special educational needs. Those needs determine the logic of the educational process construction, they are also reflected in the structure and content of instruction. In particular:

- special instruction is provided for the child once disorder has been diagnosed preceded by preparation for academic learning;

- individualized instruction is provided to a larger extent than it is required in the case of children with typical development;
- special chapters are introduced to the child's instructional content that are not included in the curricula for peers with typical development;
- special educational methods and aids (including specialist computer technologies) are used to facilitate learning;
- special temporal and spatial organization of the educational environment is provided;
- the educational space is expanded beyond the educational setting as much as possible (Denisova, 2007).

For inclusive education to be effective, it is necessary to take into account the special educational needs of different groups of children with SEN, which are dependent on the nature and degree of manifestation of disorders and children's abilities as well, and to aim to satisfy those needs as fully as possible while at the same time meeting the universal standard of education.

1.1.2. DEVELOPING THE CONCEPT OF INCLUSIVE EDUCATION

At the beginning of the 1970s, a new cultural norm was formed in the world – respect for racial, gender, age, national, political, religious, and ethnic differences as well as differences in health status. According to N.N. Malofeyev (1996) and J. Pańczyk (2001), special schools (including residential ones) became considered to be segregated settings in that context, and the special education system – separated from the mainstream system – to be discriminatory. This emerging global trend manifested itself at the end of the 1980s in the USSR (Kazakhstan was then one of the Soviet republics and was subject to national education regulations) in first experimental classes for children with profound intellectual disabilities opened in special schools. Those children were regarded as unteachable before. Till 1990, there were 2,789 special schools in the USSR with about 575,000 students. There were eight types of special schools and 15 types of special education services. More than 300,000 children with developmental impairments attended preschools (which were introduced in the 1970s).

Positive features of special education in the USSR include: a) structural improvement, diversification, and expansion of special education for chil-

dren with SEN; b) advanced level of development of the methodological basis; c) advanced level of development of special education technologies and instruction methods for children with various disorders and disabilities; and d) development of the theoretical basis for special education (L.S. Vygotski, V.P. Kashchenko, A.R. Luria, A.Y. Grabarov, A.S. Griboyedov, G.M. Dulnev, F.A. Rau, N.A. Rau, F.F. Rau, Zh. I. Shif, R.M. Boskis, I.A. Sokolanski, R.E. Levina, N.G. Morozova, B.D. Korsunskaya, M.S. Pevzner, A.Y. Diachkov, S.A. Zykov, and others). Defectology (the term used in the USSR, sometimes still used in Russian-language publications) provided children with SEN with different forms of education within the state system (education and care for children with developmental issues was organized in various types of special education settings depending on the nature and severity of symptoms of the disorder/impairment). The system includes 15 types of special education services delivered in eight main types of special schools, which provide board and lodging, methods, and organization. At present, however, it is mainstreaming, i.e. including children with special needs in general education classrooms, that is becoming the main goal in the policy of the development of the educational system for children with special educational needs.

The concept of inclusion was reflected in the UNESCO document on measures in social policy that promote inclusive education (*Salamanca Statement...*, 1994). According to this idea, authorities in each country should recognize the inclusion of children with special educational needs in education provided in mainstream schools as a priority task for their educational policies (Serikov, 1999). The idea of “school for all” and its operationalization was presented in the *Salamanca Statement*, adopted in 1994 by 92 countries. It includes principles, proposals, and legal adaptations in the area of inclusive education. What is more, it seems to be the most important, fundamental international document on special education that has been issued so far. The *Salamanca Statement (...)* (2004) defines inclusion as a reform that supports and accepts each student’s differences and characteristics and that aims at avoiding social discrimination resulting from sexual, racial, cultural, social, national, and religious differences as well as from individual abilities and skills.

One of the most comprehensive definitions of inclusion is given in the *Guidelines for Inclusion* by UNESCO (2005). According to this document, inclusion is seen as: “a process of addressing and responding to the diversity of

needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children. [...] Inclusion is concerned with providing appropriate responses to the broad spectrum of learning needs in formal and non-formal educational settings. Rather than being a marginal issue on how some learners can be integrated in mainstream education, inclusive education is an approach that looks into how to transform education systems and other learning environments in order to respond to the diversity of learners. It aims towards enabling teachers and learners both to feel comfortable with diversity and to see it as a challenge and enrichment of the learning environment, rather than a problem” (*Guidelines...*, 2005).

According to Polish regulations, school inclusion refers to 12 groups of students that need the learning process to be organized in a special way due to their unique, varied needs (*Act of 14 December 2016 – Educational law...*). The first group are students with disabilities, who are the focus of attention of many researchers exploring inclusion (Maciarz, 1985; Hulek, 1987; Palak, 1993; Bogucka & Kościelska, 1998; Zaorska, 1999; Zamkowska, 2000; Chodkowska, 2002; Dryżałowska & Żuraw, 2004; Skrzetuska, 2005; Skrzetuska, 2019; Szumski, 2006; Al-Khamisy, 2006). In their opinion, inclusive education should, first of all, aim for all schools and facilities to be friendlier to children with special needs. An accessible environment is created based on a social approach to disability, whose point is to overcome all barriers that prevent children with disabilities from learning together with their nondisabled peers, including architectural, organizational, administrative, legal, and mental barriers in particular, and to build a positive attitude to and image of people with disabilities. And one of the objectives of the present work is to explore the image of peers with disabilities among first-graders in mainstream elementary schools.

Many Russian authors (Malofeyev, 1996; Shipitsyna, 2005; Yarskaya-Smirnova, 2003) understand inclusive education as educators’ specialist work on providing cooperation between typically developing children and children with special educational needs within a general education setting. Such coop-

eration provides for creating special educational conditions for instruction: providing an adapted learning environment; offering psychological, medical, and educational support; and developing inclusive culture in children, educators, and parents.

D.V. Zaitsev (2008, p. 325) offers the following definition of inclusive education: it is a process of including children with disabilities in the educational space, groups, classrooms, and teams of people without developmental impairments through organization of collaborative learning, care, child cooperation, practice building, and working together on equal terms. D.Y. Sheveleva (2011, p. 13) sees the system of inclusive education as a dynamic process aiming to continually adapt learning conditions to each student's individual characteristics. N.Y. Semago, M.M. Semago et al. (2011), presenting the meaning of inclusive education, also point out the importance of adaptation.

To sum up, inclusion is understood as a specially organized educational process that ensures children with special educational needs involvement and acceptance in their peer environment in a mainstream setting, and instruction according to adapted or individualized curricula which take into account their special educational needs. What is most important in inclusive education for children with diverse abilities is their gaining social and educational experience together with their peers. The basic criterion of inclusive education effectiveness is successful socialization, introduction to culture, wide social experiences, and wellbeing of all children – children with and without special educational needs.

Polish researcher D. Al-Khamisy (2013) considers inclusive education in terms of the philosophy of dialogue and calls it the education of dialogue. She distinguished three main planes of dialogue: getting to know, understanding, and being together. The planes of dialogue reflect the links of the process of including a student with SEN.

In the context of the planned research, inclusive education is examined as: organizing cooperation between children with typical development and children with special educational needs within the educational space of a regular education setting (understanding all children is based on getting to know each student/pupil very well), and developing inclusive culture whose most important component are mutual ethical relationships among participants (being together).

1.1.3. STATE OF KAZAKH INCLUSIVE EDUCATION²

In the world, inclusive education has been provided since the seventies of the last century. Its enshrinement and popularization took place in two stages – from the integrated model (the seventies and eighties of the 20th century) to the inclusive one (the nineties until today). The development of the “school for all” concept as Kazakhstan’s educational policy and its introduction to educational practice are taking place as a consequence of political, social, and ethical changes that have happened in European countries and the USA over the last 30–40 years. The Republic of Kazakhstan’s legislation – pursuant to fundamental international documents on education – provides for the principle of equal opportunities for people with special educational needs.

The term inclusive education was introduced into Kazakh education by the National Scientific and Practical Center of Correctional Education. In 1999, the Center launched an inclusive education project together with UNESCO, and in 2002, it organized a scientific and practical conference on inclusive education with the support of the Soros Foundation-Kazakhstan (Abayeva, 2012).

The national strategy for children for 2012–2017 (approved by the *Republic of Kazakhstan President’s Decree No. 761 of June 1, 2012*) provides for the enshrinement of equal access to high quality education at all levels for children with special educational needs, their right to inclusive education in their place of residence, and also parents’ right to choose educational settings and programs for their children. Apart from this, an effective mechanism to fight discrimination against children with special educational needs if their right to inclusive education is violated is planned to be implemented (Serikbayeva, 2012).

Inclusive education for people with special educational needs has become one of the priorities of the *Kazakh State Program of Education Development in the Republic of Kazakhstan in 2011–2020 (State Program..., 7 October, 2010, No. 1118)* (<http://adilet.zan.kz/eng>). The rights of children with special educational needs to equal opportunities in high quality education are guaranteed by the legislation of the Republic of Kazakhstan. The guarantees are enshrined in the constitution and the following acts: *Act on Children’s*

² Similar issues were presented in Kulesza, E. & Butabayeva, L. (2016). Students with special needs in the Kazakh educational system. *IJPINT*, 3 (2), 26–31, doi: 10.5604/01.3001.0009.5081

Rights in the Republic of Kazakhstan (8 August, 2002, No 345-II), *Education Act of the Republic of Kazakhstan* (as amended and supplemented, 24 October, 2011), *Act on Social, Correctional, Medical, and Educational Support for Children With Limited Health Abilities* (11 June, 2002, No. 343), *Act on Social Protection of Disabled Persons in the Republic of Kazakhstan* (13 April, 2005, No. 39), *Act on Special Social Services* (29 December, 2008, No. 114-IV) (<http://adilet.zan.kz/eng>), and *Conceptual Approaches to the Development of Inclusive Education in the Republic of Kazakhstan* (2015) (<https://special-edu.kz/normativno-pravovaya%20baza/4/mat001.pdf>).

Special education is part of the general education system, and the state creates necessary conditions for people with special educational needs to provide them with equal opportunities in education.

The gradual process of creating and improving the legislative basis for the introduction of inclusive education in the Republic of Kazakhstan is being corrected and strengthened based on the findings of scientific sociological research that has been conducted over the last decade by specialists from the National Scientific and Practical Center of Correctional Education, higher education academics, and specialists from associations and nongovernmental organizations. Foreign experiences were researched, the attitudes of various social groups to the idea of inclusive education were examined, and the dynamics of statistical data on children with special needs was analyzed across regions in terms of actions taken by four departments: health care, education, social welfare, and internal affairs. Based on district psychological, medical, and educational consultations, the scale of spontaneous inclusion of children with special educational needs in preschools and schools was determined. These studies and analysis of existing practice showed positive experiences of including children with special educational needs in the general education process in many regions of the country. The development of courses to improve the qualifications of mainstream principals and teachers was as important as the research, and the first ones were introduced in 2002.

In 2009, nongovernmental organizations ran the *YES for inclusive education!* campaign in Kazakhstan. Its aim was to draw attention to the right of children with SEN to education shared with their nondisabled peers. Since 2011, a program of “round tables” supported by the Soros Foundation-Kazakhstan has been carried out in different regions of the country. It is called *Inclusive*

Education: International Practice and Ways to Implement it in Kazakhstan and is aimed at principals in the general education system. Also, an Internet project to develop inclusive education in Kazakhstan is being run to provide schools with necessary information (Abayeva, 2012).

Children with severe and multiple disabilities are included in education. For example, in schools for children with intellectual disabilities in East Kazakhstan Region, in the cities of Almaty and Astana, additional special classes were opened for children with moderate and profound intellectual disabilities, who were before considered incapable of learning and thus deprived of the opportunity to interact with peers and receive education. These children lived in centers that were under the jurisdiction of the Social Welfare Ministry or stayed at home with their parents or relatives.

Also, there are experimental groups and classes for children with profound emotional and volitional disorders, conduct disorders, and multiple disabilities in rehabilitation centers and in correctional (special) preschools and schools. There are various forms of inclusive education available: special classes in general education schools, for example for students with hearing impairments or lowered intellectual functioning, or groups for children with motor disabilities in mainstream preschools. Students who have overcome serious speech disorders in a special school are successful at integrating with students in a general education school while still using speech therapy support.

According to available data, 27% of children with special educational needs attend general education schools together with their nondisabled peers. The enrollment limit for people with disabilities in higher education increased from 0.5% to 1% of the total number of students. In 2015/2016, there were 570 students with disabilities in higher education (Kulesza & Butabayeva, 2016).

At present, the aim is to keep and improve the existing network of special education settings while simultaneously developing inclusive education in Kazakhstan. Special education settings serve a function as centers providing methodological support for mainstream educators as well as psychological and educational counseling and assistance for students and their parents.

Many issues relating to the implementation of the idea of inclusive education require further decisions and further development; however, the popularization of the idea of inclusive education and its gradual enshrinement in legal and

medical documents bring hope to families with children with special educational needs that they will be able to choose educational settings for their children. After all, regardless of which type of schooling parents will choose – general or special education – their children’s special needs should be fully satisfied. This hope is being boosted by the *State Program of Education Development in the Republic of Kazakhstan in 2011–2020*, which intends to increase the number of schools prepared to provide inclusive education to 70% (*State Program...*, 7 October, 2010, No. 1118) (<http://adilet.zan.kz/eng>).

1.1.4. CREATING CONDITIONS FOR INCLUSIVE EDUCATION IN KAZAKHSTAN

The process of organizing inclusive education in Kazakhstan is complex and it projects the participation of state structures, local communities, families, educational bodies and settings, and nongovernmental organizations. At the initial state of inclusive education implementation, educational law was analyzed to make the legislation on special and general education coherent. To that end, the following were developed:

- Project of state standards: *Conditions for the implementation of the state general education standard in the Republic of Kazakhstan by educational organizations providing instruction for children with limited health abilities* (<http://adilet.zan.kz/eng>);
- Document called *Concepts of inclusive education development in the Republic of Kazakhstan* (<https://special-edu.kz/normativno-pravovaya%20baza/4/mat001.pdf>);
- A number of training and methodological resources and recommendations.

Furthermore, research was conducted to identify factors determining inclusive education in Kazakhstan (Association of Sociologists and Political Scientists of Kazakhstan) as part of the activities of the Center of the Social Adaptation and Vocational Rehabilitation of Children and Adolescents with Intellectual and Physical Disabilities (SATR), and a sociological study called *Inclusive education opportunities for children with limited health abilities, children with disabilities, and children disabled from birth*. Research was also conducted by

the Research Center “SANDZ,” UNESCO, and other nongovernmental organizations (Suleymenova, 2001).

In order to fulfill the right of children with special educational needs to high quality educational services, work within the following scopes is continued:

- implementing the articles of the Republic of Kazakhstan’s *Act on Social, Correctional, Medical, and Educational Support for Children With Limited Health Abilities* (11 June, 2002, No. 343) concerning provision of educational services through expanding the network of special and general education settings and providing specialist textbooks and technical equipment;
- improving the system of early diagnosis and correctional and educational support, including the implementation of screening (e.g., newborn hearing screening) to early detect disorders in children and refer them for psychological, medical, and educational consultation if there is a risk of psychophysical delays;
- creating a flexible and multivariant system of general secondary and vocational education for adolescents with disabilities;
- creating conditions for the development of inclusive education and the concept of accompanying children with special educational needs in inclusive education;
- implementing information and communication technologies to improve the quality of inclusive education management;
- cooperating with the mass media while running social programs aiming at the education and socialization of students with developmental challenges and at preparing them for independent life in the community. The effectiveness of cooperation depends on the coordination of the efforts of all the links in the system, and also on the coordination of activities provided by various specialists and different ministries, including health care, labor and social welfare as well as education and science.

Full development of learning and social adaptation in people with SEN becomes possible only when all necessary conditions are fulfilled. Therefore, the environment of inclusive education should be adapted to the needs and abilities of the student with SEN (Semago, 2013). The goal and sense of educating children with SEN in mainstream settings is their full development and

self-actualization, their learning the general education curriculum content (the state educational standard), and their acquiring the most important social habits as their peers do while the individual features of their cognitive, physical, emotional, and volitional development are taken into consideration.

The development of the educational system aiming at the inclusion of students with SEN requires that education be restructured at all levels. The landmarks in system restructuring are outlined by the main principles of inclusive education, in particular – equal rights to education and socialization despite unequal abilities. The implementation of the main principles of inclusive education for children with SEN in mainstream settings is based on the following factual and organizational basis:

- a) Individualized instruction plan and individualized education program for students with SEN for their learning and acquiring life competencies;
- b) Social rehabilitation of children with SEN within and outside of educational settings;
- c) Psychological and pedagogical support for children with SEN in the education and socialization process;
- d) Psychological and pedagogical counseling for educational settings;
- e) Individual psychological and educational record card for the child with SEN;
- f) SEN child's portfolio;
- g) Training for teachers in general education with elements of special needs education, including social adaptation and rehabilitation;
- h) Improving the qualifications of teachers in general education settings in inclusive education;
- i) Adapting subject syllabuses for students with SEN in line with educational standards;
- j) Tutoring for students with SEN within the instruction process;
- k) Training tutors in higher education institutions;
- l) Adapting the educational environment – access to classrooms and other rooms in the school (removing barriers, providing a student-friendly environment);
- m) Adapting the educational environment – providing assistive tools and technologies (technical resources with convenient and effective access);

- n) Adapting the educational environment – a corrective and growth-oriented environment of instruction and socialization;
- o) Adapting the educational environment – creating rooms (areas) for rest as well as physical and mental recovery;
- p) Uniting the student community, developing the habit of cooperation, interaction, and mutual assistance;
- q) Orienting the educational system in educational settings at shaping and developing tolerant attitudes among the participants of the educational process.

Inclusive education has therefore the following tasks to fulfill:

- create an educational environment where both the general and special educational needs of children with SEN are met;
- provide an individualized educational approach to the student with SEN which takes into account the unique nature of his or her disorder, social experience as well as individual and family resources;
- construct education in a special way – sectioning of special tasks and chapters within the instructional content as well as methods and means to fulfill those educational tasks that are accomplished in a traditional way in the case of normal development;
- integrate the process of acquiring knowledge and school habits and the process of gaining social experience and life competencies;
- provide psychological and pedagogical support for children with SEN in the process of their integration into the educational and social environment, assistance for children and their families, assistance for educators;
- open specialist offices for students with SEN where specialists would provide them with support concerning adaptations to the curriculum and methods for its implementation;
- foster coordination of activities and cooperation between specialists and parents;
- improve educators' professional competence to deal with the instruction and development of children with SEN with conditions of different specificity and severity;
- develop a tolerant attitude among the participants of the educational process toward children with SEN (Borisova, 2009).

Inclusive education philosophy provides for a system of expected results that is varied in terms of levels, and a flexible system of assessment. Depending on the level of his or her performance in the educational process, the student is awarded a document certifying that he or she has completed elementary or high school (Pervovaya, 2001).

To include children with disabilities in the process of mainstream education, the following conditions need to be met:

- Early detection of developmental disorders in children and monitoring of their psychophysical development (screening, extended assessment, assessment of their developmental level and progress in learning);
- Assessment of special needs (medical, educational, social needs); the results of special needs assessments should be collected in a uniform information system at the local and national level, based on which state budget programs on social, medical, and educational support for children with limited abilities should be drawn up;
- Creating a supportive and growth-oriented environment, special technical and compensating tools for individual and collective use as well as hands-on, teaching, and methodological materials;
- Including parents as equal participants at all stages of inclusive education;
- Developing and implementing indicators showing the level of readiness for mainstream schooling in children with special educational needs;
- Drawing up special guidelines for enrollment in groups and classes with children with special educational needs as students;
- Appointing a person to coordinate programs for children with special educational needs in mainstream school administration;
- Establishing consultation and methodology centers on the basis of special education settings to support educators in mainstream schools (*Policy Guidelines...*, 2009; Pervovaya, 2001).

According to Kazakh researcher G.I. Yeliseyeva (2012), discussion about strategies for practical implementation of the inclusive education idea should take into account the ideas proposed by D. Mitchell, a UNESCO consultant and expert (*Aprender a Vivir Juntos...*, 2001). To describe the components that make up the essence of inclusive education, D. Mitchell (2011) uses a special

formula which visually presents the complexity and ambiguity of changes that should take place in general education:

Inclusive education = V+P+5As+S+R+L.

D. Mitchell (2011) thinks that successful inclusion depends on all those components, so they are equally important in the formula. If any of the components is not implemented in practice, there will be no inclusive education. Let us decode what this formula stands for. V stands for “vision.” it is about the principles and willingness to implement inclusive education. P stands for “placement,” i.e. variant forms of inclusion for children with special needs in the mainstream space. D. Mitchell points out that this could be teaching children with special needs both in regular classrooms and in special education classrooms. An individualized approach to students is required in all the variants. 5As stands for: “adapted curriculum,” “adapted assessment” (to get feedback and identify a child’s special educational needs), “adapted teaching,” “acceptance,” and “access.” S stands for “support” for children and educators provided by a team of professionals (psychologists, special educators, social educators, etc.) and parents. R stands for “resources,” which follow the student, i.e. funding provided for the student based on his or her individual educational needs. L stands for “leadership” at all levels: governmental, regional, and local levels as well as at the school level. All participants of the process should be able to explain the ideological basis of inclusive education and also show their commitment to this idea through their actions. School principals along with teachers are responsible for developing an inclusive culture in their schools (Mitchell, 2011).

The formula proposed by D. Mitchell is universal and should be taken into consideration in the process of organizing education for all. Based on the research findings, the authors of this work will attempt to make recommendations for developing a friendly peer environment at school.

1.1.5. SUMMARY

In Kazakhstan, terminological discussion on the most appropriate and correct term for people with developmental disorders resulted in adopting the term *students with limited health abilities* (LHA). In the USA and most Western

European countries, including Poland, the term *students with special educational needs* (SEN) is commonly used.

Till 1991, Kazakh education developed in line with education practiced in the Soviet Union; that is why, its system of special education and the theoretical and methodological basis were consistent with Russian solutions. At present, the system of education for students with SEN in the Republic of Kazakhstan is still based on the Russian classification of developmental disorders by A.R. Maller and by G.N. Kobernik and V.N. Sinev (Kiseleva & Levchenko, 2005). However, education is being intensively restructured, as the approach to children with SEN has changed. Inclusive education has become one of the priorities for the educational policy of the Republic of Kazakhstan, which is reflected in the government document entitled *State Program of Education Development in 2011–2020* (2010). Students with SEN are educated in special education settings (preschools, schools, residential special needs schools, sanatorium- and hospital-based facilities); as part of inclusive education, special classes and groups are organized in mainstream settings, and there are mainstream preschools and schools where there are up to three children with SEN per group/class.

Kazakhstan's educational policy is oriented at building such a support system for students with special educational needs that will enable them to learn in mainstream schools and follow the standard general education curriculum as all other students do. It is possible only when special educational conditions have been provided, starting from the most general ones that are appropriate for all children with SEN to more specific ones that are individually adapted, which determine the effectiveness of students' education and social adaptation taking place in complete harmony with their characteristics, needs, and educational abilities. A number of actions were undertaken in this area: the population of children/students requiring support was identified, legislation was adopted, the knowledge of good educational practice used in other countries was gained, and the forms, principles, and strategies of implementing the philosophy of education for all were examined.

Many creators of inclusive education emphasize that a friendly social environment is an important condition for successful implementation of inclusive education. That is why, it is relevant and important to explore this environment, and in particular – to reveal the social attractiveness of children with special educational needs as perceived by their nondisabled peers.

1.2. SOCIAL ATTRACTION OF STUDENT – A FACTOR PROMOTING INCLUSIVE EDUCATION

1.2.1. NATURE OF ATTRACTION AND ITS STRUCTURE

According to Russian psychology, attraction is a term denoting charm in a person's perception of another person, fondness felt for him or her (*Kratkiy...*, 1985, p. 26). H. English and A. English (1958) define attraction as such a characteristic of an object (subject of perception) that makes a person interact with the object. The American Psychological Association Dictionary of Psychology gives two definitions of attraction: "1. The interest in and liking of one individual by another, or the mutual interest and liking between two or more individuals. Interpersonal attraction may be based on shared experiences or characteristics, physical appearance, internal motivation (e.g., for affiliation), or some combination of these. Also called interpersonal attraction; 2. in environmental psychology, a quality affecting proximity between individuals. For example, male–female and female–female pairs who enjoy each other's company position themselves closer to each other than do pairs who feel no personal liking or affection for each other. Environmental influences, such as noise, heat, and humidity, decrease attraction between pairs of individuals" (*American...*, 2018).

These definitions are virtually enough to show the extraordinary duality and comprehensiveness of the phenomenon of attraction. A. Reber (2001) combined these points of view and proposed that they be the basis for discussion on attraction. He defined attraction as: a) a characteristic of an object (a person or activity) that arouses positive curiosity in others, and b) desire for and gravitation to the object. Both aspects are in a complex, dynamic relationship. The authors of this book share A. Reber's (2001) point of view – the duality of the phenomenon of attraction (qualities of the object itself and the factors determining desire for and gravitation to the object). The planned research will include the characteristics of the object and the factors determining attraction formation (experience of interactions with people with disabilities: home and school).

In many definitions, attraction is considered as a construct referring, first of all, to a person's affective evaluation of another person, as a positive attitude toward one's interaction partner (Nęcki, 1990). It is necessary to distinguish two perspectives in the approach to the phenomenon of attraction among

those definitions: according to one, attraction is understood as a feeling of mutual liking between two people (this is interpersonal attraction); according to the other, it is understood as a person's individual, unilateral attitude regarding another person (social attraction).

V.M. Kunicyna (2002, p. 197) defines interpersonal attraction as a preference for some people over others, mutual gravitation between people, mutual liking. M. N. Nochevnik (1988) proposes, in turn, that interpersonal attraction be understood as people's attitudes to one another that determine their interpersonal interest. Attraction is then treated as a component of interpersonal perception, when one person forms a global picture of the other based on his or her individual characteristics with the use of a kind of "perceptual filter" (Shyhiryev, 1973).

T. Newcomb's concept offers an interesting theme of a measure of attraction – the researcher understands attraction as a person's attitude toward another person that is expressed in terms of sign – from love to hatred – and intensity (after Lerner, 1974; Livson, 1979). It is an interesting approach, as it offers a theoretical possibility for developing an attraction scale. Our research makes such an attempt.

Social attraction – as it was mentioned above – is understood as a process that takes place in a specific person's subjective reality. As part of this approach, the following definitions of attraction are proposed:

1. Becoming visually aware of one's own emotional attitude toward another person which manifests itself in a liking for that person and willingness to interact with him or her (Batarshev, 2004);
2. Emotional charm, fondness felt by one person for another person (Karceva, 1981);
3. Mechanism of social perception as a result of which a long-lasting positive attitude to another person develops (Kunicyna, 2002).

The definitions cited show that most authors understand attraction as a positive evaluation of another person, a positive attitude to another person. What is more, the feeling of affection rather than hatred is emphasized in attraction (Newcomb, 1979).

According to L.Y. Gozman (Gozman & Aleshyna, 1982), attraction is contained in the attitude of "the private" (interpersonal) toward "the public" (social) along with such reactions as emotion, approach, and perception. The author argues that attraction should be considered as a personal emotion

whose object is another person, as a position or attitude toward another person. (In fact, most research on attraction is devoted to this particular issue). L.Y. Gozman takes the view that attraction can be understood as a complex structure composed of : a) emotion, b) attitude, and c) interpersonal perception. These three components are in a dynamic relationship with each other.

Our research examines nondisabled students' personal attitudes toward their peers with disabilities, including the emotional component, willingness to interact (attitude), and the interpersonal and social perception components. The research includes students who have experience of interacting with people with disabilities (interpersonal perception component) and students who do not have such experience and their evaluation of the attractiveness of their peers with disabilities is largely based on stereotypes existing in society (social perception component).

When attraction is examined as a special type of social attitude toward another person, the emotional component predominates. In that case, another person is generally evaluated affectively. Therefore, three levels of attraction are distinguished by L.Y. Gozman and Y.Y. Aleshyna's (1982): liking, friendship, and love. In our research, having (or not having) a liking for a peer with disability is one of attraction indicators.

An attempt to define social attraction was made based on a literature review. Social attraction will be understood as a personal, emotional attitude to another person that is based on individual experiences and on the impact of stereotypes present in a given society; as an attitude that expresses a special type of orientation to another person and that manifests itself in willingness/consent to interact. Most authors define attraction as a positive evaluation, a positive attitude toward another person, so it has a positive sign (+). However, one person can be evaluated as very attractive, attractive or simply unattractive by another person. That is why it is assumed that attraction can be expressed in terms of its intensity: from high to low.

STRUCTURE OF ATTRACTION

The issue of the structure of attraction and its different variants was studied by numerous researchers, among others: D. Byrne et al. (1970), B.R. Schlenker & J.T. Tedeschi (1972), J.T. Tedeschi & S. Lindskold (1976), L.Y. Goz-

man (1987), T.V. Slinkova (2002), Z. Nęcki (1990), K. Kościński (2010). The universally accepted concept of attraction structure is the one proposed by J.T. Tedeschi. It distinguishes three components of attraction: cognitive, affective, and dispositional (Tedeschi & Lindskold, 1976; Grigoriyeva, 1997).

Numerous authors, including D. Heider (1958), G. Kelley, and W. Stahelsky (after Jones, 1973), argue that the cognitive component refers to previous experiences and to bringing together all conclusions relating to constructing interpersonal interaction. They hold the view that the cognitive component reflects expectations interaction partners hold for each other as well as evaluation of the benefits the partner brings to the relationship. The more one expects from another person, the more attractive the other person is. The cognitive component does not refer to estimated potential benefits only but also to the subjective interpretation of another person's mental processes. The cognitive component consists of knowledge of one's own emotions and feelings, of another person's feelings and attitude toward us, and of this information put together. The affective component refers to emotional reactions to another person in their entirety. It thus reflects one's attitude to the interactant which can be conscious or subconscious. The dispositional component is the readiness to interact, to provide another person with benefits; it is the readiness to "invest" in interpersonal relationships (Slinkova, 2002).

J.T. Tedeschi (Tedeschi & Lindskold, 1976) argues that all the components are closely interrelated. And so the affective component cannot exist without the cognitive component, as all manifestations of emotional reactions to people are impossible without the knowledge of the ways to show them, which are learned during the socialization process, or without analysis of stimuli that elicit those reactions.

Scientific research confirms the relationship between the cognitive component and the affective component (after Touhey, 1975). An experiment was conducted where a researcher showed men pictures from *Playboy* magazine: each time a picture was shown, they were provided with a false heart-rate feedback (i.e., the heart rate they heard was not their actual heart rate). Then the men were asked to sort the pictures according to their attractiveness. It turned out that the pictures they rated as most attractive were the ones shown accompanied by false, increased heart rates. Also I. Sarnoff and P. Zimbardo (1961) point out that emotions have a cognitive basis. In their research on

the impact of similarity on attraction, D. Byrne and his colleagues (1970) discovered that a person with similar attitudes and values evoked more positive emotions and was more attractive.

The affective component influences the dispositional component: they are interrelated and directly interdependent. The dispositional component can be interpreted based on social exchange theory. Social exchange takes place when, investing in their relationship, both parties expect rewards and incentives from one another (Kerckhoff & Davis, 1962). Social exchange is thus a two-sided process. If a person gives somebody a gift selflessly and expects nothing in return, there is no social exchange there. If a gift is given to change another person's attitude/behavior, it is a variant of interpersonal social exchange.

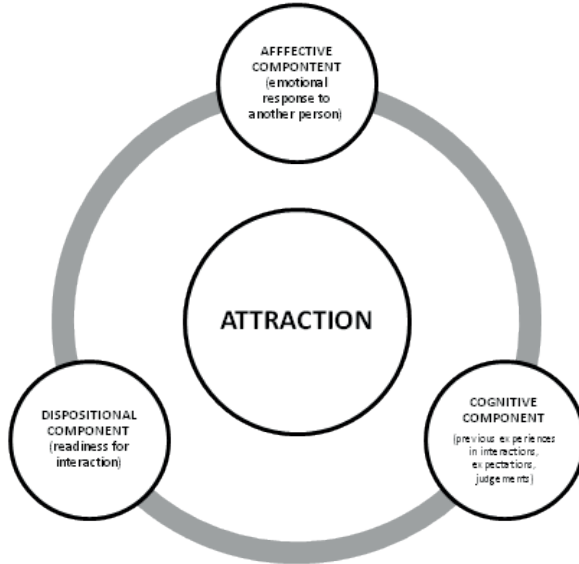
Numerous studies confirm that the willingness to invest in a relationship is greater when attraction is higher. E. Staub and L. Sherk (1970) found that fourth-graders were more willing to share their crayons with classmates they liked than with those they disliked. The more positive feelings a person has for another person, the more willing he or she is to start an interaction and offer benefits to the interaction partner. This, in turn, arouses expectations in the other person, i.e., a specific cognitive pattern of interaction is created. When a person understands the other person's attitudes, emotional responses corresponding to those attitudes are evoked.

All the components of attraction are closely interrelated and exert a specific impact on one another. It is evident that the structure proposed corresponds to the structure of social attitudes commonly adopted in social psychology. This is dictated by logic and methods used in research on attraction. It is worth reminding that most researchers investigate attraction as an attitude toward another person.

J.T. Tedeschi's structure (Tedeschi & Lindskold, 1976) logically explains attraction as understood, for example, by D. Byrne (1971) and I. Altman and D. Taylor (1973), when it is examined as a response to a specific stimulus or the whole of the circumstances of a given situation.

The attraction model proposed by J.T. Tedeschi can be considered as a general outline for the analysis of the phenomenon of attraction. According to that structure, manifestations of attraction can be presented in the following way (see Diagram 1).

Diagram 1
Structure of Attraction by J.T. Tedeschi – External Structure



Source: Compiled by the authors based on: Tedeschi & Lindskold (1976), Grigoriyeva (1997).

Diagram 1 shows the external structure of attraction. It will not be exhaustive, however, for a number of deliberations on attraction – in particular, deliberations on attraction among acquaintances – as it does not reflect the internal dynamics of the phenomenon of attraction. That is why it is reasonable to look into other variants of attraction structure.

One of the attempts to explain the internal structure of interpersonal relationships was made by L.Y. Gozman (1987). In his experiment, both good friends and casual acquaintances (women and men) took part. Based on mathematical processing of data, the researcher revealed several types of attraction with different factorial structures: attraction among female good friends and casual acquaintances, attraction among male good friends and casual acquaintances, and attraction among female and male good friends and casual acquaintances. Further analysis enabled him to distinguish three factors recurring in each attraction type: 1) general factors reflecting the emotional bond with the object and striving for that bond; 2) extensive associations; and 3) social

value factors with evaluations of the object according to various qualities – intellect, education, sociability, etc.

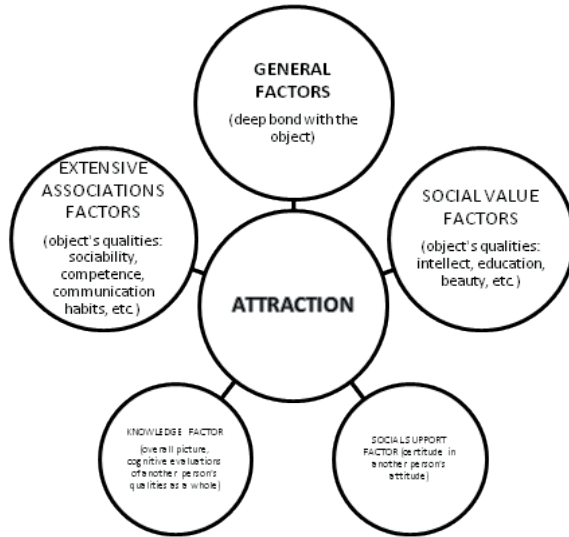
According to L.Y. Gozman (1983, 1987), the weight of General Factors in the structure of attraction is much greater than the weight of all the other factors taken together. The conclusion may therefore be drawn that it is not the cognitive observation of the object's values (Extensive Associations and Social Value factors) that is most important in attraction, but the emotional attitude to the object, which constitutes the main content of General Factors. L.Y. Gozman also found that the loading values of General Factors were significantly higher in the structure of attraction among good friends than among casual acquaintances. That structure also contained other factors that were not present in the structure of attraction among casual acquaintances – these were Knowledge and Social Support Factors. These data suggest that sufficiently complete information about the other person and certainty about his or her attitude play a determining role in the development of a relationship. It is valuable information in the context of creating an inclusive environment for students.

Summing up, L.Y. Gozman (1983) suggests that a number of factors be distinguished in the structure of attraction, among which the value loadings of General Factors reflecting the emotional bond with the object are the highest. The factors of Extensive Associations and Social Value determine attraction filling it with various qualities of the object.

Diagram 2 shows the internal components of attraction by L.Y. Gozman. J.T. Tedeschi's and L.Y. Gozman's elements of attraction complement each other. Both approaches are of great theoretical and practical importance for the investigation of attraction and seem to constitute an appropriate basis for research on the attractiveness of peers with disabilities.

Summing up, the literature review revealed that researchers do not have an explicit opinion as to the issue of attraction. Attraction is most commonly treated as a person's fondness for another person. At the same time, attraction is the process during which a person's fondness for the object develops and the product of this process as well. This term is ambiguous and its ambiguity needs to be taken into account in determining whether research is to examine attraction itself as an effect produced by multiple factors or the role attraction has in the process of relationship formation, the mechanism of how attachment

Diagram 2
Factorial Structure of Attraction by L.Y. Gozman – Internal Structure



Source: Compiled by the authors based on: L.Y. Gozman (1987).

and friendship – or, on the contrary, the feeling of unfriendliness – develop. That is why the phenomenon of attraction is an extremely interesting scientific issue. Attraction is of great social importance in the context of creating a friendly inclusive environment for students with disabilities. It is particularly important to find out about the following:

- 1) the relationship between attraction and willingness to initiate interaction among students: the more positive feelings a student has toward another student, the more willing he or she is to interact and of fer benefits to the interaction partner (Staub & Sherk, 1970) and
- 2) the impact of knowledge of the other person on the development of their relationship (Gozman, 1983).

Attraction is a multidimensional phenomenon; the lack of a sufficiently precise and unambiguous definition of this phenomenon makes its operation-alization difficult. At the same time, there is a trend toward assigning such a meaning to the concept of attraction that corresponds most closely to a specific study. An attempt was made to define attraction for the needs of this study as well.

Attraction will be treated dynamically – on the one hand, as a result, i.e. A shaped, special type of personal emotional attitude toward another person; on the other hand, as a state that can change under the influence of individual, social, and educational experiences.

This research will be based on the concept of the external structure of attraction proposed by J.T. Tedeschi, which distinguishes three components of attraction: cognitive, affective, and dispositional. Also L.Y. Gozman's factorial structure of attraction will be taken into consideration, which corresponds to J.T. Tedeschi's components, expands them, and provides details.

It is assumed in the study that attraction is a complex construct which is composed of : 1) the object's characteristics that produce an attraction/repulsion response (image of the other person) – and the characteristics result from specific social psychological determinants in their entirety; 2) feelings accompanying the perception of the object (affective component); and 3) readiness to interact (dispositional component).

1.2.2. RESEARCH ON HUMAN ATTRACTIVENESS ACCORDING TO SOCIAL AND COGNITIVE THEORIES

Over the last decades, the issue of attraction has been studied by many researchers from different countries, including the USA, Canada, Great Britain, Russia, Poland, and others. Among the forerunners of attraction research are: T. Newcomb (1979), T. Newcomb, R. Turner, and P. Converse (1970), R. Winch (1958), F. Heider (1958), J.W. Thibaut and H.H. Kelley (1959), E. Berscheid and E.H. Walster (1969), D. Byrne, C. Ervin, and J. Lamberth (1970), E. Walster and G. Walster (1963), H. Sigall and E. Aronson (1969), I. Altman and D. Taylor (1973), A. Kerckhoff (1974), M. Lerner (1974), T. Huston and G. Levinger (1978), L. Ya. Gozman and Yu. Ye. Aleshyna (1982), Z. Necki (1990) and others.

Initially, a lot of studies originated from proverbs, sayings, and different statements carrying general life knowledge. At present, attraction is analyzed mainly based on social psychological theoretical constructs, among which the following are especially popular: R. Winch's theory of complementary needs (1958), L. Festinger's social comparison and cognitive dissonance theories (2007), F. Heider's

balance theory (1958), J.W. Thibaut and H.H. Kelley's social exchange theory (1959), and D.E. Byrne's reinforcement model of attraction (1971).

R. Winch's (1958) theory focuses on the importance of searching for balance in choosing a life partner and the issue of opposites that attract. According to the researcher, complementarity is most important, i.e. orientation toward personality traits that are poorly developed in oneself (for example, a weak person will be particularly fond of a strong person) (after Kephart, 1970).

L. Festinger's (2007) social comparison theory examines conditions in which one person chooses another person he or she will have a close relationship with: alike or not alike one. The importance of similarity as a determinant of attraction shows the well-known conservatism of informal interactions – most people choose people who belong to the same sociodemographic group, follow a similar path in life, and share the same views to be their interaction partners. Interactions with such a partner reinforce the shaped cognitive consonance and hardly ever cause dissonance.

Balance theory investigates conditions in which interpersonal relationships are symmetrical and suit all interaction participants, i.e. are balanced (Heider, 1958). Social exchange theory examines the formation of interpersonal relationships and tries to emphasize people's cooperation which occurs as a result of benefit exchange (Kerckhoff, 1974).

At the beginning of the sixties of the 20th century, a few new concepts explaining attraction were proposed. Among them were E. Berscheid and E.H. Walster's (1969), and D. Byrne's (1961, 1997) theories, according to which people like more those who reward them.

An attraction research explosion took place in the 1960s and 1970s, when a lot of experiments were conducted on factors determining attraction, qualities that distinguish attraction from other similar phenomena, the impact of rewards on the occurrence of attraction, and signs of attraction.

The most general definition of attraction underlying numerous studies is the one provided by T. Newcomb, in which attraction is understood as one person's attitude toward another expressed in terms of sign and intensity (after Lerner, 1974, Livson, 1979). In this context, the concept of attraction covers a full spectrum of feelings a person can have for another: from love to hate. D. Marlowe and K.J. Gergen (1969) suggested that attraction be understood only as a positive orientation toward a person. However, even in that case,

attraction can be attributed to various sentiments: from respect for friends to love between spouses and between children and their parents.

The issue of differentiation between various sentiments was presented in numerous studies; in particular, researchers aimed to distinguish attraction from romantic love (Rubin, 1974) and from passionate love (Berscheid & Walster, 1974), and to find differences between attraction and respect (Kiesler & Goldberg, 1968).

The findings of attraction research can be analyzed according to various criteria, including: the degree of closeness of the relationship between people, number of measurements of attraction, factors and conditions in which attraction develops, etc. (Huston, 1973). The review of previous studies revealed a sufficiently wide spectrum of interpersonal relationships that can be examined starting from the earliest stage of a relationship to the stage of strong bonds. L.Y. Gozman (1987) points out that less than a third of attraction research is devoted to established pairs; the remaining papers focus on pairs and groups whose members virtually do not affect each other.

Based on the degree of closeness of the relationship between people, G. Levinger (1974) proposed a three-level approach explaining the essence of attraction at different stages of relationship development. Attraction can be examined in terms of three levels of interpersonal relationship development, i.e. unilateral awareness, surface contact, and mutuality.

Customarily, the phenomenon of attraction is investigated starting with research on strangers. The following method is popular in studies on first impression formation: 1) First the participant is informed that the study objective is to investigate how judgments about other people are formed based on information on their attitudes, beliefs, etc. 2) the participant is given a questionnaire to fill out in his or her free time with items on first impressions; 3) The participant returns with the questionnaire filled out, is given questionnaires filled out by other people, and is to express his or her opinion about them. The person whose questionnaire is similar to the one filled out by the participant will be evaluated in a friendlier light. Such a procedure reveals attraction at the first level of interpersonal relationship development, where people have a given opinion about a person but do not know him or her personally.

The second level of relationship development occurs in two ways: as a single meeting or as situational interaction role-playing. At this stage,

impressions and attraction form based on limited information received from each other.

The third level is marked by a high degree of knowledge of each other. At this stage, two processes are important: self-disclosure (sharing exhaustive information about self and receiving information in return) and “investment” (the whole of shared experiences, attuning oneself to the other).

Research has shown that attraction is determined by different factors at each stage of relationship development: at stage 1 – by attitude similarity; at stage 2 – by attitude similarity as well and by possible physical attractiveness and some degree of joint action; and at stage 3 – by a whole set of factors affecting reciprocal attraction between people.

The third level of relationship development (mutual interdependence) – deep self-disclosure and bond between interaction partners – presumes there are deeper feelings there than mere liking that reflects the phenomenon of attraction. A totally distinct feeling in terms of quality occurs in such cases; that is why – according to G. Levinger (1974) – it is not really correct to use the term attraction with reference to this level of relationship development. Nevertheless, the attempt to follow through the way the phenomenon of attraction accompanies emotional relationship development is very productive and, consequently, developed in Russian scientists’ works.

In Russian psychology, the phenomenon of attraction is looked into in the context of research on emotions in relationships between men and women, so attraction is analyzed as the emotional content of the relationship development process. It is, therefore, reasonable to say that Russian psychologists treat attraction as a component of how people perceive other people they know. Such an approach is adopted in L.Y. Gozman and Y.Y. Aleshyna’s (1982) research on liking, friendship, and love. According to these researchers, attraction is the leading component at the stage of relationship formation and is present at subsequent stages of relationship development. Attraction is thus studied with reference to people that have met and their relationship evolves.

Approaches investigating attraction at different stages of relationship development emphasize qualitative changes in relations that occur with time, which cannot leave the attraction level unaffected. Russian psychologists specify that attraction at later stages of relationship development is not the leading component any more and can be looked into only as an element of

interpersonal perception (Gozman, 1987). In the case of longitudinal studies, D. Hick and T. Platt point to terminological problems, because as a relationship develops, it is difficult to distinguish where it is still attraction and where it is something more than that (after Berscheid & Peplau, 1983).

A. Kerckhoff's (1974) and T. Lickona's (1974) theories investigate attraction as an evolving phenomenon. The main assumption of T. Lickona's theory about the nature of human relationships is that reciprocity and mutual complementarity are at the root of human attachment. This idea originated with R. Winch (1958). Two people's interaction is always interaction according to certain principles that make it possible to satisfy one's needs and relations. According to cognitive-developmental theory, interpersonal relationships are reinforcing from the very beginning and thus are a powerful motivator and reward. The primal desire for joint action, for association, and the need for reciprocity are at the heart of attraction (Winch, 1958; Lickona, 1974).

Explaining interpersonal differences in attraction, researchers point out that every person goes through many stages of the development of personal structures throughout his or her life, such as, for example: morality, responsibility, ego organization, etc. According to T. Lickona, interpersonal differences in attraction that show in attitudes or behaviors are differences in individual structures. Interpersonal interaction based on partners' attraction can be seen at all stages of a person's life.

Child-parent relationships result from the need to complement each other, the need for joint action that enables each child and parent to perform their roles. Cognitive development levels determine differences in the signs of attraction on the part of the child and the adult. The child's attitude to the parents is more direct, open, and overwhelming; the parents' attitude to the child – more mature and responsible. Same-age peers can also differ in how they show attraction depending on the extent to which the developmental levels of their cognitive structures are adapted (or maladapted) to each other.

Cognitive-developmental theory assumes a prospective approach to attraction, but it does not provide a specific definition of attraction, as a result of which attraction frequently gets confused with other feelings such as love, attachment or respect. What unarguably is researchers' achievement is the attempt to shift focus from external to within-person factors that have an impact on the effectiveness of interpersonal interaction.

A. Kerckhoff (1974) examines signs of attraction in relationships between future spouses. Numerous studies were conducted under his leadership; they were intended to find factors that create favorable conditions for future spouses to meet, factors that mediate in the development of their interpersonal relationships. A. Kerckhoff assumed that attraction cannot be understood without taking into account the other person's attributes and their role in their mutual relations. For example, male aggressiveness may be seen as masculinity by some women and as boorishness or brusqueness by other women. Female aggressiveness may be repulsive to some men, and attractive to other men. These personality traits have different meanings in different social contexts.

Numerous studies were carried out to explain the influence of the social environment on mate selection. Among others, it was determined that there was a direct relationship between the frequency of marriages and the similarity of people's social environment. Also, research on attraction allowed determination of a close relationship between attraction and social status (Schwartz, 1967) and intellect (Byrne, 1971).

As interesting are longitudinal studies on attraction among couples that met through personal ads. The participants' level of attraction was measured after first meetings and then a few months later (Huston, 1973; Berscheid & Peplau, 1983). The findings are consistent with the aforementioned A. Kerckhoff's approach and D. Heider's, J.W. Thibaut's, and H.H. Kelley's theories (after Gozman & Aleshyna, 1982).

Therefore, analysis of attraction should take into consideration both two people's personality traits as well as the social context where interactions occur. The main disadvantage of such an approach is its narrow use, as attraction is examined most frequently in the context of a spouse search. This limits the scope of this phenomenon, as other people – for example, peers – are not or hardly ever included in deliberations on attraction.

New data on attraction among people other than prospective spouses are derived from longitudinal studies conducted by T. Newcomb et al. (1970), S. Duck and G. Craig (1978). T. Newcomb (1970) conducted an experiment to determine the level of attraction among participants as they engaged in joint activities and spent a lot of time together. The findings showed that attraction tended to increase only when the participants had similar attitudes and principles, i.e. when their doing activities together was based on cooperation;

in other cases, unfriendliness increased. S. Jones's (1973) and R. Driscall, K. Davis, and M. Lipitz's (1972) studies confirm that.

T. Newcomb's (Newcomb et al., 1970; Newcomb, 1979) pioneering experiments revealed a number of factors promoting the development of harmonious relationships. The scientist's long-term longitudinal research enabled him to distinguish determinants of attraction. These are: knowledge and experience of relationships, proximity, joint action, similarity (of attitudes, beliefs, etc.), complementarity, reciprocity, and minmax principle (minimize losses or maximize minimum benefits). T. Newcomb's findings were confirmed by other researchers (Forsyth, 2009).

The issue of attraction determinants was studied by D. Byrne (1971), A. Lott & B. Lott (1965, 1974), W. Griffitt (1974), and others. Most frequently, they used a standard procedure: they chose one or a few variables (e.g., similar values, attitudes, physical attractiveness, etc.) and revealed their impact on attraction occurrence. Those studies can be assigned to social interaction research, as they determined how changes in the situational context, in the nature of interaction, and in other variables influenced the feeling of attraction between relationship partners. Typically, physical attractiveness, similarity in values, proximity, and positive feedback were adopted as independent variables.

It was revealed that physical attractiveness is one of the most significant factors of attraction development. Studies carried out by numerous researchers, including S. Moss (1969) and K. Dion and colleagues (1972), showed the importance of physical attractiveness in attraction development and its influence observed many years later. According to 60 undergraduates, physically attractive people have more socially desirable personality traits and will have better lives than those who are physically unattractive (Dion et al., 1972).

Numerous studies on attraction determinants focus on similarity between two people's values and attitudes and how they affect attraction occurrence (Berscheid & Peplau, 1983). Particularly interesting in this context are the experiments performed under the leadership of D. Byrne (1971) with the use of the "bogus stranger" method, which broaden the knowledge of factors promoting attraction. D. Byrne and his team came to the conclusion that there was a directly proportional relationship between the degree of attitude similarity and the level of attraction. They even made an attempt to present the factors in numerical terms in

a formula where attraction was a function of proportion of attitude similarity. This relationship was called the Byrne-Nelson Law of Attraction:

$$Y = m \frac{[\Sigma S]}{[\Sigma S + D] + k},$$

where Y is attraction, ΣS – the sum of similar attitudes/opinions, D – dissimilar attitudes/opinions, m and k – empirical constants.

With a specific number of attitudes/opinions (there were typically 12 of them), neither their importance to the participants nor other characteristics played any role – the only determinant of attraction was the number of similar or dissimilar opinions (Byrne, 1971). Subsequent studies confirmed the influence of attitude similarity on attraction (Stroebe, 1976; Tesser, 1971).

In order to systematize and explain the vast store of empirical facts and regularities they had gathered, D. Byrne (1971) and his associates proposed a behavioral approach where attraction would be examined as a response to a specific stimulus: reinforcement or reward. They established that if feedback is positive, it results in positive attraction, if it is negative – negative attraction develops. Attraction occurs, thus, as an effect of positive or negative reinforcement. Therefore, attitude and value similarity can play the role of reinforcement (E. Aronson's experiments) (Sigall & Aronson, 1969).

A slightly different interpretation of the behavioral approach was developed by A. Lott and B. Lott (1965), who studied the role of rewards in attraction development. According to the researchers, each element of the social environment that has pleasant or unpleasant associations can have a positive or negative significance. The more rewards and benefits one person can offer to the other, the more attractive he or she is. This approach formulates an important postulate, i.e., that attraction occurs only in the presence of another person who is expected to provide a reward. Another person's presence itself is seen as a reward and considered as a benefit of association. Attraction within the behavioral approach is viewed as a response to a positive stimulus – reward, which can be represented by similar attitudes and opinions.

In real, short interactions, reinforcement provided by one person typically manifests itself in a verbal or nonverbal expression of attitude toward the other. Then, the relationship between attraction and reinforcement can be explained in

two ways: either we are beginning to feel attractive to another person because he or she shows a positive attitude toward us or, feeling attractive, we decode and interpret his or her actions in such a way so as to come to the conclusion that he or she has a positive attitude toward us. Experimental studies conducted since the 1950s have shown that both relationships occur at the same time: support/reinforcement breeds attraction, but attraction, too, makes one person overestimate the level of support received from the other. Once support has been received, a specific generalization occurs, the positive attitude to support (service, object, praise, etc.) is projected onto its source (Homans, 1950). The impact of feedback on the level of attraction was also revealed in P. Skolnick's (1971) research. Participants took part in an experiment where they engaged in short interactions. When those who had shown liking for each other during the interaction later received unfavorable ratings (as the experimenter manipulated the ratings), they completely changed their opinions.

As research shows, D. Byrne's (1971) reinforcement model has great explanatory power. According to this model, each moment of reality perceived as pleasant is a reward and, consequently, a positive affective attitude toward this moment develops in the person. In this case, reward has the role of positive feedback.

Also, it was established that those we ask for help personally are more attractive (Huston & Levinger, 1978). Increase in attraction – in a given case – is determined by a person's aiming to maintain cognitive balance as a result of giving up a deserved reward. The explanation is to be found in cognitive balance theory, when a subject strives for such an interpretation of an event that will not disturb the state of his or her inner satisfaction.

Researchers also considered ecological variables as factors of attraction. They included, for example, distance between participants and frequency of meetings among them. There are lots of data that prove that the smaller distance between the subject and the object, the more chance of attraction between them. This relationship can be explained by the fact that spacial proximity to another person makes it easier to gain information about him or her, or to develop a sufficiently full picture of him or her, and makes attraction more probable. G. Homans (1950) noted that if the frequency of interactions between people increased, their mutual liking increased as well, and vice versa. R.B. Zajonc (1968) reached a similar conclusion when doing research where pictures of people were shown with the frequency of 1 to 25 exposures.

The researcher found that the more of ten a person saw a given face, the more attractive it seemed to him or her.

INDICATORS OF ATTRACTION

Attraction research deals with indicators of attraction, i.e. observable responses that can be received by the sense organs and that can be considered as signs of a positive attitude to a person. Indicators of social liking and disliking include, among others: eye contact, distance, speaking rate, and intonation. Each of these indicators may trigger associations with a past experience and a corresponding emotional response (Graziano et al., 2007). Of course, particularly important is the content of the verbal message.

In I. Altman's ecological approach, the starting point is social penetration theory, or the idea that people open up and penetrate more deeply into their subjective realities as their relationship develops (Altman & Taylor, 1973). Attraction is viewed here as a phenomenon that accompanies a deep level of self-disclosure and interpenetration of partners. The degree of penetration emerges in the form of verbal and nonverbal responses and fits together into a number of specific patterns of behavior that express attraction.

I. Altman and D. Taylor (1973) tried to find indicators of attraction at the level of nonverbal behavior. They include posture, use of space, eye contact, gestures, and others. The researchers' major achievement is the empirically proven thesis that attraction triggers a number of specific standard responses, patterns of behavior, which include, for example, a long look at the person we find attractive and orienting the body toward him or her. V.A. Labunskaya's (1981) research on expressive movements also indicates that specific movement behaviors may be considered as indicators of interpersonal attraction. According to L.Y. Gozman (1987), expressive movements are emotional components of interpersonal reception and can create internal content of attraction.

The issue of behavioral indicators of attraction was also studied by J. Tedeschi and M. Kaplan, who found that the level of attraction is directly expressed in a person's readiness to cooperate, to offer support to the person he or she grows attracted to (after Huston, 1973). The planned research will take into account declared behaviors toward peers with disabilities and readiness to invest in interactions.

1.2.3. SUMMARY

Social psychological theories (R. Winch's theory of complementary needs, L. Festinger's cognitive dissonance theory, F. Heider's balance theory, J.W. Thibaut and H.H. Kelley's social exchange theory, D. Byrne's reinforcement model, and others) constitute a conceptual framework for numerous studies aiming to explain the phenomenon of attraction development, qualities that distinguish attraction from other states occurring in interpersonal relationships at its various stages, factors underlying attraction, or indicators of attraction. Researchers found, among others, that:

- attraction results from a positive or negative reinforcement – feedback: people have more positive feelings toward those who reward them – praise them, encourage them, etc. (Byrne, 1962); attitude and value similarity can act as a reinforcement (Sigall & Aronson, 1969);
- positive reinforcement breeds attraction but also a person's attractiveness makes us overestimate the level of support (service, object, praise, etc.) received from him or her (Homans, 1950);
- as a relationship develops, attraction goes through three stages and is determined by different factors at each stage: at stage 1, by attitude similarity, at stage 2 – by attitude similarity and possible physical attractiveness, and some degree of joint action; and at stage 3 – by a whole set of factors affecting reciprocal attraction between people (Levinger, 1974);
- the number of agreeing or disagreeing opinions is an important determinant of attraction;
- a person with similar attitudes and values triggers more positive emotions and is more attractive (Byrne et al., 1970; Byrne, 1971);
- attraction cannot be understood without taking into consideration the other person's traits and their role in their mutual relations (Kerckhoff, 1974);
- physical attractiveness is an important factor of attraction; it was found that its impact in married couples is long-term (Walster, Aronson, Abrahams, & Rottman, 1966; Moss, 1969; Dion, Berscheid, & Walster, 1972);
- a direct relationship between attraction and social status (Schwartz, 1967) and intellect was found (Byrne, 1971);
- distance between interaction partners and the frequency of meetings (ecological factors) are important determinants of attraction;

- it was found experimentally that the more of ten a person sees a face, the more attractive it looks to him or her (Zajonc, 1968);
- the frequency of interactions between people increases as their mutual liking increases, and vice versa (Homans, 1950);
- the primal desire for joint action, for association, and the need for reciprocity are at the heart of attraction (Winch, 1958; Lickona, 1974);
- attraction manifests itself in a person's readiness to cooperate, to offer support to the other person he or she grows attracted to (Huston, 1973);
- those we ask for help personally are more attractive (Huston & Levinger, 1978);
- nonverbal indicators of attraction include: posture, use of space, eye contact, gestures, and certain affective motor behaviors (Altman & Taylor, 1973; Labunskaya, 1981);
- the more attractive a person finds the other, the readier he or she is to invest in the relationship (Staub & Sherk, 1970);
- sufficiently complete information about the other person and certainty about his or her attitude play an important role in the development of a relationship (Gozman, 1983).

The planned research will take into account the findings concerning determinants and indicators of attraction.

1.3. PUBLIC PERCEPTION OF PEOPLE WITH DISABILITIES

1.3.1. ATTITUDES TOWARD PEOPLE WITH DISABILITIES

The attitude to people who are weaker and need support is a measure of our humanity, an indicator of society's tolerance, culture, and development. The approach to people with disabilities is influenced by social norms, traditions, beliefs, global trends and ideas, and finally – by economic conditions, which largely determine each country's policy.

Public attention – regardless of the cultural background – usually focuses on differences in people's outward appearance or their behavior. Those differences are the source of various emotions and trigger all sorts of reactions.

Students with special educational needs – whose physical and mental dissimilarity provokes different reactions – are a special social group.

Russian researchers note that in educational reality, a negative or indifferent attitude to people with disabilities is most noticeable – from both adults and children. Y.V. Reznikova states that the educational system does not have spiritual and moral readiness for the new form of education (Reznikova, 2007, p. 35). The review of the Kazakh literature shows that attitudes to people with disabilities have not been investigated enough.

According to Polish sources, attitudes to people with disabilities can be positive, negative, neutral, and hesitant (Szczepanik, 2007). Some researchers argue, however, that an attitude is either positive or negative but never neutral, as indifference or irresoluteness is rather an expression of a negatively oriented attitude (Nowak, 1973). Attitudes toward people with disabilities in Polish society are on a scale ranging from acceptance to rejection. The spectrum of attitudes toward people with disabilities is very wide: from a negative attitude, rejection, pity, excessive curiosity, compassion, and overprotectiveness to wise thoughtfulness and acceptance (Osik-Chudowolska, 2010).

Researchers think that attitudes to people with disabilities depend, among others, on the type and severity of disability or illness (especially its external manifestations – physical characteristics and behavior), experience of interaction with people with disabilities, their age and financial status, the qualities of the social environment and stereotypes that prevail in it (Ossowski, 1999; Orłowska, 2001; Nelson, 2003; Durka, 2009; Chodkowska, 2010). Many studies show that people have the least favorable attitudes to people with intellectual disabilities, with multiple disabilities (e.g., with intellectual and motor disabilities) and with facial deformities that are very visible at first contact, and with body, upper and lower limb deformities (Sękowski, 2001; Jachimczak, 2007; Palak, 2012). Less negative attitudes are shown toward people with motor disabilities (Rudek, 2005), hearing and visual impairments, and chronic diseases (Palak, 2012).

Data collected for nearly 40 years by Polish researcher A. Ostrowska (Ostrowska, 1994; Ostrowska, Sikorska, & Gąciarz, 2001; Ostrowska, 2015a; Ostrowska, 2015b) indicate a gradual increase in interactions between adult Poles and people with disabilities: from 24% in the 1970s to 40% at the end of the 1990s, and social acceptance to 70% in the 21st century. And although there

has been a significant increase in the percentage of Poles declaring contact with people with disabilities, as Krause (2005), Szczepanik (2007), Gajdzica (2013), and point out, they still do not know how to behave toward people with disabilities in daily life, at school or work. They are afraid of being suspected of inquisitiveness or callousness.

Adults and children most frequently view disability as equivalent with motor disabilities and sensory impairments (Soroka-Fedorczuk, 2007; Olszewski, Parys, & Trojanowska, 2012). It turns out, therefore, that it is outward appearance that plays a crucial role in how the image of people with disabilities is shaped. People with physical disabilities are described as people with disabilities most frequently even though disability is invisible in appearance in about 75% of people. According to M. Komorska (2000), it is related to commonly accepted norms, which put physical abilities and health before other values.

The media image of people with disabilities as viewed by students majoring in education studies was analyzed by I. Banach (2014). The author found two prevailing descriptions: in one, people with disabilities fight valiantly against adversities and their conduct is exemplary; in the other, they are helpless and dependent on nondisabled people's assistance. The latter description predominated among respondents. According to I. Banach (2014), the media frequently perpetuate stereotypes about people with disabilities, depicting them in a black-and-white way: either as heroes that should be admired or as helpless, pathetic individuals who need others' assistance. And after all, people with disabilities are also resourceful, cheerful, open to social interactions, active, have successful professional lives and happy family lives. To break stereotypes, social, educational, and professional integration is necessary as well as promotion of interactions between nondisabled people and people with disabilities (Chodkowska & Szabała, 2012).

Actions promoting the integration of people with disabilities into society that have been taken in many countries in the area of regulations, social, educational, and health policies as well as promotion of the idea of integration by nongovernmental organizations and the mass media have brought about the change of social attitudes toward people with disabilities. The turn of the 20th and 21st centuries saw a considerable increase in acceptance of people with disabilities. A lot of people think that people with disabilities should not

be isolated in the social and professional environment. A. Stankowski's longitudinal studies show that the level of acceptance and tolerance toward people with disabilities is rising, there are more interactions with people with disabilities, and approval of education shared by nondisabled children and children with disabilities is increasing (Stankowski, 1997).

1.3.2. CHILD WITH DISABILITIES IN AN INCLUSIVE SETTING AS PERCEIVED BY CHILDREN WITHOUT DISABILITIES AND THEIR PARENTS

In the Kazakh literature (in the Kazakh and Russian languages – two of ficial languages in Kazakhstan), knowledge of how children with disabilities are perceived as students and friends comes mainly from various studies conducted in the context of the educational transformation in Russia. A review of available resources shows that Kazakh and Russian scientists focus, first of all, on factors determining inclusive education. J. A. Ilina (2008) states that preschool settings are marked by insufficiently humane attitudes among children and lack of quality orientation to relationships with the special child, and that a lot of preschoolers with typical development show a low level of moral conceptions and an underdeveloped emotional identification response. This Russian author argues that preschoolers' integration – of children with moderate intellectual disabilities in particular – is largely dependent on the competence of the educator in the integrated group in terms of forming positive relationships oriented at children's personality traits.

In her doctoral dissertation, *Educational support for children with limited health abilities in lower grades of general education school in their interactions with peers*, V.I. Trofimova (2008) reveals that nondisabled lower-grade students lack motivation for starting interaction with students with disabilities, know little about each other, and their attitudes are conditioned by adults' negative attitudes and negative stereotypes. According to the author, educational conditions for developing interactions between children with disabilities and children with typical development in a general education setting include, among others: developing junior students' motivation for interacting, knowledge of each other, knowledge of norms and principles regulating communication, and developing habits of interacting with people around in an appropriate way. Improving educators' competencies and parents' knowledge of children with disabilities is

a necessary condition for fostering interaction between nondisabled students and those with disabilities (Trofimova, 2008). The conditions for effective integration also include: creating a positive psychological atmosphere for peer interactions, humanization of the environment, and increasing tolerance for children's atypicalities (Ilina, 2008; Zubaryeva, 2009).

Carrying out her studies on social interaction among children in inclusive preschool groups, O.P. Gavrilushkina (2011) came to the conclusion that the educational process needs to contain content relating to the development of communication skills, and above all, the ability to cooperate within a group. Following this line of reasoning, I.V. Vachkov (2011) developed a three-degree model of creating conditions for effective interactions between lower-grade students and children with disabilities and for developing a tolerant attitude toward their peers with disabilities in children with typical development based on forming social motivation during main activities (e.g., during play).

O.P. Gavrilushkina (2011) and I.V. Vachkov (2011) point out specific characteristics of inclusive education relating to the process of interaction and relations within the group in which a child with disabilities has been included. The interpretation of these data leads to the conjecture that forming mutual relationships in inclusive education is not possible without consistent work in terms of developing children's knowledge of disability, creating a positive atmosphere in mutual relations, and developing communication and interaction skills.

Learning together with children with disorders has a beneficial impact not only on "special" children but also on their peers with typical development. According to N.N. Malofyeyev (2000), it is equally important that in integrated settings, children with typical development become gradually aware that there are children who are different from them and that the world is composed of healthy people and sick people, those who are very fit and those who are not and need special support and assistance. T.G. Zubaryeva's (2009) research confirms that children with typical development become tolerant, more active, and independent in inclusive education settings.

Also, in the process of forming positive relationships in inclusive education, it is necessary to explain how students perceive their peers with disabilities (outward appearance, way of communicating, atypical behaviors). A.A. Bodalyev (after Solovyeva, 2011) suggests that when first impressions about another person are being formed, a social perception mechanism is at work which is of a unique

nature in children at an early school age. It is an orientation toward outward characteristics, a physical image, which is a framework on which junior students build another person's picture. In her study, Russian researcher T.A. Solovyeva (2011) cites the following observations: infantile behavior of children with hearing impairments attracts their classmates' attention, who conclude that they are "weird," "different than us." It follows that outward defects can be a psychological barrier for junior students that interferes with their interacting and socializing with their peers with special needs. Mutual relations among junior students are built based on experiences from prior interactions, on emotions and feelings that accompany shared activities. Frequently, a child with special needs may become isolated. It is possible that a lot of children with typical development will not be able to overcome the psychological barrier connected with the unattractive appearance of a classmate with SEN and will avoid interactions, play or friendship (Kolokolceva, 2010).

Numerous studies indicate that acceptance of inclusive education depends on the student's disability. Students with intellectual disabilities, multiple disabilities, and mental disorders have the least chances of educational and professional integration, and attitudes toward them change very slowly (*Armenia...*, 2014; Palak, 2012; Pilecki & Kazanowski, 2001; Szabała, 2010; Zaorska, 1999, 2000; Żuraw, 1998).

At the same time, many reports from all over the world show a positive impact of inclusive education on attitudes toward students with disabilities (Al-Khamisy, 2013; Diamond & Carpenter, 2000; Georgiadi et al., 2012; Kyong-Ah Kwon et al., 2017). For instance, the findings of a study on 1,881 British students aged 7-16 conducted in 2016 confirm that more frequent interactions of students with people with disabilities result in more positive attitudes toward disability among students (Armstrong, 2016). There is also evidence that the fact itself that the subjects of inclusive education are in a specific social situation does not ensure positive relationships (Sale & Carey, 1995; Kulesza, Huang, & Tsai, 2019). In other words, there is a whole spectrum of factors that can influence the process of developing positive relationships.

Inclusive education is being introduced at a different pace in different countries; that is why different approaches are adopted not only to this form of education but also to children with special needs as students. In Poland, research on the situation of children with disabilities in mainstream settings was started by

A. Maciarz (1985), among others. The author pointed out the unfavorable social situation of those children in general education school. She showed that children rejected 60% of their peers with disabilities and isolated 30% of them.

In the 1990s, when the idea of integrated/inclusive education was formally accepted in Poland (it became legally possible to establish integrated settings), research on factors determining inclusive education, including the schooling environment and relationships between nondisabled students and students with disabilities, was intensified. I. Chrzanowska (2015, see pp. 98–111) conducted a wide-ranging review of quite extensive Polish research on attitudes toward children/students with disabilities, undertaken since the 1990s. Just a few of those studies that are important for our research will be cited here.

At the beginning of the 1990s, Polish researcher Z. Palak (1993) revealed that 20% of students with visual impairments were accepted by their nondisabled peers in general education schools, while 66% were rejected and isolated. The author emphasizes the negative impact of rejection by a peer group on self-esteem in children with disabilities. She demonstrates that their self-esteem is lower than in children with disabilities in special schools. According to other reports published at the same time, having students with hearing impairments in a special class in a general education school did not encourage their integration with hearing students (Baran & Klaczak, 1992). Their classes were organized in such a way that did not allow them to spend time together and interact. B. Oszustowicz's (1994) studies showed a similar situation of students with intellectual disabilities in special classes in general education schools. Children with disabilities felt they were different in general education schools. The author also found that: only 7% of nondisabled students developed friendly relations with their peers with disabilities; knowledge of intellectual disability among students was insufficient and of ten untrue; the majority of nondisabled students (75%) thought that students with intellectual disabilities should be educated in special schools; about half of them (45%) explained their position by saying that students with disabilities would avoid feeling different there.

Interesting findings on how nondisabled children and adults perceived people with disabilities were published over 10 years later by A. Soroka-Fedorczuk (2007). The study covered 300 children, including 163 six-year-olds and 137 ten-year-olds in mainstream and integrated preschools and schools, 299 parents, and 75 teachers. The author found that about 30% of the parents, about 26%

of the general education teachers and about 18% of the integrated education teachers were in favor of special schools for students with disabilities (“strongly agree,” “agree,” and “undecided” responses were summed up). In the same study, the majority of children readily expressed their opinions about people with disabilities, among whom they included people with visible motor impairments. More than 63% of the six-year-olds and more than 72% of the ten-year-olds described a person with disability as someone who is in a wheelchair or as someone who uses a walking cane or crutches (more than 25% of the six-year-olds and more than 57% of the ten-year-olds). About 4% of the six-year-olds and 43% of the ten-year-olds listed a blind person. A person with a broken arm or leg is also a person with disability (8% of the six-year-olds and 10% of the ten-year-olds). It follows that some children think it is possible to have a temporary disability.

It was also found that the majority of children (over 68% of the six-year-olds and over 78% of the ten-year-olds) took notice of both physical characteristics: outward appearance, state of health, way of moving around, and mental characteristics: abilities, mood, emotions, personality traits (e.g.: “My grandma is in a wheelchair, I like to visit her, she’s good,” “I have a friend who is in a wheelchair, he’s nice,” “He can’t learn,” “She’s lonely,” “He doesn’t leave his house,” “A person with disability is unhappy because they’re in hospital”). Some children realized that people with disabilities become a target of ridicule (“I saw others making fun of her”) and that they are dependent and a burden to others (“You need to help them all the time”). Some of the children’s responses contained pejorative and colloquial terms, of ten false and stigmatizing ones, e.g.: cripple, brainless, stupid (Soroka-Fedorczuk, 2007, p. 108).

The children in the study were also asked to evaluate people with disabilities. Analysis of the material shows that the children’s ratings were classified as positive (“good”), negative (“bad”) or positive and negative at the same time (“Sometimes they’re pretty and sometimes they’re not. It depends. Some just can’t be liked ... They’re normal people” (Soroka-Fedorczuk, 2007, p. 118–120). Negative ratings were given by about 47% of the six-year-olds and about 22% of the ten-year-olds; positive ratings – by over 7 and 4% of the participants respectively. About 44% of the six-year-olds and about 73% of the ten-year-olds ascribed both positive and negative characteristics to people with disabilities at the same time. The participants rated the physical characteristics of people with disabilities more negatively (six-year-olds – about 32%

and ten-year-olds – about 3%) than their mental characteristics (about 18% and about 1% respectively). In both age groups, there were more responses with positive and negative ratings at the same time for both the physical and mental characteristics of people with disabilities.

In the context of the planned research, the children's answers to the question about how they would behave if they met a person with disability are of the utmost importance. About 60% of the six-year-olds and 77% of the ten-year-olds would start an interaction. A. Soroka-Fedorczuk states that "the children view people with disabilities as friendly, interesting, and non-threatening" (2007, p. 137). The children would gladly say hello, shake hands, help, invite a person with disability to participate in play or become friends with him or her.

The results of an educational experiment performed by B. Oszustowicz in a group of six-year-olds raises hopes, in a long-term perspective, that integrated education will be successful (2004, after Chrzanowska, 2015, pp. 101–102). The experiment aimed to determine the effectiveness of a three-month educational program in which children got to know different disabilities and develop relationships with peers with disabilities. The experimental integrated group included children with intellectual, hearing, and visual disabilities as well as with mobility issues and with cerebral palsy. The study that was carried out before the educational program started showed that:

- only 5% out of 60 participants could correctly name given types of disabilities and 88% did not answer that question at all;
- even though the children had peers with disabilities in preschool, only 30% of them said they saw them there, 13% of the preschoolers were aware of children with hearing impairments, and 5% – of children with visual impairments;
- 90% of the children declared they were willing to help children with disabilities;
- 80% of the children were willing to have a playdate with a blind friend, 75% – with a friend with motor disability, and 60% – with a friend with hearing impairment.

The children were also asked what activities their peers with disabilities could participate in. The results show that:

- over 70% of the participants say children with motor, visual, and hearing impairments can play;

- 45% say that children with motor disabilities can ride a bike;
- 33% think that their peers with hearing impairments can walk;
- 46% believe that children with visual impairments can go to school, 63% believe that children with hearing impairments can go to school, and 53% believe that children with motor impairments can go to school. After the three-month program, another study was conducted with the six-year-olds which found that:
 - 80% of the children correctly named the characteristics of visual, hearing, and motor disabilities;
 - 74% of the six-year-olds used appropriate terms;
 - 90% of the children were aware of the fact that their peers with disabilities would go to school just like they would;
 - the six-year-olds could name activities accessible to their peers with disabilities (Oszustowicz 2004, after Chrzanowska, 2015, pp. 101–102). It turns out that even a few months' program has a great impact in terms of education and integration.

The majority of studies conducted in various countries show a bigger or smaller impact of inclusive programs (Al-Khamisy, 2013; Anke de Boer et al., 2014; Cairns & McClatchey, 2013; Edwards, Patrick, & Topolski, 2003; Georgiadi et al., 2012; Godeau et al., 2010) and interactions with people with disabilities (Gonçalves & Lemos, 2014; Hong, Kwon, & Jeon, 2014; MacMillan et al., 2014; Reiter, Schanin, & Tirosh, 1998) on the development of positive attitudes toward children and adults with disabilities.

Research was also conducted on attitudes toward children/students with disabilities among parents whose nondisabled children attended mainstream settings without children with disabilities and parents of nondisabled preschoolers in inclusive settings. It was revealed that parents accepted their children learning together with children with motor disabilities but were concerned about their learning together with students with behavioral disorders and intellectual disabilities (Gasteiger-Klicpera et al., 2013; Paseka & Schwab, 2019).

Moreover, the findings show that parents of children in inclusive groups have a greater knowledge of disability and more positive attitudes toward people with disabilities as compared to parents of children in mainstream preschools without children with disabilities (Sekulowicz, 2002). However,

all parents – even those whose children do not attend inclusive settings – see considerable benefits from shared education. They list first the development of tolerant and accepting attitudes, sensitivity to the needs of other people, and learning the ways of support (Brągiel & Kaniok, 2016; Boer, 2009; Kazanowski, 2011; Myśliwczyk, 2016; Remziye & Neriman, 2016).

Researchers also describe the negative side of inclusive education that parents point to. Most frequently, they mention a lowered level of education, disruption in the process of instruction, and conflicts among children (Leyser & Kirk, 2007; Doménech & Moliner, 2013; Ostrach, 2011). At the same time, it turns out that almost half of parents have low knowledge of inclusive education despite their children learning in an inclusive setting (Ostrach, 2011). Nevertheless, most studies show that both parents of nondisabled children and parents of children with disabilities attending inclusive settings generally have positive or neutral attitudes toward this form of education (Brągiel & Kaniok, 2016; Boer, 2009; Boer, Pijl, & Minnaert, 2010; Zamkowska, 2019).

1.3.3. SUMMARY

The idea of including people with disabilities in social life, which has been spreading worldwide since the 1970s, encourages gradual changes in the public's attitudes toward people with disabilities. Analysis of the literature in the Kazakh and Russian languages proves that both Kazakh and Russian education are open to the process of educational integration. However, data on perceiving children with disabilities as friends and students are not available yet. Researchers focus mainly on analysis of factors determining the process of inclusion, as this is important for staff training, a barrier-free environment, and work organization.

Longitudinal studies that have been carried out in Poland within the space of several decades show slow changes in public attitudes. Those attitudes range from tolerance and full acceptance through indifference to rejection. The latter two are usually hidden due to political correctness. In the 2000s, the level of acceptance of Polish people with disabilities increased to 60%–70% (Ostrowska, 2015a). Least accepted are people with intellectual disabilities, multiple disabilities, and bodily deformities that are very visible (Żuraw, 1998; Jachimczak, 2007; Bujnowska, 2008).

Even though people with disabilities are very frequently perceived as recipients, pitiful people who need constant help, there is an increasing number of people who say they should – just like nondisabled people – learn, work, and enjoy all the rights to derive satisfaction from life (Chodkowska, 2010; Czykwin, 2007; Durka, 2009).

Researchers in many countries have been conducting studies aiming to identify determinants of inclusive education – in particular, the effectiveness of various forms of inclusion as well as peers' and parents' perceptions of and attitudes toward students with disabilities. The following are the most important findings relating to the picture of people with disabilities and attitudes toward inclusive education:

- educating students with hearing, visual, and intellectual disabilities in special classes within general education schools (separately from nondisabled students) has little impact on increasing the frequency of interactions with nondisabled students (Maciarz, 1985; Baran & Klaczak, 1992; Palak, 1993);
- when students with visual impairments are rejected by their nondisabled peers, their self-esteem decreases, they feel more uncomfortable in a general education school than in a special school (Palak, 1993);
- activities organized specifically for nondisabled children and children with disabilities so that they can participate in them together bring notable benefits in terms of integration, increase students' knowledge of disability, and develop their social skills (Oszustowicz, 2004);
- most early-elementary-school-aged children create a picture of a person with disability with visible motor impairments, e.g.: without a leg or an arm, most frequently in a wheelchair, with crutches or a walking cane (Soroka-Fedoreczuk, 2007);
- physical characteristics result in a negative evaluation of people with disabilities to a larger extent than mental characteristics;
- six-year-olds make negative evaluations of people with disabilities more frequently than ten-year-olds;
- ten-year-old children's perceptions of people with disabilities are richer and more diversified than six-year-old children's perceptions, they see both positive and negative characteristics of people with disabilities more frequently;

- most early-elementary-school-aged students would start an interaction with a person with disability; ten-year-olds are more willing to do so than six-year-olds (Soroka-Fedorczuk, 2007);
- parents of nondisabled children are willing to accept education shared with children with sensory impairments, i.e., hearing and visual impairments, and with children with motor disabilities; they are most concerned about sharing the classroom with students with behavioral disorders and intellectual disabilities (Gasteiger-Klicpera et al., 2013; Paseka & Schwab, 2019);
- parents of nondisabled children attending inclusive settings have a greater knowledge of disability and express more positive attitudes toward people with disabilities than parents of children who do not have any contact with children with disabilities (Al-Khamisy, 2006; Sekułowicz);
- despite some reservations, parents of nondisabled children point out that this form of education brings substantial benefits to children (Anke de Boer et al., 2010; Brągiel & Kaniok, 2016; Kazanowski, 2011; Sekułowicz, 2002);
- shared education encourages the development of positive attitudes toward students with special needs (Anke de Boer et al., 2014; Cairns & McClatchey, 2013; Georgiadi et al., 2012; Zamkowska, 2019).

Therefore, based on numerous studies by researchers from various countries, it is reasonable to state that attitude toward disability is largely dependent on the social environment. When people with disabilities are present in a community, interactions with them become a part of everyday life, the ability to coexist develops, and attitudes toward them are usually positive.

Children form an image of and attitude toward people with disabilities based on their own experiences as well as on behavioral patterns and knowledge imparted to them by others (parents, teachers, peers, mass media); that is why, it is important to undertake various actions in support of creating an inclusive social environment.

CHAPTER 2

RESEARCH DESIGN

2.1. RESEARCH SUBJECT AND OBJECTIVES

The idea of education for all – inclusive education – has recently become very popular in Kazakhstan. It is also reflected in the country's education policy and plans to reorganize schooling till 2020. Consequently, intensive research is being conducted to identify conditions that promote inclusion in mainstream education for students with special needs, including students with disabilities. It should be pointed out that studies on nondisabled students and their parents in terms of their perception of the social attractiveness of children with disabilities as students and friends have not been undertaken in Kazakhstan so far. And a friendly, tolerant, and supportive socio-educational space is one of the fundamental conditions that encourage inclusive education. This issue, which is very important and relevant in the context of reorganizing education for students with SEN in Kazakhstan, has been thus recognized. That is why the social attractiveness of students with disabilities was chosen as the subject of this study.

The study was based on the concept of the structure of attraction proposed by J.T. Tedeschi (Tedeschi & Lindskold, 1976). He distinguished three components: cognitive, affective, and dispositional. Also L.Y. Gozman's (1983) factorial structure of attraction was taken into consideration.

Attraction is understood as a complex construct composed of :

1. Cognitive component (CC) – the object's characteristics: in this study, people with disabilities;
2. Affective component (AC) – emotional response to people with disabilities;

3. Dispositional component (DC) – readiness to interact with people with disabilities.

This study is a diagnostic research study conducted with the use of qualitative and quantitative methods (Pilch & Bauman 2001), and its main aim is to explore the social attractiveness of children/students with disabilities as seen by nondisabled first-graders in noninclusive and inclusive schools and by their parents.

Following the main aim, a number of objectives were selected and divided into five groups (the components of attraction are given in the brackets: CC, AC, and DC).

1. To explore the social attractiveness of peers with disabilities as seen by nondisabled first-graders attending a noninclusive school, i.e., school with no students with disabilities, and an inclusive school, i.e., school where children with disabilities learn together with nondisabled children in one classroom:
 - 1.1. To investigate the knowledge of disabilities among children, including their understanding of the essence of disability, and to determine the sources of their knowledge of disabilities (CC);
 - 1.2 To explore the content of conversations parents have with their children about disabilities (CC) (children's accounts);
 - 1.3. To reveal attitudes to peers with disabilities declared by nondisabled students regarding various probable interactions/social contexts (conversation, play, learning, invitation to a birthday party, and friendship) (DC and AC);
 - 1.4. To determine the level of the social attractiveness of peers with disabilities in the opinion of nondisabled students (CC, AC, and DC).
2. To explore the social attractiveness of children with disabilities as perceived by parents of nondisabled children:
 - 2.1. To explore the knowledge of disabilities among parents (CC), including their understanding of the essence of disability, and to determine the sources of their knowledge;
 - 2.2. To investigate whether parents talk to their children about disabilities at home and what their content is (CC);
 - 2.3. To reveal parents' self-declared attitudes toward their daughter/son's interactions with a peer with disability (DC and AC);

- 2.4. To investigate the position of parents of nondisabled children on inclusive education (CC, DC, and AC);
- 2.5. To determine the level of the social attractiveness of children with disabilities in the opinion of parents of nondisabled children (CC, AC, and DC).
3. To explore differences in the evaluation of the social attractiveness of peers with disabilities made by nondisabled students in a noninclusive school and in an inclusive school.
4. To explore differences in the evaluation of the social attractiveness of children with disabilities made by parents of nondisabled students in a noninclusive school and in an inclusive school.
5. To make pedagogical recommendations for teachers for developing a friendly peer environment.

2.2. PROBLEMS AND HYPOTHESES

The answers to the following questions are sought:

What is the social attractiveness of children with disabilities for a) their nondisabled peers in two types of schools: noninclusive and inclusive ones, and b) their parents? A number of specific questions were framed that follow the objectives listed before:

1. What is the social attractiveness of peers with disabilities for first-graders in noninclusive and inclusive elementary education?
 - 1.1. What do children know about disabilities (essence of disability and sources of knowledge)?
 - 1.2. What is the content of conversations about disabilities parents have with their nondisabled children (children's accounts)?
 - 1.3. What attitudes toward peers with disabilities do nondisabled first-graders declare regarding various probable interactions: 1) conversation, 2) play, 3) learning, 4) invitation to a birthday party, and 5) becoming friends?
 - 1.4. What is the level of the social attractiveness of peers with disabilities in the opinion of nondisabled students?

Apart from attitudes toward peers with disabilities declared regarding probable interactions, such as: 1) conversation, 2) play,

3) learning, 4) invitation to a birthday party, and 5) becoming friends, indicators of social attractiveness include: 6) direct evaluation – personal attitude to a child with SEN in terms of “I like him/her – I dislike him/her,” and 7) indirect evaluation – the house a nondisabled child will invite a child with disability to. Children can choose either a colored or black-and-white house.

2. What is the social attractiveness of children with disabilities as perceived by parents of nondisabled children?
 - 2.1. What do parents know about disabilities (essence of disability and sources of knowledge)?
 - 2.2. Do parents talk about disabilities with their children? What is the content of such conversations?
 - 2.3. What attitude do parents declare regarding their daughter/son’s interactions with children with disabilities (talking, playing together, learning together)?
 - 2.4. What is parents’ opinion about children with disabilities as friends and students?
 - 2.5. What is parents’ position on inclusive education, including: 1) type of setting for children with disabilities, and 2) advantages and disadvantages of inclusive education?
 - 2.6. What is the level of the social attractiveness of children with disabilities in the opinion of parents of nondisabled children?

Indicators of the social attractiveness of children with SEN for parents of nondisabled children include the attitude they declare toward: their daughter/son 1) talking, 2) playing, and 3) learning with a child with disability, 4) the type of school children with disabilities should attend according to parents, and also 5) their evaluation of a child with disability as a friend and 6) as a student.

3. Are there differences in the evaluation of the social attractiveness of peers with disabilities made by nondisabled students in a noninclusive school and in an inclusive school?
4. Are there differences in the evaluation of the social attractiveness of children with disabilities made by parents of nondisabled students in a noninclusive school and in an inclusive school?

Two hypotheses were formulated that are tested further on in the research process. The hypotheses are justified by current knowledge which was presented in the first part of the book.

Main hypothesis

Abundant empirical evidence shows that spacial proximity and frequent social interactions have an impact on a person's social attractiveness. Therefore, it may be supposed that an inclusive setting will shape a more positive image of children/students with disabilities than a noninclusive setting.

Specific hypothesis 1.

Children with disabilities are more socially attractive as assessed by nondisabled first-graders in inclusive education than by nondisabled first-graders in noninclusive education.

Specific hypothesis 2.

Parents of nondisabled children in inclusive education assess the social attractiveness of children with disabilities more positively than parents of nondisabled children in noninclusive education.

2.3. METHODS, TECHNIQUES, AND TOOLS

This book is based on the typology of research methods and techniques proposed by Polish methodologist M. Łobocki (2011). The following methods are used: survey, sociometric method, and document analysis. The survey includes the questionnaire and individual interview techniques (Appendix 1 and Appendix 2). A survey questionnaire for parents was designed ("Social Attractiveness of Students with Disabilities Survey Questionnaire for Parents") with 20 questions on disability and different social contexts (closed-ended questions, multiple choice questions, and open-ended questions) (see Appendix 3).

Based on the survey questionnaire questions, a seven-point scale was developed to measure the intensity of the social attractiveness of students with disabilities according to parents of nondisabled children. The following aspects were taken into consideration:

- conversation (0–1 pt.)
- play (0–1 pt.)

- learning (0–1 pt.)
- type of school for students with disabilities (0–1 pt.)
- evaluation of a child with disability as a friend (0–1 pt.)
- evaluation of a child with disability as a student (0–1 pt.).

One point was awarded for each of the following: accepting their daughter/son’s interactions with a child with disability, choosing inclusive school as an educational setting for children with disabilities, and a positive evaluation of children with special educational needs as friends and students. Each parent’s score could range from 0 to 6 points. Three levels of attractiveness intensity were distinguished: high, medium, and low. The following scoring range was adopted for individual levels:

6 pts. – high

5 pts. – high

4 pts. – medium

3 pts. – medium

2 pts. – low

1 pt. – low

0 pts. – low

Another technique used was an interview. An interview was conducted with each student with the use of “Social Attractiveness of Students with Disabilities Survey Questionnaire for Children”. The questionnaire has 18 questions on disability and different social contexts (Appendix 1).

Also the sociometric method was useful in explaining students’ attitudes to peers with disabilities. A test was designed, composed of two houses: a colored one and a black-and-white one (Appendix 2). Children were asked to say which house they would invite a peer with disability to. It was expected that a peer with whom the child wants to spend time will be invited to a colorful house. It was one of the indicators of the attitude towards the peer with disability.

Based on the interview questions and the Two Houses Test, an eight-point scale was developed to measure the intensity of the social attractiveness of students with disabilities according to nondisabled students. One point was awarded for each of the following: accepting interactions and a positive evaluation of a peer with disability. Each child’s score could range from 0 to 7 points. The following aspects were taken into consideration:

- conversation (0–1 pt.),
- play (0–1 pt.),
- learning (0–1 pt.),
- friendship (0–1 pt.),
- invitation to a birthday party (0–1 pt.),
- invitation to a house (0–1 pt.),
- evaluation: I like him/her – I dislike him/her (0–1 pt.).

Just as in the case of the attractiveness of children with disabilities to parents, three intensity levels were distinguished for the attractiveness of peers with disabilities as viewed by nondisabled students: high, medium, and low. The following scoring was adopted for individual levels:

7 pts. – high

6 pts. – high

5 pts. – high

4 pts. – medium

3 pts. – medium

2 pts. – low

1 pt. – low

0 pts. – low.

Another method used in the study was document analysis; in particular, analysis of school documents regarding schools' educational philosophy (bylaws), the size of classes, the number of children with disabilities (registers), and the content of curricula (school documentation). In addition, further information concerning research sites, participants, and work organization was collected through open interviews with schools' principals and class teachers.

2.4. VARIABLES AND INDICATORS

To solve the research problems and test the hypotheses, it was necessary to determine variables and their indicators that would be analyzed. Variables are generally basic characteristics and signs typical of a given fact, phenomenon or process under research. In this study, these are qualitative and quantitative variables that define the social attractiveness of children with disabilities. For example, gender and school type are qualitative (nominal) variables, while

the scale of attractiveness intensity expressed in points (from 0 through 6 and from 0 through 7) is a quantitative variable.

It was also important to determine independent and dependent variables in the study. Independent variables in pedagogy include, among others, various educational and teaching measures taken to bring about specific results in children's and teenagers' intellectual, social, moral, and physical development. A dependent variable is therefore a real or supposed effect of the pedagogical measures taken. In this study, the educational setting (inclusive-noninclusive) is an independent variable. It is reasonable to expect that this setting will impact how students with disabilities are perceived in terms of their social attractiveness by their nondisabled peers and their parents. The social attractiveness of children/students with disabilities – and its intensity in particular – is thus a dependent variable.

To ascertain that a given phenomenon occurs, it is crucial to determine indicators that will allow researchers to reveal, observe, and measure the phenomenon. In this study, mainly empirical indicators are used (see Table 1).

2.5. SAMPLING CRITERIA AND RESEARCH SITE

The study covered Kazakh children and their parents. The sampling criteria for participants were as follows:

- a) Children
 - 1) with no developmental disorders,
 - 2) aged 7–8,
 - 3) in Grade 1 in a noninclusive elementary school (only for nondisabled children) or an inclusive elementary school (children with disabilities and nondisabled children share the same classroom) for six months or longer,
 - 4) from natural or foster families, and
- b) their parents/legal guardians who consented to their participation in the study.

Participation in the study was voluntary; parents/legal guardians gave their consent in writing. The study planned to include 200 people: 100 first-graders (50 students in inclusive education and 50 students in noninclusive education) and 100 parents/legal guardians of these students.

Table 1
Variables, Indicators, and Measurement Method in the Study

Research problems	Variables	Indicators	Type of indicator	Measurement method
1. What is the social attractiveness of peers with disabilities for nondisabled first-graders in noninclusive and inclusive education?	social attractiveness of children with disabilities (complex variable)	type of attitude toward interactions with a peer with disability in various social situations; attractiveness intentionality levels	<p>qualitative indicator: positive attitude (child answers "yes") or negative attitude (child answers "no") in the following situations:</p> <ul style="list-style-type: none"> – conversation, – play, – learning, – friendship, – invitation to a birthday party, – positive – negative direct evaluation: <p>I like him/her – I dislike him/her,</p> <ul style="list-style-type: none"> – positive – negative indirect evaluation: <p>invitation to a colored or black-and-white house;</p> <p>qualitative indicator: justifications categorized;</p> <p>quantitative indicator: number of answers in "yes-no" and "like-dislike" questions, number of answers falling into justifications categorized, attractiveness intensity on a 0–7-point scale (three levels)</p>	<p>survey method: interview;</p> <p>sociometric method: Two Houses Test;</p> <p>qualitative and quantitative analysis methods</p>

Research problems	Variables	Indicators	Type of indicator	Measurement method
<p>1.1 What do children know about disabilities?</p>	<p>knowledge of disability</p>	<p>(essence) characteristics of disability, sources of information on disability</p>	<p>qualitative indicator: characteristics of disability organized into disability types; types of sources organized into categories, e.g.:</p> <ul style="list-style-type: none"> – one’s own experiences, – family, – school, – peers, – TV, Internet, – other sources; <p>quantitative indicator: number of answers falling into disability types and types of sources of information distinguished</p>	<p>survey method: interview; qualitative and quantitative analysis methods</p>
<p>1.2 What is the content of conversations about disabilities parents have with their children (children’s accounts)?</p>	<p>conversations about disabilities parents have with their children</p>	<p>content of conversations about disabilities</p>	<p>qualitative indicator: content of conversations organized into semantic categories;</p> <p>quantitative indicator: number of answers falling into categories distinguished</p>	<p>survey method: interview; qualitative and quantitative analysis methods</p>

Research problems	Variables	Indicators	Type of indicator	Measurement method
1.3 What attitudes toward peers with disabilities do first-graders declare regarding various probable interactions?	attitude toward a peer with disability in probable interactions	type of attitude toward interactions with a peer with disability and justification	qualitative indicator: positive attitude (answer “yes”) – negative attitude (answer “no”) Interactions: <ul style="list-style-type: none"> – conversation, – play, – learning, – friendship, – invitation to a birthday party; qualitative indicator: justification of answers organized into categories; quantitative indicator: number of positive and negative answers; number of answers in categories of justifications distinguished	survey method: interview; qualitative and quantitative analysis methods

Research problems	Variables	Indicators	Type of indicator	Measurement method
<p>1.4 What is the level of the social attractiveness of peers with disabilities in the opinion of non-disabled children?</p>	<p>social attractiveness of children with disabilities</p>	<p>intensity of social attractiveness measured with three levels (accumulation of points for answers regarding interactions:</p> <ul style="list-style-type: none"> - conversation, - play, - learning, - friendship, - invitation to a birthday party, - direct evaluation: I like him/her – I dislike him/her, - indirect evaluation: invitation to a colored or black-and-white house) 	<p>quantitative indicator:</p> <ul style="list-style-type: none"> - 0–7-point intensity scale, - attractiveness levels: low – from 0 to 2 pts., medium – from 3 to 4 pts. high – from 5 to 7 pts. 	<p>survey method: interview; sociometric method: Two Houses Test; quantitative analysis method</p>

Research problems	Variables	Indicators	Type of indicator	Measurement method
2. What is the social attractiveness of children/students with disabilities as perceived by parents of nondisabled children?	social attractiveness of children with disabilities (complex variable)	<p>type of attitude toward their daughter/son's interactions with a child with SEN in various social situations;</p> <p>attractiveness intensity levels</p>	<p>qualitative indicator:</p> <ul style="list-style-type: none"> – positive attitude (answer “yes”) – negative attitude (answer “no”); <p>interactions:</p> <ul style="list-style-type: none"> – conversation, – play, – learning, – school choice (special/inclusive), – evaluation of a child with SEN as a friend, – evaluation of a child with SEN as a student; <p>qualitative indicator:</p> <p>categories of answers to open-ended questions;</p> <p>quantitative indicator:</p> <ul style="list-style-type: none"> – number of positive and negative answers, – number of answers in categories distinguished, – attractiveness intensity on a 0–6-point scale (three levels) 	survey method: questionnaire; qualitative and quantitative analysis methods

Research problems	Variables	Indicators	Type of indicator	Measurement method
<p>2.1 What do parents know about disabilities?</p>	<p>knowledge of disability</p>	<p>(essence) characteristics of disability, sources of information on disability</p>	<p>qualitative indicator: – disabilities categorized, e.g.: – hearing disability, – visual disability, – speech disorders, – motor disability, – intellectual disability, – other disabilities; – sources of knowledge organized into categories, e.g.: – one’s own experiences, – family, – neighbors, – school, – colleagues, – TV, Internet, – other sources; quantitative indicator: – number of answers falling into disability types distinguished, – number of answers in types of sources</p>	<p>survey method: questionnaire; qualitative and quantitative analysis methods</p>

Research problems	Variables	Indicators	Type of indicator	Measurement method
2.2 Do parents talk about disabilities at home? What is the content of such conversations?	conversations about disabilities parents have with their children	readiness to begin conversations; justification; content of conversations	quantitative indicator: – number of “yes-no” answers; qualitative indicator: – justification of answers organized into categories, – content of conversations organized into categories; quantitative indicator: – number of answers falling into categories distinguished	survey method: questionnaire; qualitative and quantitative analysis methods
2.3 What is parents' self-declared attitude toward their daughter/son's interactions with a child with disability?	parents' attitude toward their daughter/son's interactions with a peer with disability	type of attitude in social situations	qualitative indicator: – positive attitude (answer “yes”) – negative attitude (answer “no”) in the following situations: – conversation, – play, – learning; qualitative indicator: – justification of answers organized into categories; quantitative indicator: – number of answers in categories distinguished	survey method: questionnaire; qualitative and quantitative analysis methods

Research problems	Variables	Indicators	Type of indicator	Measurement method
<p>2.4 What is parents' opinion about children with disabilities as friends and students?</p>	<p>evaluation of a child with disability</p>	<p>type of evaluation of a child with disability as a friend and a student</p>	<p>qualitative indicator: – positive attitude (answer "yes") – negative attitude (answer "no"); quantitative indicator: – number of answers in close-ended questions</p>	<p>survey method: questionnaire; quantitative analysis methods</p>
<p>2.5 What is the position of parents of nondisabled children on inclusive education?</p>	<p>attitude toward inclusive education</p>	<p>type of attitude regarding inclusive education (type of school for students with disabilities); justification of choice; advantages and disadvantages of inclusive education</p>	<p>qualitative indicator: – positive attitude – negative attitude; – justification of school choice organized into categories, advantages and disadvantages of inclusive education organized into categories; quantitative indicator: – number of answers in close-ended questions, – number of answers in categories distinguished</p>	<p>survey method: questionnaire; qualitative and quantitative analysis methods</p>

Research problems	Variables	Indicators	Type of indicator	Measurement method				
<p>2.5 What is the level of the social attractiveness of children/students with disabilities in the opinion of parents of nondisabled children?</p>	<p>social attractiveness of children/students with disabilities</p>	<p>intensity of social attractiveness by three levels (accumulation of points for answers regarding:</p> <ul style="list-style-type: none"> - conversation, - play, - learning, - type of school, - evaluation of a child as a friend, - evaluation of a child as a student 	<p>quantitative indicator: - 0-6-point attractiveness intensity scale, - attractiveness levels: low - 0-2 pts., medium - 3-4 pts., high - 5-6 pts.</p>	<p>survey method: questionnaire; quantitative analysis methods</p>				
<p>3. Are there differences in the evaluation of the social attractiveness of peers with disabilities made by nondisabled students in an inclusive school and in a noninclusive school?</p>	<table border="1"> <tr> <td data-bbox="665 485 721 856">Dependent variable</td> <td data-bbox="728 485 1036 856">social attractiveness of peers with disabilities</td> </tr> <tr> <td data-bbox="665 856 721 1483">Independent variable</td> <td data-bbox="728 856 1036 1483"> <ul style="list-style-type: none"> - educational setting/school type - knowledge of disability - experiences of interacting with people with disabilities </td> </tr> </table>	Dependent variable	social attractiveness of peers with disabilities	Independent variable	<ul style="list-style-type: none"> - educational setting/school type - knowledge of disability - experiences of interacting with people with disabilities 	<p>attractiveness intensity by three levels</p>	<p>quantitative indicator: - 0-7-point intensity scale, - attractiveness levels: low - from 0 to 2 pts., medium - from 3 to 4 pts., high - from 5 to 7 pts.; - significance level of differences in social attractiveness intensity</p>	<p>survey method: interview; sociometric method: Two Houses Test; quantitative analysis methods</p>
Dependent variable	social attractiveness of peers with disabilities							
Independent variable	<ul style="list-style-type: none"> - educational setting/school type - knowledge of disability - experiences of interacting with people with disabilities 							

Research problems	Variables		Indicators	Type of indicator	Measurement method
<p>4. Are there differences in the evaluation of the social attractiveness of children/students with disabilities made by parents of nondisabled students in an inclusive school and in a non-inclusive school?</p>	<p>social attractiveness of children/students with disabilities</p>	<ul style="list-style-type: none"> - educational setting/school type - knowledge of disability - experiences of interacting with people with disabilities 	<p>attractiveness intensity by three levels</p>	<p>quantitative indicator: - 0–6-point attractiveness intensity scale, - attractiveness levels: low – 0–2 pts., medium – 3–4 pts., high – 5–6 pts.; - significance level of differences in social attractiveness intensity</p>	<p>survey method: questionnaire; quantitative analysis methods</p>

There were 7,398 elementary schools (excluding special schools) in Kazakhstan in 2016 (when the study started); 1,653 (22.3%) of them provided appropriate conditions for inclusive education. Every third child with disability is provided with inclusive education in Kazakhstan.

Apart from classes shared by children with and without disabilities, inclusive schools offer special classes for children with disabilities. In 2016, there were 388 (5.2%) of such schools with 1,219 special classes, which had 8,907 students with various disabilities in total. It should be emphasized that students with disabilities in inclusive schools (also those in special classes) follow a general education core curriculum.

The study was conducted in elementary schools in two largest Kazakh agglomerations: Almaty and Astana, in one mainstream noninclusive school with no students with disabilities, and in one mainstream inclusive school with classes with two to three students with mild disorders, and special classes only for children with disabilities – children with hearing, visual, and motor impairments most frequently.

2.6. ORGANIZATION AND COURSE OF RESEARCH

The study covered children in Grade 1 in noninclusive elementary schools and Grade 1 in inclusive elementary schools as well as their parents or legal guardians. The study started in the summer semester of 2015/2016. It was assumed that children would have adapted to their school by then, developed peer relationships, and gained a certain amount of social experience related to education shared with peers with and without disabilities.

Consents for the study were obtained gradually. First, the principals in Almaty and Astana were talked to. They were presented the purpose and significance of the study as well as the research procedure. After the principals consented to the study, Grade 1 class teachers were asked to give their consent. They were provided with the research design and all details concerning procedures to be used. Class teachers were enthusiastic about the study, found it to be important and relevant, and hoped that it would bring tangible benefits to pedagogical practice.

Then a meeting with parents was organized where the purpose and significance of the study were explained. After they were presented the ques-

tions children would be asked, each parent was asked to give written consent for a conversation (interview) with his or her daughter/son. Parents were also asked to fill in the Social Attractiveness of Students with Disabilities Survey Questionnaire for Parents.

As many as 102 signed parental consent forms were returned by parents who gave consent for their child's participation and 102 survey questionnaires filled out by them. Then the study could start among first-grade students. The procedure was performed on an individual basis and was composed of two stages:

Stage 1: Conversation (interview) based on the Social Attractiveness of Students with Disabilities Survey Questionnaire for Children;

Stage 2: Two Houses Test.

Based on a pilot study, it was found that the interview and the test lasted a maximum of 15 minutes. Thus, the study was not onerous for first-grade students.

CHAPTER 3

SOCIAL ATTRACTIVENESS OF STUDENTS WITH DISABILITIES – STUDY RESULTS AND THEIR INTERPRETATION

3.1. DESCRIPTION OF THE SAMPLE AND EDUCATIONAL ENVIRONMENT

3.1.1. DESCRIPTION OF THE STUDY GROUP

CHILDREN

The study covered 102 Kazakh children – Grade 1 students in the cities of Astana (now Nur-Sultan) and Almaty. The research base were two schools: General Education School No. 53 in Almaty (noninclusive school) and General Education School No. 65 in Astana (inclusive school).

Two groups were formed – an inclusive one and a noninclusive one. The inclusive group had 50 children (School No. 65), including 23 girls and 27 boys, and the noninclusive group had 52 children (School No. 53), including 26 girls and 26 boys. The mean age of participants was 7 years 8 months (Table 2).

Table 2
Number of Children in the Study by Group

Group		Child's gender		Total
		Girl	Boy	
Inclusive	Number	23	27	50
	%	46.0	54.0	100.0
Noninclusive	Number	26	26	52
	%	50.0	50.0	100.0
Total	Number	49	53	102
	%	48.0	52.0	100.0

The groups of children were equivalent in terms of number and gender, and no statistically significant differences were found in this area.

PARENTS³

The study included parents – 102 people in total: 50 parents of children in the inclusive group and 52 parents of children in the noninclusive group living in Astana and Almaty. Parents were grouped according to the following criteria: mother, father, and other legal guardian. The study covered: 72 mothers, 22 fathers, and eight legal guardians (Table 3).

No statistically significant differences were found between the groups, which means they were equivalent in terms of parent/legal guardian and number.

3.1.2. PARTICIPANTS' EDUCATION

The study covered students and their parents in two cities of Kazakhstan – Almaty and Astana: in School No. 53 in Almaty and School No. 65 in Astana. Almaty and Astana were chosen intentionally. In the capital of Kazakhstan,

³ Similar issues were presented in Kulesza E.M., Butabayeva, L.: the disabled in conversations between Kazakh parents and their children. In *Interdyscyplinarne Konteksty Pedagogiki Specjalnej*, vol. 16, 2017, pp. 205–227 (Polish and English).

Table 3
Number of Parents in the Study by Group

Group		Parents			Total
		Mother	Father	Other legal guardian	
Inclusive	Number	37	11	2	50
	%	74.0	22.0	4.0	100.0
Noninclusive	Number	35	11	6	52
	%	67.3	21.2	11.5	100.0
Total	Number	72	22	8	102
	%	70.6	21.6	7.8	100.0

Source: Kulesza, E.M. & Butabayeva, L. (2017): the disabled in conversations between Kazakh parents and their children. In: *Interdisciplinary Contexts of Special Pedagogy*, Number 16, p. 213.

Astana (now Nur-Sultan), inclusive education services are offered by different educational settings. Out of 96 mainstream schools, 49 are inclusive schools, where 175 children with disabilities (special educational needs) are provided with inclusive education. All the schools provide a barrier-free educational environment.

INCLUSIVE GROUP'S EDUCATIONAL SETTING

School No. 65 is one of the many schools that provide inclusive education in Astana. It is an experimental facility run by the National Scientific and Practical Center of Correctional/Special Education. It has 19 inclusive classes (10 with Kazakh as the language of instruction and nine with Russian as the language of instruction), whose members are children with hearing and visual impairments and with cerebral palsy.

The school has created appropriate conditions for the education of students with disabilities: a barrier-free environment, classroom supplies, resources, and equipment, as well as therapy and rehabilitation services are available. To provide children with medical assistance in the school, a medical office is available with special equipment (massage table, ultraviolet light therapy device, ultrasonic nebulizer, and others) and medicines for seasonal vitaminization. Classrooms are equipped with special desks, chairs, and standing frames.

The teaching process in inclusive classes is organized taking into consideration the specific nature of the functioning of children with disabilities, on the basis of which a strategy to synchronize instruction with nondisabled children is developed. The timetable of fered in School 65 is in line with the legislation on general education. Teachers in inclusive classes do calendar and topic planning, where work with children with special needs as part of the general education process is planned separately and time devoted to students with and without disabilities is appropriately adjusted according to their skills and academic performance.

Including children with special educational needs in mainstream education requires additional assistance and learning support. The school uses a two-level support model depending on a student's needs. A student is accompanied by an assistant whose main task is to provide the child with physical support, help him or her to move around and feel self-confident in the classroom. In addition, children with SEN need a specialist teacher who knows special teaching methods. For instance, students with hearing impairments are supported by teachers of the deaf and hard-of-hearing. Children with motor disabilities are brought from home to school in taxis for people with disabilities.

Also, students with hearing impairments in School No. 65 are of fered career pre-orientation, e.g., senior students are provided with hairdressing and manicure training and tutorials as well as with specialist classes: timber processing and applied and decorative arts. The school also has a mime and gesture theater.

Table 4
Number of Students in Inclusive Classes in School No. 65 by Disability

Number of inclusive classes	Disability type		
	Hearing impairment	Visual impairment	Motor disability
19	16	20	23
Total	59		

There are 1222 students in total in School No. 65. Apart from inclusive classes with up to three children with SEN per class, the school also has special self-contained classes for children with hearing impairments with 79 students with various degrees of hearing loss in total. All the inclusive classes have

59 students with SEN in total, including 16 students with hearing impairments, 20 students with visual impairments, and 23 students with motor disabilities (Table 4).

The study covered 50 children without disabilities in inclusive classes and their parents (also 50 people). The fundamental sampling criterion was consent given by the school's principals and parents of first-graders for participation in the study. Detailed data are presented in Table 5.

Table 5

Number of Students in Classes Included in the Study in School No. 65 (Astana)

Class	Number of students in class	Number of students with SEN	Number of participating students	Number of participating parents
Class 1W	21	3	17	17
Class 1G	20	2	15	15
Class 1Z	21	3	18	18
Total	62	8	50	50

There are 21 students in 1W, including three children with disabilities: two children with motor disabilities and one child with visual impairment. There are 20 students in 1G, including two children with motor disabilities. There are 21 students in 1Z, including one child with hearing impairment and two children with motor disabilities. The study covered 23 girls and 27 boys without disabilities and their parents (50 people) of Kazakh nationality.

NONINCLUSIVE GROUP'S EDUCATIONAL SETTING

The noninclusive group was selected in School No. 53, which is one of the largest schools in Almaty – the educational center of Kazakhstan – with almost two million residents.

School No. 53 is a mainstream school with 635 students and 59 teachers. All the teachers have appropriate educational background (degree in teaching). The school employs a 1.5 full-time-equivalent speech therapist who treats children with mild speech sound disorders. These children are not considered students with special educational needs by their teachers or peers.

Table 6
Number of Students in Classes Included in the Study in School No. 53 (Almaty)

Class	Number of students in class	Number of students with SEN	Number of participating students	Number of participating parents
Class 1A	30	0	24	24
Class 1B	33	0	28	28
Total	63	0	52	52

First-graders in this group were of Kazakh nationality (Table 6). Only Kazakh is the language of instruction in this school. There were five first grades in the 2015/2016 academic year. The number of students in each class ranged from 30 to 35. Instruction was provided in line with the State General Education Standard of the Republic of Kazakhstan. This school is considered a traditional Kazakh school. Conversations with the school's administration and teachers proved that there were no children with disabilities in the school and virtually no lessons about disability were taught. According to the teachers, this topic was not included in the curriculum. The study covered 26 girls and 26 boys attending this school and their parents (52 people).

3.2. SOCIAL ATTRACTIVENESS OF PEERS WITH DISABILITIES AS ASSESSED BY NONDISABLED FIRST-GRADERS IN INCLUSIVE AND NONINCLUSIVE EDUCATION

The study on first-graders was conducted in two stages. First, individual conversations (interviews) were held with children in inclusive education (inclusive group – IGr) and in noninclusive education (noninclusive group – NGr). Then, they were asked to choose a house they would invite a peer with disability to. The interview questionnaire for students was evaluated by a panel of competent judges. Members of the panel were four early elementary education teachers: two teachers from the inclusive school and two teachers from the noninclusive school, and two special educators. They rated the following aspects on a 5-point scale with five being the highest rating: 1) if the purpose of

the study was clearly framed, 2) if the questions were intelligible and accurate, 3) if the questions did not overlap, 4) the questions' substance, 5) if the questions served their function, and 6) if the questions were correctly sequenced (Pilch & Bauman, 2001). The competent judges' ratings oscillated between four and five for all the aspects listed above. The high level of consistency in positive ratings confirmed the questionnaire's diagnostic validity.

3.2.1. CHILDREN'S KNOWLEDGE OF DISABILITIES – ESSENCE OF DISABILITY AND SOURCES OF KNOWLEDGE

The interview questions were aimed to allow interaction with a student (*What's your name? Which class are you in?*), to explore children's understanding of the concept of disability (*What does it mean that a person is fit? And what does it mean that a person is disabled/handicapped?*⁴), and to determine the sources of knowledge of disability as well as direct and indirect interactions with people with disabilities (*How do you know that? Have you met such a person? Where did you see them?*) (Appendix 1).

FIRST-GRADERS' UNDERSTANDING OF DISABILITY

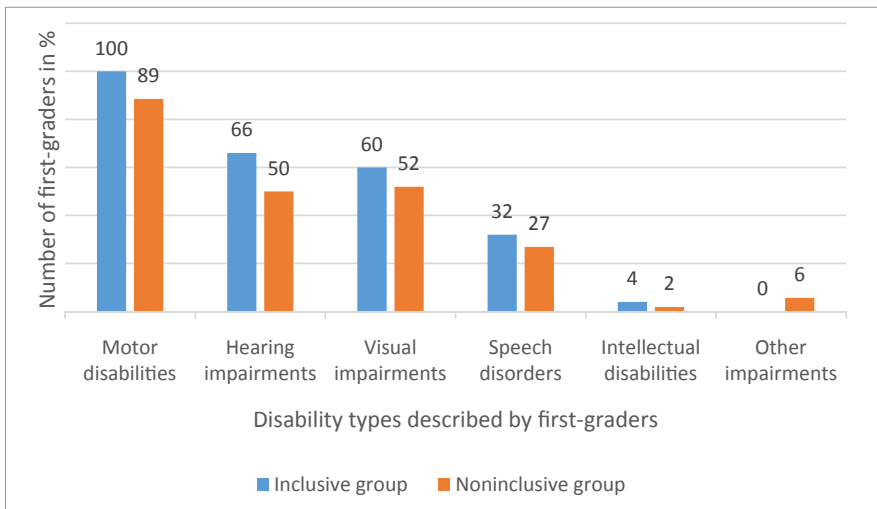
Noninclusive and inclusive education students readily answered the interview questions. According to them, a fit person is somebody that *can do anything, has deft hands, runs fast*. Such replies were given in both groups. As far as a disabled (handicapped) person is concerned, many children listed several characteristics. For example, they said: *doesn't have a leg, is in a wheelchair, has a crutch, can't walk, limps, is deaf, can't hear well, can't see, can't speak, can't speak correctly, doesn't understand, is of f his head*. Children's answers were organized into categories reflecting typical disability types listed in classifications, starting with those that were mentioned most frequently by the children:

- people with motor disabilities,

⁴ As the term *person with special needs* was introduced relatively recently as an official term in Kazakhstan, it was obvious that children did not know or understand it. That is why the term *handicapped* was used in interviews with students, as they were familiar with it. This term was used in official documents for decades and it is still used in common parlance.

- people with hearing impairments,
- people with visual impairments,
- people with speech disorders,
- people with intellectual disabilities,
- other impairments (Chart 1).

Chart 1
Disability Types Identified Based on the Accounts of Students in Inclusive and Noninclusive Education (Cognitive Component)



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

People with disabilities were mainly described as people who have trouble moving around. More than 94% of the children (IGr and NGr altogether) see people with disabilities as people with motor impairments. Students know external signs of motor disabilities (*doesn't have a leg, can't walk*) and aids used, for example, a wheelchair or crutches. The second most frequently listed characteristics referred to people with hearing impairments [*there's this thing in his ear* (hearing aid), *speaks with her hands*]. People with hearing impairments were more frequently described by children in the inclusive group (66%) than those in the non-inclusive group (50%). Similar results were obtained in the case of the number of characteristics describing people with visual impairments: 60% and 52% respectively (*has a cane, wears black glasses*). Children in both groups rarely described

people with speech disorders (32% IGr and 27% NGr). The characteristics of people with intellectual disabilities were least frequent in children's accounts: 4% IGr and 2% NGr. During the interviews, three children in the noninclusive group also listed other characteristics that – in their opinion – signified disability: illness (*ill children*), poverty (*without money*), and difficulty learning (*poor students*).

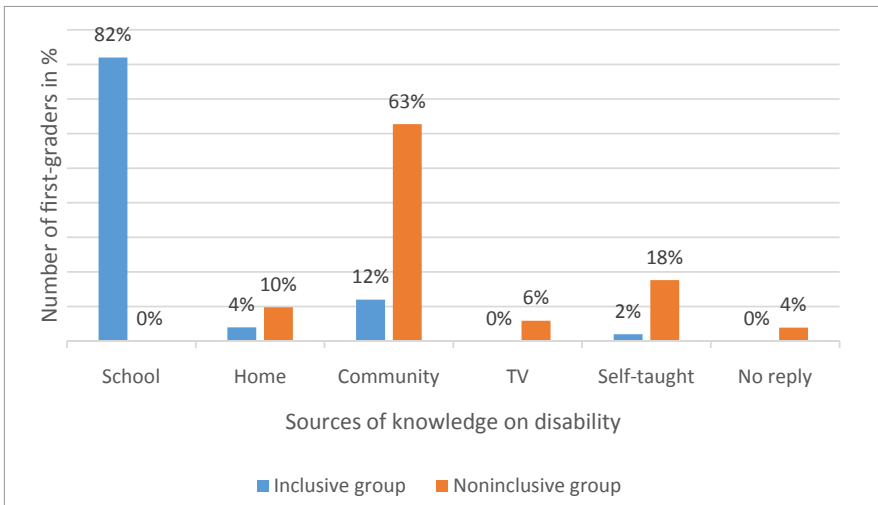
SOURCES OF KNOWLEDGE

Children's replies regarding how they know about disabilities were organized into the following categories (Chart 2):

- school,
- home (mom, brother, grandma, person with disability at home),
- community (playground, neighbor with disability, hospital, street, town, village),
- TV (movies),
- self-taught (the child just knows),
- no reply.

Chart 2

Sources of Knowledge of Disability Among First-Graders in Inclusive and Noninclusive Education (Cognitive Component)



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

Inclusive school students pointed to their school or class as the main source of information on disability (82% – 41 children). As the second source (12% – six children), they listed settings in which they had seen people with disabilities or those that they associated with people with disabilities (street, hospital, acquaintances). Two children pointed to their home: *my mom told me, my brother is handicapped*.

And noninclusive school students most frequently encountered people with disabilities in social space – 63% of the children, including: in the street – 26 children, in a hospital, different town, the countryside – three children, in the neighborhood (neighbor, playground) –

three children. Four children pointed to their home as the source of their knowledge (having a brother with disability or their mom, grandma or brother telling them about disabilities). Almost every fifth student (18%) said they knew about disabilities by themselves. It is reasonable to suppose that they gain their knowledge of disability from different sources that they cannot name.

DIRECT AND INDIRECT INTERACTIONS WITH PEOPLE WITH DISABILITIES

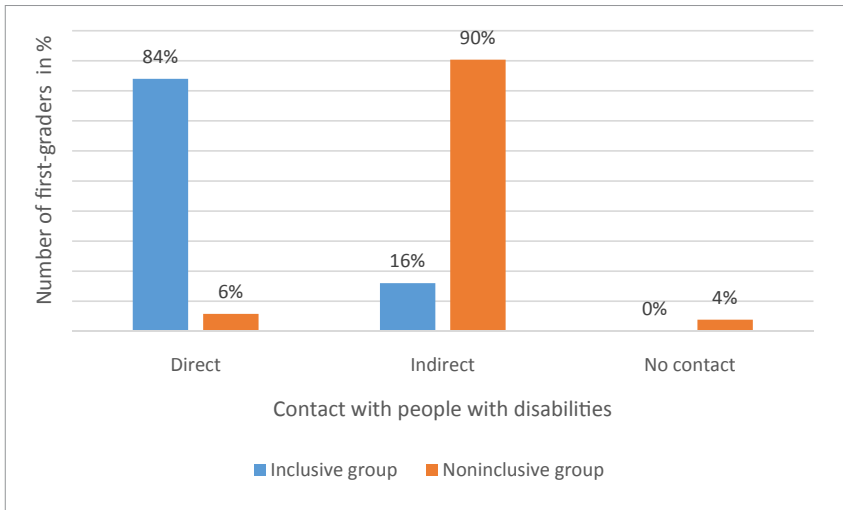
As Chart 3 shows, most of the students in the inclusive group (84%) had direct interactions with people with disabilities – usually, within their educational setting. Some of the students in this group (16%) had indirect encounters with people with disabilities (saw them in the street, close to their home, at the playground).

Only a few students in the noninclusive group (6%) reported direct interactions with people with disabilities, while 90% of the group had indirect encounters with them in public spaces. Only two children had no contact with people with disabilities.

Difficulties moving around are the sign of disability that is pointed out most frequently by 7–8-year-old Kazakh students receiving education in inclusive and noninclusive classrooms. According to research by A. Soroka-Fedorczuk (2007), most Polish 6- and 10-year-olds are of the same opinion. In 2003, the author conducted interviews with 300 children and analyzed their drawings showing a person with disability. She found that over 63% of the 6-year-olds and over 72% of the 10-year-olds pictured a person with disability in a wheelchair. Motor disabilities also predominate in drawings by lower elementary school students in inclusive settings (65%) and in noninclusive settings (85.5%) – according

Chart 3

Direct and/or Indirect Acquaintance of People With Disabilities Among Children in Inclusive and Noninclusive Education (Cognitive Component)



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

to reports from 2017 (Kulesza, 2017). Children's descriptions of people with disabilities usually show the most visible signs of disability, i.e., a missing limb (leg, arm or fingers) or a visible aid used – a wheelchair. The findings of a longitudinal study (1993-2013) by A. Ostrowska (2013) and of a survey on local communities by P. Boryszewski (2007) seem to prove that people with visible physical disabilities and severe mobility limitations are the representatives of people with disabilities, and a person with mobility limitations in a wheelchair is a typical referent of the concept of people with disabilities (Kulesza, 2016). This cognitive representation is being consolidated in the minds of societies in different countries by the universal use of the symbol of disability – a person in a wheelchair or a wheelchair itself. No wonder descriptions of people with motor disabilities also predominate in the descriptions of disability given by the Kazakh students in the study.

The second most frequently listed characteristics are those relating to sensory disabilities (hearing and visual impairments). This is consistent with reports by other authors studying children (Kulesza, 2016; Soroka-Fedorczuk, 2007).

In Kazakhstan, students with disabilities in inclusive schools are most frequently students with motor, hearing, and visual impairments. That is why children are more familiar with these disability types than with intellectual disabilities, especially when visible physical challenges are not involved. Speech disorders (mainly articulation difficulties) are not considered disability by the students. Most Kazakh teachers believe the same. Speech therapy classes are provided for quite a large group of children in all school types for students in Grades 1 through 4.

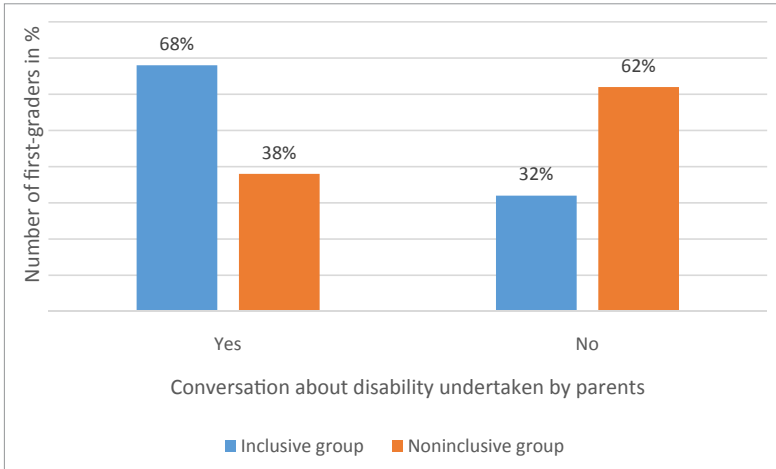
The findings show that people with disabilities are present in Kazakhstan's social space, as almost all of the students – regardless of their educational setting – have encountered, seen or heard of adults/children with disabilities. According to research by D. Al-Khamisy, in 2006, approximately 40% of Polish children in noninclusive preschools and 10% of children in inclusive preschools did not encounter disability (Al-Khamisy, 2006). That is why, the preschoolers in the study could not give any characteristics showing disability. Recent data indicate that people with disabilities are more present in social life in Poland nowadays (Ostrowska, 2013) and that the number of students with special educational needs has increased at every level of education (Apanel, 2014; Kulesza, 2019). Spacial proximity in inclusive settings promotes frequent interactions between nondisabled students and students with disabilities and their collecting various experiences. The Kazakh students in inclusive education drew their knowledge of disability precisely from these direct interactions with their classmates with special needs.

3.2.2. CONVERSATIONS PARENTS HAVE WITH THEIR CHILDREN ABOUT DISABILITIES – CHILDREN'S ACCOUNTS

Each student was asked if the parents talked to him or her about people/children with disabilities (the handicapped) and what they said.

It was revealed that both parents of children in the inclusive group and parents of children in the noninclusive group talked about disabilities with their children. In the NGr, 38% of the parents had such conversations, which means that every third parent made their child aware of the phenomenon of disability. This happened more frequently in families where children had contact with peers with disabilities – 68% of the IGr parents (Chart 4).

Chart 4

Conversations About Disabilities Parents Have With Their Children – Children’s Accounts

Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

Table 7

Tests in Statistical Analysis of the Frequency of Conversations About Disabilities Held at Home as Related by Children

Tests	Value	df	Asymptotic significance (bilateral)	Exact significance (bilateral)	Exact significance (unilateral)
Pearson’s chi-squared	8.927	1	.003	-	-
Continuity correction	7.781	1	.005	-	-
Likelihood ratio	9.069	1	.003	-	-
Fisher’s exact test	-	-	-	.003	.003
Linear-by-linear association	8.840	1	.003	-	-
N of valid cases	102	-	-	-	-

Statistically significant differences between the inclusive and noninclusive groups of $p < .01$ were revealed (Table 7). It was found that IGr children’s parents talked with them about disabilities significantly more frequently than NGr children’s parents – as seen by the children. Let us have a closer look at the issues raised in these conversations.

INCLUSIVE GROUP

Based on the analysis of the content of IGr students' accounts, the following subject categories were distinguished:

- 1) Developing a fair attitude toward children with disabilities – 16 students (32%).
The message: *you mustn't hurt them, don't hurt them, you mustn't bully* – nine replies, *you can't laugh at them* – seven replies;
- 2) Developing a positive attitude to doing shared activities and to interactions with peers with disabilities – nine children (18%).
The message: *you should play with them, play with them* – six replies, *you should be friends with them* – three replies;
- 3) Developing a helping attitude – eight people (16%).
The message: *help them*.
- 4) Developing an aloof attitude – one person (2%).
The message: *don't play with them, don't talk to them*.

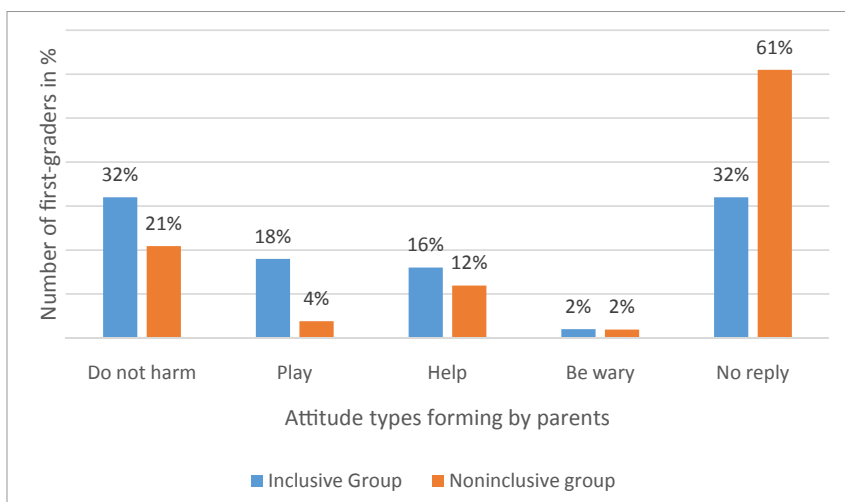
NONINCLUSIVE GROUP

More than half of the NGr children (62%) said their parents did not talk to them about people with disabilities. The remaining children's replies concerning the content of conversations were grouped into the same subject categories as IGr children's replies:

- 1) Developing a fair attitude toward children with disabilities – 11 students (21%).
The message: *you mustn't bully them, they're ill* – eight replies, *they're children too, they're good, be kind to them* – three replies;
- 2) Developing a positive attitude to doing shared activities and to interactions with peers with disabilities – two children (4%).
The message: *play with them* – one reply, *you should be friends with them* – one reply;
- 3) Developing a helping attitude – seven people (12 %).
The message: *you should help, help them*.
- 4) Developing an aloof attitude (a negative image) – one person (2%).
The message: *they keep yelling all the time*.

Chart 5

Content of Conversations With Parents as Related by Inclusive and Noninclusive Education Students [Behavioral Component (Leading One), Cognitive Component, Emotional Component]



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

The list of main issues (Chart 5) discussed by parents with their children (as related by the children) shows that developing a fair attitude toward children with disabilities in their child is the leading thread in their conversations (32% IGr and 21% NGr). Every fifth IGr parent (18%) encouraged the child to play and/or be friends with a peer with SEN, while only two NGr parents suggested such a possibility in their conversations. NGr parents more frequently had conversations about sensitizing their children to the needs of people with disabilities (12%) by shaping appropriate behaviors – providing help. Also 16% of the IGr parents encouraged their child to provide students with disabilities with help. More than half of the NGr parents (61%) and quite a high percentage of the IGr parents (32%) do not answer for the question.

Research on Polish 6-10-year-olds conducted at the beginning of the 2000s shows that parents and other people are an important source of knowledge of disability that is listed by children most frequently. Specifically, A. Soroka-Fedorczuk (2007) revealed that approximately 20% of parents were the main source of information for 6-year-olds and approximately 32% of parents for 10-year-olds; other people (including friends and teachers) constituted approx-

imately 11% and approximately 28% respectively. Research by D. Al-Khamisy (2006) also suggests that parents of preschoolers in integrated settings are a source of information for their children more frequently than are parents of preschoolers in nonintegrated settings for theirs. It is therefore reasonable to think that a child's educational setting has an impact on the content of conversations held at home.

The content of Kazakh parents' conversations – as related by their children – concerned, first of all, developing socially acceptable attitudes toward people with disabilities – doing no harm, sensitizing their children to the needs of people with disabilities – helping them, and also encouraging them to get involved in closer interactions. However, children in the inclusive group mentioned that their parents encouraged them to develop friendly relations with their peers with disabilities, i.e. To play together and be friends, more frequently than children in the noninclusive group. Only a few accounts in both groups showed certain anxiety about contact with people with disabilities on the part of the parents.

Parents shape a specific model of behavior toward peers with disabilities in their children. Our data show that in the noninclusive group, the prevailing attitudes were children accepting the presence of people with disabilities in their environment (21%) and providing them with help (12%), while in the inclusive group – accepting their presence (32%) and doing activities together (18%). Therefore, it will be interesting to explore the attitudes toward peers with disabilities students in these two different educational settings declare in different social contexts, including: encounter in the street, at a playground, in school, and establishing closer relations.

3.2.3. BEHAVIORS TOWARD PEERS WITH DISABILITIES DECLARED BY NONDISABLED CHILDREN REGARDING VARIOUS PROBABLE INTERACTIONS⁵

Interviews with students were to explore their declared behaviors regarding probable or already existing interactions with peers with disabilities, such as:

⁵ Some data of research on Kazakh children were published in Butabayeva, L., Kulesza, E.M. (2019). Children with disabilities as social partners in the perception of Kazakh parents and their

1. starting a conversation,
2. playing together,
3. learning together,
4. becoming friends,
5. inviting them to a birthday party.

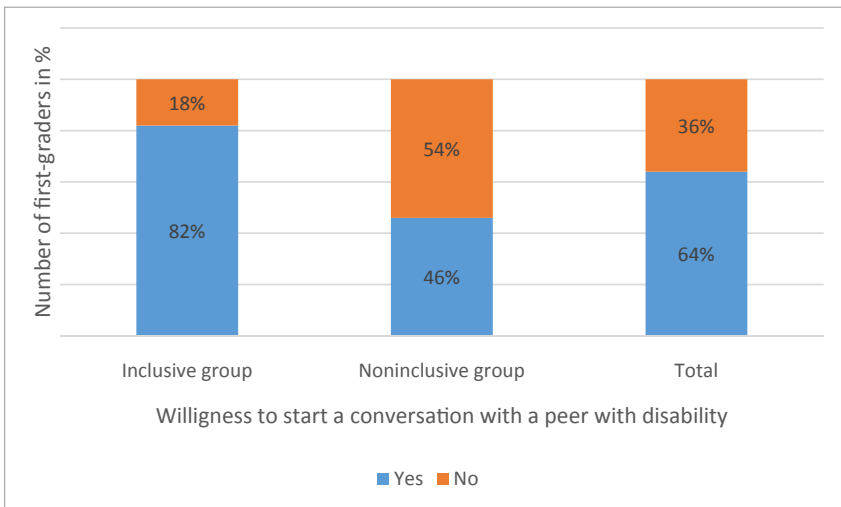
The interviews were also to reveal direct evaluations of peers with disabilities (I like him/her – I dislike him/her) and indirect evaluations (invitation to a colored or black-and-white house) made by nondisabled students.

3.2.3.1. STARTING A CONVERSATION WITH A PEER WITH DISABILITY

Participants in both groups were asked the following question: *If there was a girl/boy with disability in your class, would you talk with her/him?* Children answered yes or no. The distribution of results is shown in Chart 6.

Chart 6

*Children's Position Regarding a Conversation with a Peer with Disability
Split Between the Inclusive group and the Noninclusive Group*



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

children. *EDULEARN19 Proceedings*. 11th International Conference on Education and New Learning Technologies, 1–3 July, 2019, Palma, Spain, pp. 6901–6907. doi:10.21125/edulearn.2019.1657

In the inclusive group, 82% of the children express their willingness to start a conversation with their peer with disability; in the noninclusive group – nearly every second participant (46%). Detailed distribution of results with the number of participants is shown in Table 8.

Table 8
Children’s Willingness/Unwillingness to Engage in a Conversation with a Peer with Disability and the Size of the Groups

Group		Conversation		Total
		Yes	No	
Inclusive	Number	41	9	50
	%	82.0	18.0	100.0
Noninclusive	Number	24	28	52
	%	46.0	54.0	100.0
Total	Number	65	37	102
	%	63.7	36.3	100.0

Nine children (18%) in the inclusive group are not ready to engage in an interaction with a peer with disability; in the noninclusive group – 28 children (54%). Altogether, 63.7% of all the participants (65 children) are not afraid of a conversation with a friend with disability and declare they would start it. This shows that a positive attitude to interactions with peers with disabilities prevails.

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Analysis of the justifications provided by first-grades in the inclusive group for their replies reveals that they would like to talk most about school and learning (10 people) and play (8 people), that is about activities that occupy most of their time and attention (Table 9). For three children, whether they will start a conversation or not depends on their disabled peer’s willingness to talk and whether they will play. Children’s statements represent their attitude that shows empathy, they want to make their peer feel happy, they care about his or her wellbeing – four people (*so that they feel OK; so that he’s not alone; I’ll be making her laugh; I’ll ask what she likes*). Seven children declare their readiness to help

(*I will be helping; you should help them*). They also make positive evaluations of peers with disabilities – nine people (*he's good; I like them*), including two children who said a peer with disability *was a friend of theirs* and were surprised by the question about starting a conversation with them.

Table 9

Inclusive Group Children's Replies Regarding Justification of Starting a Conversation with a Peer with Disability and the Content of Conversations

Categories	Detailed answers	Frequency	Percent
Content of conversations	<i>We learn together; About lessons; I'll ask about learning</i>	10	20.0
	<i>About games; About the Christmas tree; I'll talk about the zoo; I'll tell them about a movie</i>	8	16.0
Empathy	<i>I'll ask what she likes; So that he's not alone; So that they feel OK; I'll be making her laugh</i>	4	8.0
	<i>If they want to talk; If we play</i>	3	6.0
Help	<i>I will be helping; You should help them; You should talk with them; Because the teacher says we should be friends</i>	7	14.0
Positive evaluation	<i>He's good; They're good; She wants to be friends with everyone; I like them; She's my friend</i>	9	18.0
Total		41	82.0

Note. Number of IGr students = 50.

Table 10

Inclusive Group Children's Replies Regarding Justification of Not Starting a Conversation with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't want to</i>	3	6.0
Evaluation on the grounds of impairments	<i>He doesn't talk; They can't talk; She doesn't walk or speak; He's ill</i>	6	12.0
Total		9	18.0

Note. Number of IGr students = 50.

It was also revealed that nine students felt anxious about having a conversation with a peer with disability. They answered: *I don't want to* (talk); *he's ill*; *she doesn't walk*; *she doesn't speak* (Table 10). The reason for refusing interaction were mainly problems with verbal communication. Inclusive classes have students with hearing and motor disabilities, frequently with concurrent disorders in the area of articulation, intonation, and modulation, hence the difficulties in verbal communication.

Analysis of the content of children's statements shows that lessons and school are the dominant topic of conversations – *we learn together*. It is therefore reasonable to think that nondisabled students perceive peers with disabilities as students who participate in the process of education. Wise support of their shared education is the crucial factor in the development of interpersonal relationships in the class.

Replies in the inclusive group reflect empathy, readiness to help, orientation toward shared activities, and positive descriptions of disabled children's personality traits.

Disabled children's self-esteem, their evaluation and acceptance by nondisabled peers develop influenced by numerous factors, such as academic success but also when these students' positive image is being created by their teachers. The findings give grounds for stating that teachers undertake pro-integration actions that result in a positive attitude toward interactions with peers with disabilities among most of the nondisabled students in the study. However, 18% of the students in the inclusive group are still anxious about having a casual chat with a peer with disability.

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Analysis of the content of replies given by nondisabled children in the noninclusive group shows how important school and performing the role of a student are for them. They declare they will talk about lessons (13 people) and about their class (2 people) with a friend with disability, and also about a book (2 people) (Table 11). They think they can also talk about games, about mom (3 people) and become friends (1 person); they also express their empathy: *so that he's not alone* (1 person) and offer help: *I want to help* (1 person).

Table 11.

Noninclusive Group Children's Replies Regarding Justification of Starting a Conversation with a Peer with Disability and the Content of Conversations

Categories	Detailed answers	Frequency	Percent
Content of conversations	<i>About lessons; About the class; About school; About a book</i>	17	32.3
	<i>About mom; About games; We'll make friends</i>	3	5.7
Empathy	<i>So that he's not alone</i>	1	2.0
Help	<i>I want to help</i>	1	2.0
Positive evaluation	<i>He's good</i>	2	4.0
Total		24	46.0

Note. Number of NGr students = 52.

Table 12

Noninclusive Group Children's Replies Regarding Justification of Not Starting a Conversation with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification, no reply	<i>I don't want to; I won't; I don't know</i>	10	19.0
Fear of interaction	<i>I'm afraid; He's not my friend</i>	2	4.0
Evaluation on the grounds of impairments	<i>She doesn't have an arm; Because he doesn't have a leg; They don't understand; They're ill; He doesn't hear; He doesn't speak; He doesn't see</i>	10	19.0
Generalized negative evaluation	<i>They're hoodlums; They're bad; He's naughty; I don't like him</i>	6	12.0
Total		28	54.0

Note. Number of NGr students = 52.

It is interesting to note that the number of participants who express their willingness to interact with children with SEN (24 people) is almost the same as the number of those who have a negative attitude to such interactions (28 people). The following statements prove this: *I don't like them; I don't know; they're ill; they don't understand*. Some students (10 people) point directly to disability as the reason for refusing interaction: *he or she doesn't speak; doesn't see; doesn't hear; doesn't have a leg; doesn't have an arm*.

In the minds of a number of nondisabled children in the noninclusive group (16 people), a negative image of a child with disability formed – not only on the grounds of physical and mental traits (10 students) – but also a generalized negative evaluation of a person with disability (6 students). This shows in such descriptions as: *He's naughty; they're bad; they're hoodlums*. These statements reflect evaluations that are determined by negative stereotypes; it is hardly surprising then that children also said: *He's not my friend; I don't like him; I don't want to; I'm afraid*. It appears that negative stereotypes have a direct impact on the perception of people with disabilities as rather unattractive partners in social interactions.

A quantitative comparative analysis of the replies to the question about starting a conversation with a peer with disability given by participants in both groups showed statistically significant differences of $p < .01$ in favor of students in the inclusive group. Therefore, it is reasonable to conclude that the latter presented significantly higher openness and readiness to start a conversation with a peer with SEN than students in the noninclusive group.

3.2.3.2. PLAYING WITH A PEER WITH DISABILITY⁶

Students in the inclusive and noninclusive groups were asked the following question: *Would you be willing to play with a girl/boy with disability?* They answered yes or no. Results are shown in Chart 7.

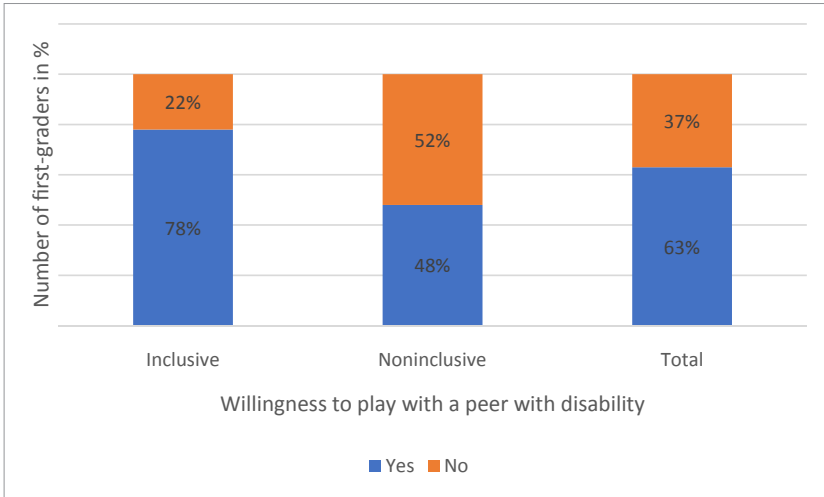
Most of the children in the inclusive group (78%) express their willingness to play with a peer with disability; in the noninclusive group – less than half (48%). Detailed distribution of results showing the number of participants giving their answers is presented in Table 13.

Every fifth student in the inclusive group (11 people) and every second student in the noninclusive group (27 people) are unwilling to play with a student with SEN. Altogether, however, 63% (rounded up) of the participants (64 people) express their willingness to engage in play interactions with a friend with disability. This shows that a positive attitude to peers with disabilities as playmates prevails.

⁶ Portions of research on Kazakh children were published in Butabayeva, L., Kulesza, E.M. (2019). Children with disabilities as social partners in the perception of Kazakh parents and their children, *EDULEARN19 Proceedings*. 11th International Conference on Education and New Learning Technologies, 1–3 July, 2019, Palma, Spain, pp. 6901–6907, doi:10.21125/edulearn.2019.1657

Chart 7

Children’s Position Regarding Playing with a Peer with Disability Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr students = 50, number of NGr students = 52, total N = 102.

Table 13

Children’s Willingness/Unwillingness to Play with a Peer with Disability and the Size of the Groups

Group		Play		Total
		Yes	No	
Inclusive	Number	39	11	50
	%	78.0	22.0	100.0
Noninclusive	Number	25	27	52
	%	48.0	52.0	100.0
Total	Number	64	38	102
	%	62.7	37.3	100.0

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Inclusive group children’s accounts show that they engage in play because their peer with disability needs care and help (*I’ll look after them; when you play with them, they’re getting better; when you play with them, they change*)

– 5 people. They add that *you should play with them* and *you should entertain them* – 9 people (Table 14). This shows that these children consider play as a duty and not enjoyment. In total, 14 students have this attitude.

Table 14
Inclusive Group Children’s Replies Regarding Justification of Their Willingness to Play with a Peer with Disability and the Content of This Play

Categories	Detailed answers	Frequency	Percent
Content, mood, and characteristics of play with peers with disabilities	<i>We’ll be ice skating together; We’ll be playing hide and seek; We’ll go and play on the swings</i>	9	18.0
	<i>It’ll be fun; It’s fun to play; I like to play</i>	3	6.0
	<i>You have to play in one place; You play with them sitting down and don’t get tired</i>	2	4.0
Empathy, peer’s perspective	<i>If he wants to play; If he says we play; He wants to play too</i>	4	8.0
	<i>So that she’s not sad; to amuse them</i>	2	2.0
Help	<i>I’ll look after them; You should entertain them; When you play with them, they’re getting better; When you play with them, they change</i>	14	2.8
Positive evaluation	<i>We like him; She’s smart; They’re good; They’re cheerful</i>	5	10.0
Total		39	78.0

Note. Number of IGr students = 50.

Students recognize that their peers with SEN have the same need for play as they feel themselves (*he wants to play too*) – 2 people, and say they will play with a peer with disability as long as he or she is willing to (*if he wants to play*) – 2 people. Two children empathize with disabled peers’ emotional state and think they are sad, that is why they are motivated to play with them to cheer them up: *to amuse them; so that she’s not sad*. This proves their empathic sensitivity and shows that they can recognize another person’s perspective. It is reasonable to suppose that these students have a well-developed theory of mind.

Children at that age want and like to play and have various ideas for playing together. This is seen in the following accounts: *I like to play; it'll be fun; we'll go and play on the swings; we'll be playing hide and seek; we'll be ice skating together* – 9 people. Some participants know that their peers with SEN cannot play all games due to their disabilities: *You play with them sitting down and don't get tired* (3 people). Moreover, students' accounts include positive evaluations of disabled children's personality traits, e.g.: *They're good; they're cheerful; she's smart* – 5 people. Also, one child says: *We like him*.

Table 15
Inclusive Group Children's Replies Regarding Justification of Not Engaging in Play with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	No reply	1	2.0
Unwillingness on the grounds of impairments	<i>I'll get ill too (1); He keeps falling down all the time (1); They don't walk (1);</i>	3	6.0
Negative evaluation of people with disabilities	<i>I don't want to play with a disabled person (4); He's disabled (1); They can't play (2)</i>	7	14.0
Total		11	22.0

Note. Number of IGr students = 50.

Also, nondisabled students' anxiety and unwillingness to engage in play with peers with SEN were revealed. Three children will not play with them, as they are afraid they will contract the illness; they also see their limitations in walking and say they of ten fall down. That is why they are afraid peers with disabilities could get injured while playing. Four students answer: *I won't play with a disabled (handicapped) person*. Two children say: *They can't play*. In total, 11 students in the inclusive group have a negative attitude to playing together with children with SEN, which is expressed in evaluations of their inability and unattractiveness in interactions. The negative impact of stereotypes about people with disabilities is clearly visible here.

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

In the noninclusive group, answers were distributed almost evenly – 52% of the children do not want to play with peers with disabilities and 48% are willing to (Chart 7). A positive attitude and acceptance of potential play with peers with disabilities are expressed in the following accounts: *He's good; he'll be my friend; I like her* (Table 16). This is how nine out of 52 children replied. As many as five participants (11.6%) show empathy and recognition of a peer's perspective, saying: *He wants to play; he's my peer; I feel for them*. Only two children say: *It'll be interesting*. Seven children (13.5%) cannot justify their positive answer. Noninclusive group children have little experience of informal interactions with peers with disabilities and that is why they do not know what they could play with them.

Table 16

Noninclusive Group Children's Replies Regarding Justification of Their Willingness to Play with a Peer with Disability and the Content of This Play

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't know</i>	7	13.5
Content, mood, and characteristics of play with peers with disabilities	<i>It'll be interesting (2)</i>	2	3.8
Peer's perspective, empathy	<i>He wants to play (1); He's my peer (2)</i>	3	5.8
	<i>If there's nobody there (1); He doesn't have friends (1); I feel for them (1)</i>	3	5.8
Help	<i>You should play with her (1)</i>	1	1.9
Positive evaluation	<i>But we are friends (1); He'll be my friend (2) He's good (2); He's a good boy (2); I like her (2)</i>	9	17.2
Total		25	48.0

Note. Number of NGr students = 52.

Participants justify their reluctance to play with children with SEN, saying: *I don't like them; they can't play; he doesn't have a leg; he doesn't walk* – 21 people (Table 17). Such statements show that negative stereotypes influence attitudes toward peers with disabilities, that they are treated as people

with “defects” who cannot play like other children and are simply not liked by nondisabled students. Also, children show their lack of experience interacting with people with disabilities. When they provide no answer, this is because they do not know peers with disabilities, feel anxious, and have doubts about engaging in an activity with them (6 people).

Table 17

Noninclusive Group Children’s Replies Regarding Justification of Not Engaging in Play with A Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	No reply	6	12.0
Unwillingness on the grounds of impairments	<i>He doesn’t have a leg (3); He doesn’t walk (6); She can fall (1)</i>	10	19.0
Negative evaluation of people with disabilities	<i>They can’t play (7); I don’t like them (3); He’s ill (1)</i>	11	21.0
Total		27	52.0

Note. Number of NGr students = 52.

A quantitative comparative analysis (Chi-square tests) of students’ replies to the question about playing with a peer with disability showed statistically significant differences of $p < .01$ in favor of participants in the inclusive group. Students in this group expressed their willingness to play together with a friend with disability much more frequently and also initiated different games more frequently. Moreover, they took into consideration their friend’s limitations resulting from his or her disability when choosing a game to play.

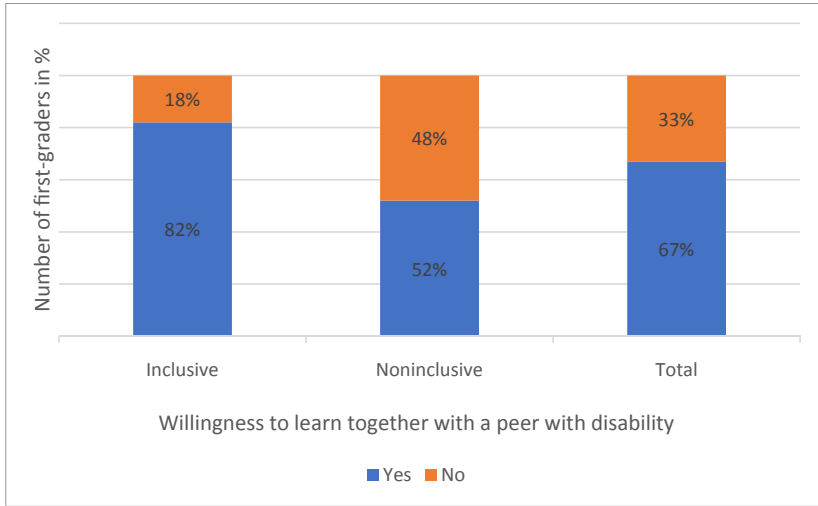
3.2.3.3. LEARNING WITH A PEER WITH DISABILITY⁷

Analysis of first-graders’ answers to the question if they would like to learn together with a girl or a boy with disability revealed a decided prevalence of positive answers (*yes*) in the inclusive group (82%) and a small prevalence of positive answers in the noninclusive group (52%) (Chart 8).

⁷ Some data of research on Kazakh children were published in Butabayeva, L., Kulesza, E.M. (2019). Children with disabilities as social partners in the perception of Kazakh parents and their children. *EDULEARN19 Proceedings*, 11th International Conference on Education and New Learning Technologies, 1–3 July, 2019, Palma, Spain, pp. 6901–6907, doi:10.21125/edulearn.2019.1657

Chart 8

Children’s Position Regarding Learning Together with a Peer with Disability Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr students = 50, number of NGr students = 52, total N = 102.

Table 18

Children’s Willingness/Unwillingness to Learn Together with a Peer with Disability and the Size of the Groups

Group		Learning		Total
		Yes	No	
Inclusive	Number	41	9	50
	%	82.0	18.0	100.0
Noninclusive	Number	27	25	52
	%	51.9	48.1	100.0
Total	Number	68	34	102
	%	66.7	33.3	100.0

Detailed distribution of results with the number of participants is shown in Table 18.

In the inclusive group, 18%, that is, nine children would not like to learn together with a peer with disability in the same classroom, in the noninclusive

group – 48.1% (25 children). In total, one third of the students (33.3% – 34 children) would not like to learn with peers with SEN. However, the remaining participants, i.e., two thirds of the students (66.7% – 68 people) are not afraid of interaction with peers with disabilities and declare they would learn together with them. This shows that a positive attitude to children with disabilities as classmates prevails. Analysis of participants' justifications for their *yes* or *no* answers suggests that most of them understand and accept interactions with children with SEN taking place within their academic learning process (Table 19 and Table 21).

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Inclusive group students' statements are full of positive emotions; children express their willingness to help their peers with disabilities – with counting and homework in particular (20%) (Table 19). They stress that they already learn together: *He is in my class*, and declare: *We'll be sitting at the same desk*, so their actions and attitudes toward friends with disabilities result from their direct experiences.

Table 19

Inclusive Group Children's Replies Regarding Justification of Their Willingness to Learn with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't know</i>	2	4.0
Characteristics of learning with peers with disabilities	<i>He is in my class</i> (3); <i>We'll be learning together</i> (2); <i>We'll be doing homework together</i> (2); <i>We'll be playing with her</i> (1); <i>We'll be sitting at the same desk</i> (1)	9	18.0
Empathy, peer's perspective	<i>I want them to get A's</i> (1); <i>So that he has knowledge</i> (1); <i>So that they think they're healthy too</i> (2); <i>So that they're good students</i> (2)	6	12.0
	<i>They want to learn too</i> (4)	4	8.0
Help	<i>I'll help</i> (6); <i>I'll be watching him</i> (1); <i>I'll teach them to count</i> (2); <i>We help them do homework</i> (1)	10	20.0
Positive evaluation	<i>My friend</i> (2); <i>He's good</i> (2); <i>She's a good girl</i> (2); <i>They're cheerful</i> (1); <i>They're smart</i> (2); <i>He'll be a good student</i> (1)	10	20.0
Total		41	82.0

Note. Number of IGr students = 50.

Four participants say that children with disabilities *want to learn too*. Six justify their positive answers regarding learning together with students with disabilities in the following way: *I want them to get A's; So that he has knowledge; So that they think they're healthy too; So that they're good students*. Altogether, 20% of the participants in this group equate their perspective with their disabled peers' perspective as students who want to learn and can get A grades despite their "illness," which is promoted by their learning together and their help. Some nondisabled students (20%) already developed close friendly relationships with a friend with SEN (*My friend*) and a positive image of children with disabilities: *He's good; She's a good girl; They're cheerful; They're smart*. Only two children were not able to justify their positive attitude to learning together with a peer with disability and answered: *I don't know*.

Table 20

Inclusive Group Children's Replies Regarding Justification of Their Unwillingness to Learn With a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	No reply	3	6.0
Unwillingness on the grounds of impairments	<i>They're ill</i>	1	2.0
Negative evaluation of people with disabilities	<i>They can't read (1); He's a poor student (1); They're poor students (3)</i>	5	8.0
Total		9	18.0

Note. Number of IGr students = 50.

Nine children in the inclusive group (18%) do not want to learn with a friend with disability. Essentially, they make negative evaluations of peers with disabilities as students: *They can't read; They're poor students* (5 participants). Three children did not justify their negative attitude and one said: *They're ill* (Table 20).

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

In the noninclusive group, the distribution of answers is almost even: *yes* – 27 children, *no* – 25 children (Table 18). Out of the 27 children with a positive

attitude to learning together with peers with disabilities, 17 (33%) explain their position, while ten (19%) either do not provide justification or simply say: *I don't know* (Table 21).

Those students who are willing to learn together with peers with disabilities justify their position by saying that education is mandatory for all children (*They should go to school*) and that children at that age want to fulfill their role as students just like they do themselves (*They want to learn too*) – four students in total. That is why they imagine: *We'll be going* [to school – authors' note] *together*; *We'll be learning together*; *We'll be doing homework together* (6 children – 12%). Seven students (13%) also declare that they will be helping their peers with disabilities (Table 21).

Table 21
Noninclusive Group Children's Replies Regarding Justification of Their Willingness to Learn with Peers with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't know</i> ; No reply	10	19.0
Characteristics of learning with peers with disabilities	<i>We'll be learning together</i> (2); <i>We'll be going</i> [to school] <i>together</i> (3); <i>We'll be doing homework together</i> (1)	6	12.0
Empathy, peer's perspective	<i>They should/have to go to school</i> (3); <i>They want to learn too</i> (1)	4	8.0
Help	<i>I'll be helping</i> (7)	7	13.0
Positive evaluation	-	0	.0
Total		27	52.0

Note. Number of NGr students = 52.

Students in the noninclusive group who do not want to learn together with peers with disabilities list disability as an impediment to learning (12%). They explain: *They're ill*; *They won't be able to go to school*; *They don't hear, don't speak* (Table 22). They also think that peers with SEN *won't be able to learn* or *can't learn* – that is why they will be poor students (8 children). One participant said that children with disabilities *are bad*. These nondisabled students developed an image of peers with disabilities as people who are not able to learn and if they go to school, they will be poor students. Their negative attitude to learning together with peers with disabilities probably results from negative stereotypes present in their immediate environment.

Table 22
Noninclusive Group Children’s Replies Regarding Justification of Their Unwillingness to Learn with Peers with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don’t know (6); No reply (4)</i>	10	19.0
Unwillingness on the grounds of impairments	<i>They’re ill (2); They won’t be able to go to school (3); They don’t hear, don’t speak (1)</i>	6	12.0
Negative evaluation of people with disabilities	<i>They won’t be able to learn (3); They can’t learn (1); They’re poor students (4); They’re bad (1)</i>	9	17.0
Total		25	48.0

Note. Number of NGr students = 52.

A large proportion of students in this group (19%) did not justify their negative answer: six children said they did not know why they did not want to learn together with peers with disabilities, and four children did not provide any answer (Table 22). Also 19% of the students who were willing to learn together with peers with disabilities did not justify their answer. Thus in total, 38.0% of the noninclusive group participants could not explain their position. It is reasonable to suppose that this is related to their little experience of interactions with people with disabilities and with peers with SEN in particular.

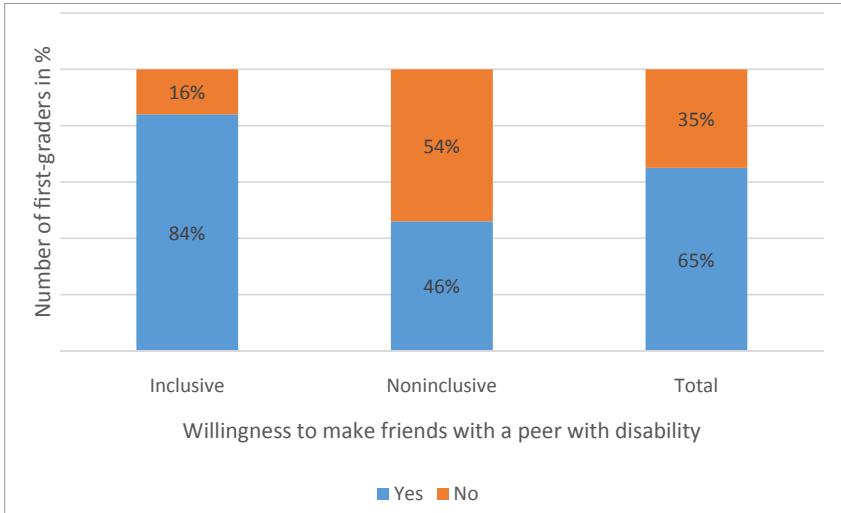
A quantitative comparative analysis (SPSS Chi-square tests) of the answers to the question about learning with peers with disabilities given by participants in both groups showed statistically significant differences of $p < .01$ in favor of participants in the inclusive group. This means that students in the inclusive school have a significantly more positive attitude to learning together with peers with SEN than students in the noninclusive school.

3.2.3.4. MAKING FRIENDS WITH A PEER WITH DISABILITY

Participants were asked the following question: *Would you be willing to make friends with a girl or a boy with disability?* All children answered *yes* or *no*. The distribution of results is shown in Chart 9. In total, 65% of the nondisabled students have a positive attitude to peers with disabilities and see nothing standing in the way of making friends with them.

Chart 9

Children's Position Regarding Making Friends with a Peer with Disability Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

Table 23

Children's Position Regarding Making Friends with a Peer with Disability and the Size of the Groups

Group		Friendship		Total
		Yes	No	
Inclusive	Number	42	8	50
	%	84.0	16.0	100.0
Noninclusive	Number	24	28	52
	%	46.2	53.8	100.0
Total	Number	66	36	102
	%	64.7	35.3	100.0

The distribution of results in the inclusive group is very different from that in the noninclusive group. The vast majority of children in the inclusive group (84% – 42 students) are willing to establish friendly relationships with their peers with disabilities; in the noninclusive group – less than half of the children (46.2% – 24 students) (Table 23).

In total, one third of all participants, that is, 36 children would not make friends with a peer with SEN, including eight children (16%) in the inclusive group and 28 children (53.8%) in the noninclusive group. However, if the total number of positive declarations (64.7% – 66 children) is taken into account, participants who are not afraid of peers with disabilities and declare their willingness to make friends with them outnumber those who are unwilling to do so. The analyses below show students' justifications for their positive and negative answers.

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

A substantial majority of students in the inclusive group can see a possibility of making friends with peers with SEN (Table 24). Their statements include positive descriptions of children with disabilities: *She's good; They're well-behaved; They're cheerful; I like them* (8 children). A few students (6 children) can see a possibility of having fun (*We'll have a fun time*); two students remark:

Table 24

Inclusive Group Children's Replies Regarding Justification of Their Willingness to Become Friends with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't know</i> (4)	4	8.0
Characteristics of becoming friends with peers with disabilities	<i>We'll have a fun time</i> (4); <i>We'll be playing together</i> (2); <i>We learn together</i> (2); <i>You should make friends with them</i> (2)	10	20.0
Empathy, peer's perspective	<i>I'll protect him</i> (1); <i>If I make her laugh, she'll recover quickly</i> (1); <i>He shouldn't be alone</i> (1); <i>So that they feel OK</i> (1)	4	8.0
	<i>I'll introduce him to my friends</i> (1)	1	2.0
Help	<i>I'll be helping</i> (12); <i>I like to teach</i> (1); <i>to entertain them</i> (2)	15	30.0
Positive evaluation	<i>He doesn't bother anyone</i> (1); <i>He/she's good</i> (4); <i>They're cheerful</i> (1); <i>I like them</i> (1); <i>They're well-behaved</i> (1)	8	16.0
Total		42	84.0

Note. Number of IGr students = 50.

We learn together. Some consider establishing closer relationships as their duty (*You should make friends with them; to entertain them*) that helps their peers recover (*If I make her laugh, she'll recover quickly*) and provides support for them (15 children). Students then show great sensitivity to their peers' needs and an empathic attitude toward them (*He shouldn't be alone; So that they feel OK*).

Table 25

Inclusive Group Children's Replies Regarding Justification of Their Unwillingness to Become Friends with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't want to</i> (2)	2	4.0
Unwillingness on the grounds of impairments	<i>He doesn't walk</i> (1)	1	2.0
Negative evaluation of people with disabilities	<i>I don't like him</i> (4); <i>He doesn't know how to play</i> (1)	5	10.0
Total		8	16.0

Note. Number of IGr students = 50.

Eight children in the inclusive group are afraid of peers with disabilities and would not become their friends. They usually say that they do not know why or that they do not like them (*I don't know; I don't want to; I don't like them*). Thus they cannot fully explain their negative attitude.

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

In the noninclusive group, many children did not provide any specific justifications of their willingness or unwillingness to become friends with a peer with disability – 24 participants (Table 26 and Table 27). It is important to stress, however, that noninclusive group students can see a possibility of making friends with peers with disabilities (46% – 24 children). It can be seen that the development of interpersonal relationships with children with SEN would take place at play and because one should become their friend (7 children), e.g.: *I'll play with them; I want to be friends with them; Mom said so* (that you

should be their friend – authors’ note). Three children also observe disabled peers’ loneliness (*They don’t have friends*), and one needs friends after all, so they want to have friends too. Two children declare their willingness to help peers with special needs, two make positive evaluations of their personality traits (*They’re good*) and their behavior (*They’re well-behaved*) (Table 26).

Table 26
Noninclusive Group Children’s Replies Regarding Justification of Their Willingness to Become Friends with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don’t know</i> (4); No answer (6)	10	19.0
Characteristics of becoming friends with peers with disabilities	<i>We’ll be playing together</i> (2); <i>I’ll play with them</i> (1); <i>It’ll be interesting</i> (1); <i>Mom said so</i> (1); <i>He’s my friend</i> (1); <i>I want to be friends with them</i> (1)	7	13.0
Empathy, peer’s perspective	<i>They don’t have friends</i> (1)	1	2.0
	<i>They need friends</i> (1); <i>They want to have friends too</i> (1)	2	4.0
Help	<i>You should help them</i> (1); <i>I want to help</i> (1)	2	4.0
Positive evaluation	<i>They’re good</i> (1); <i>They’re well-behaved</i> (1)	2	4.0
Total		24	46.0

Note. Number of NGr students = 52.

Table 27
Noninclusive Group Children’s Replies Regarding Justification of Their Unwillingness to Become Friends with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	No reply (12); <i>I don’t want to</i> (2)	14	26.9
Unwillingness on the grounds of impairments	<i>They’re handicapped</i> (1); <i>They don’t know how to walk</i> (1); <i>They don’t hear</i> (1); <i>I’ll fall ill too</i> (2)	5	9.6
Negative evaluation of people with disabilities	<i>They’re weird</i> (1); <i>They’re terrible</i> (1); <i>I’m scared of them</i> (2); <i>I don’t like them</i> (5)	9	17.5
Total		28	54.0

Note. Number of NGr students = 52.

Underlying some evaluations are negative stereotypes about people with disabilities: *They're terrible; They're weird; I'm scared of them; I don't like them* (9 children) (Table 27). Students also point directly to disability as an impediment to becoming friends (5 children): *They're handicapped; They don't know how to walk; They don't hear; I'll fall ill too*. These statements show negative emotional attitudes, insecurity, and fear about engaging in interactions with people with disabilities.

A quantitative comparative analysis (SPSS Chi-square tests) of the answers to the question about becoming friends with a peer with disability given by participants in both groups showed statistically significant differences of $p < .001$ in favor of participants in the inclusive group. Students in the inclusive group would engage in friendly relationships with peers with special needs significantly more frequently compared to students in the non-inclusive group.

3.2.3.5. INVITING A PEER WITH DISABILITY TO A BIRTHDAY PARTY

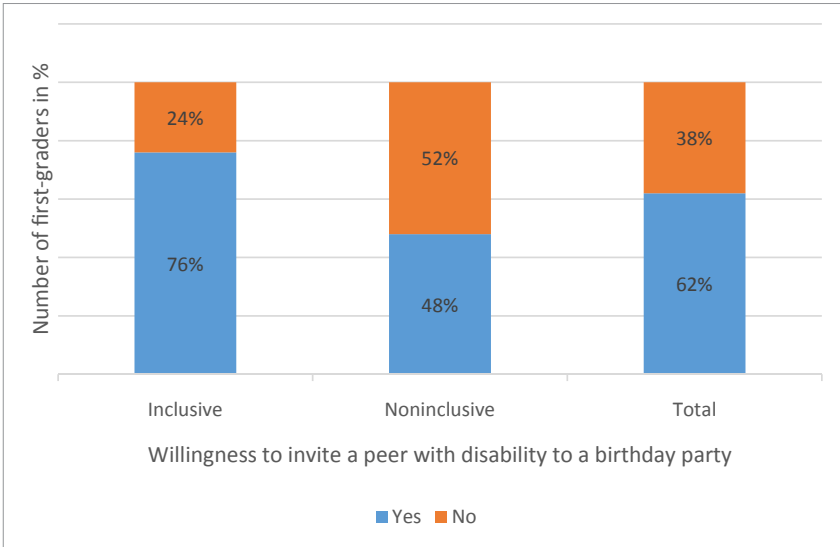
Analysis of all first-graders' answers to the question whether they would invite a girl or a boy with disability to their birthday party shows a prevalence of positive answers (*yes*) – 62% of the participants (Chart 10).

In the inclusive group, 76% of the children express their willingness to invite a peer with disability to their birthday party; in the noninclusive group – less than half of the children (48.1%). Detailed distribution of results with the number of participants is shown in Table 28.

Nearly one fifth of the students in the inclusive group (12 children) would not invite a friend with disability to their birthday party even though they are in the same class. In the noninclusive group, 27 students (51.9%) would not do that either. This is probably an abstract situation for them, as they do not know children with disabilities and so are afraid to invite a stranger to their birthday party, let alone if he or she has some challenges in addition. In total, 39 children among the 102 participants, that is, more than one third of all participants (38%), have a negative attitude to inviting a peer with disability to their birthday party. The remaining participants – 63 students (62%) – declare their readiness to celebrate their birthday together with a friend with disability.

Chart 10

Children’s Position Regarding Inviting a Peer with Disability to Their Birthday Party Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

Table 28

Inviting a Peer with Disability to a Birthday Party and the Size of the Groups

Group		Birthday party		Total
		Yes	No	
Inclusive	Number	38	12	50
	%	76.0	24.0	100.0
Noninclusive	Number	25	27	52
	%	48.1	51.9	100.0
Total	Number	63	39	102
	%	61.8	38.2	100.0

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Students in the inclusive group explain why they would invite a friend with disability to their birthday party in the following way: *We’re friends; He/she’s my friend; I like her* (16 children) or *I’ll invite everyone* (4 children). Such answers

were given by 42% of the inclusive group participants. They also make predictions about the party's atmosphere: *it will be fun; it will be very nice* (20% – 10 children). Nondisabled students treat their peers with SEN as their regular classmates (*I'll invite everyone*). They also express their personal evaluations – *I like her*, that is why they will invite their friend to their birthday party.

Table 29

Inclusive Group Children's Replies Regarding Justification of Their Willingness to Invite a Peer with Disability to Their Birthday Party

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't know</i> (1)	1	2.0
Feelings associated with an invitation to a birthday party	<i>We'll be enjoying ourselves</i> (1); <i>We'll be having fun</i> (2); <i>it will be fun</i> (5); <i>to spend time together</i> (2)	10	20.0
Empathy, peer's perspective	<i>He/they'll have fun</i> (4); <i>He'll enjoy himself</i> (1)	5	10.0
Positive evaluation	<i>I'll invite everyone</i> (4); <i>We're friends/ He's my friend</i> (16); <i>I like her</i> (1)	21	42.0
Caregivers' attitude	<i>If my parents let me</i> (1)	1	2.0
Total		38	76.0

Note. Number of IGr students = 50.

Table 30

Inclusive Group Children's Replies Regarding Justification of Their Unwillingness to Invite a Peer with Disability to Their Birthday Party

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't want to</i> (2); <i>I don't know</i> (1); <i>No reply</i> (2)	5	10.0
Unwillingness on the grounds of impairments	<i>They don't walk</i> (2); <i>My parents will fall ill</i> (1)	3	6.0
Caregivers' attitude	<i>Mom will be upset</i> (1); <i>My parents don't like them</i> (1)	2	4.0
Negative evaluation	<i>He's not my friend</i> (1)	1	2.0
Other	<i>He doesn't know where I live</i> (1)	1	2.0
Total		12	24.0

Note. Number of IGr students = 50.

Five students in the inclusive group were not able to justify their negative answers. The others' answers show their concern about their caregivers' attitude (*Mom will be upset; My parents don't like them*) and about their peers' disability as an impediment to inviting them to their birthday party (*They don't walk; My parents will fall ill*) (Table 30). Two children said they would not invite a peer with SEN to their birthday party because: *He's not my friend* (1 person) and *He doesn't know where I live* (1 person).

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

In the noninclusive group, more than half of the children (30 out of 52 participants, that is, approximately 58%) did not provide justification for their positive answer (Table 31) or negative answer (Table 32) concerning their inviting a peer with disability to their birthday party. The most frequent answers to the question: *Why would you/would you not invite a peer with disability to your birthday party?* were: *I don't know; I want to invite them or Just because; I don't want to* or children did not answer at all, lowering their heads. This reflects their lack of knowledge and experience of direct interactions with peers with disabilities. However, a positive or negative generalized, nonconscious attitude to peers with SEN is already visible.

Out of the 25 students in the noninclusive group (48.1%) who would invite a peer with disability to their birthday party, 15 children justify their decision (Table 31). They explain it in the following way: *They're my friends; I like them* (8 children). Two children would invite a peer with disability to their birthday party and make sure he or she has a good time. Two students would invite all their classmates to their birthday party, which means that they see children with disabilities just as they see other classmates.

Out of the 27 noninclusive group children who gave a negative answer, only nine provided justification. Their main concern is their caregivers' decision and they anticipate that *Grandma won't let me; Mom will be upset; My parents will be upset* (7 children) if they invite a peer with disability to their birthday party. Presumably, their families do not talk about people with disabilities and children think that a peer with disability is so "different" and "strange" that their caregivers will get angry at them if they invite such a peer to their birthday party.

Table 31

Noninclusive Group Children's Replies Regarding Justification of Their Willingness to Invite a Peer With Disability to Their Birthday Party

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't know</i> (9); No reply (1)	10	19.2
Empathy, peer's perspective	<i>They'll enjoy themselves</i> (2); <i>They'll have fun</i> (1)	3	5.8
Positive evaluation	<i>I'll invite everyone</i> (1); <i>I want to invite them</i> (2); <i>I like them</i> (1); <i>They're my friends</i> (7) <i>There will be lots of kids</i> (1)	12	23.1
Total		25	48.1

Note. Number of NGr students = 52.

Table 32

Noninclusive Group Children's Replies Regarding Justification of Their Unwillingness to Invite a Peer with Disability to Their Birthday Party

Categories	Detailed answers	Frequency	Percent
No justification	<i>Just because</i> (8); <i>I don't know</i> (2); No reply (8)	18	34.6
Unwillingness on the grounds of impairments	<i>They don't walk</i> (1)	1	1.9
Caregivers' attitude	<i>Grandma won't let me</i> (1); <i>Mom/my parents will be upset</i> (6)	7	13.5
Negative evaluation of people with disabilities	<i>I don't want to be their friend</i> (1)	1	1.9
Total		27	51.9

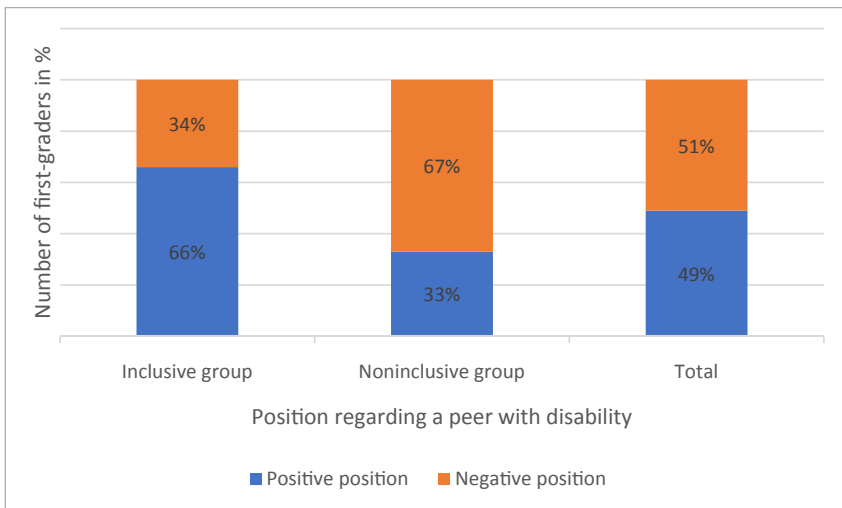
Note. Number of NGr students = 52.

A quantitative comparative analysis (SPSS Chi-square tests) of the answers to the question about inviting a peer with disability to a birthday party given by participants in both groups showed statistically significant differences of $p < .01$ between the inclusive group and the noninclusive group. Students in the inclusive group provided positive answers significantly more frequently, thus showing a more favorable attitude to peers with disabilities than students in the noninclusive group.

3.2.3.6. DIRECT EVALUATIONS OF PEERS WITH DISABILITIES

Nondisabled students expressed their direct attitude to peers with disabilities in terms of “I like her/him – I dislike her/him” statements. Each participant was asked: *Do you like her/him?* Prior to asking the question, the researchers talked with each participant about children with disabilities; that is why the phrase “with disabilities” was not included in the question. Analysis of participants’ answers shows that positive and negative evaluations are distributed almost evenly with a small prevalence of negative evaluations – 49% and 51% respectively (Chart 11).

Chart 11
Children’s Position Regarding the Question if They Like Peers with Disabilities Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr students = 50, number of NGr students = 52, total N = 102.

Detailed distribution of results with the number of participants is shown in Table 33. In the inclusive group, 17 students (34%) said they did not like their peers with disabilities and 33 students (66%) made a positive evaluation of their peers with SEN. Noninclusive group results are very unfavorable to children with disabilities, as 67.3% of the participants (35 children) say they do not like children with disabilities; only 32.7% (17 students) have a positive

perception of children with disabilities. Let us have a closer look at the justifications provided by nondisabled students in both groups for their evaluations. Their answers were organized into the following categories: a) no explanation; evaluation on the grounds of b) impairments and c) disabled peers' personality traits; d) emotional background in interactions with peers with disabilities; and e) possibility/nature of peer relationships.

Table 33

Evaluation of Peers with Disabilities in Terms of "I Like Her/Him – I Dislike Her/Him" and the Size of the Groups

Group		I like her/him		Total
		Yes	No	
Inclusive	Number	33	17	50
	%	66.0	34.0	100.0
Noninclusive	Number	17	35	52
	%	32.7	67.3%	100.0
Total	Number	50	52	102
	%	49.3	50.7	100.0

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Students in the inclusive group make positive evaluations of their peers with disabilities for their personality traits above all, and most of their answers have a positive emotional charge (Table 34). They express positive descriptions of children with SEN as people (*They're good; They're well-behaved*) and as the subject of interaction (*She doesn't walk but is smart; She's cheerful; They're interesting; It's interesting to be with them*) (23 children). Their statements also contain the affective component (*I want him to get well*) and the dispositional component (*We're friends; He's my friend*) (5 children).

Table 34
Inclusive Group Children's Positive Answers to the Question if They Like Their Peers with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don't know</i> (2); No reply (1)	3	6.0
Evaluation on the grounds of impairments (cognitive component)	-	0	.0
Characteristics of peers with disabilities as people (cognitive component)	<i>She doesn't walk but is smart</i> (1); <i>They're well-behaved</i> (7); <i>He/she's cheerful</i> (4); <i>She's good/They're good</i> (7); <i>They're good and smart</i> (1); <i>They're interesting</i> (2)	22	44.0
Emotions in interactions with peers (affective component)	<i>I want him to get well</i> (1); <i>It's interesting to be with them</i> (1)	2	4.0
Possibility/nature of peer relationships (dispositional component)	<i>He'll be my friend</i> (1); <i>He's my friend</i> (3); <i>They need to be taught</i> (1); <i>You should respect her</i> (1)	6	12.0
Total		33	66.0

Note. Number of IGr students = 50.

Some students do not like their peers with SEN because: *He doesn't speak; He doesn't walk; They're drooling* (14 children) (Table 35). Two children say that *He's bad* and that *They take crayons without asking*. What matters to students is language efficiency, physical fitness, appearance, and personality traits. Their peers with SEN are unfit, do not look nice or behave well and therefore are disliked by nondisabled students (cognitive component). Some children already formed a generalized negative evaluation of people with disabilities (6 children) and say: *I don't like ill people* (1); *I don't like handicapped people* (1); *I don't like them* (4). Answers provided by inclusive group students along with the cognitive, affective, and dispositional components are presented in Table 36.

Table 35

Inclusive Group Children's Negative Answers to the Question if They Like Their Peers with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	No reply (1)	1	2.0
Evaluation on the grounds of impairments (cognitive component)	<i>I don't like children who don't walk (4); He keeps falling down all the time (1); He doesn't speak (1); He doesn't speak or answer (1); They're drooling (1); I don't like ill people (1); I don't like hand-capped people (1); I don't like them (4)</i>	14	28.0
Characteristics of peers with disabilities as people (cognitive component)	<i>He's bad (1); They take crayons without asking (1)</i>	2	4.0
Emotions in interactions with peers (affective component)	-	0	.0
Possibility/nature of peer relationships (dispositional component)	-	0	.0
Total		17	34.0

Note. Number of IGr students = 50.

Table 36

Inclusive Group Students' Answers to the Question Why They Like or Dislike Their Peers with Disabilities Along with the Cognitive, Affective, and Dispositional Components

Component	Answer categories	Positive description	Negative description
Cognitive	Knowledge of disability	<i>She doesn't walk but is smart</i>	<i>They can't walk; He doesn't speak</i>
	Interaction subject's description	<i>He's good; She's cheerful; They're well-behaved; They're interesting; They're smart</i>	<i>He's handicapped; They're drooling; He's bad; They take crayons without asking</i>
Affective	Emotional response	<i>I want him to get well; It's interesting to be with them</i>	<i>I don't like ill people; I don't like handicapped people; I don't like them</i>
Dispositional	Relationship, attitude	<i>We're friends; He'll be my friend; You should respect them; They need to be taught</i>	<i>He keeps falling down all the time; They can't walk; He doesn't speak or answer</i>

Note. Number of IGr students = 50.

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Every fourth student in this group (13 children, 25%) cannot justify his or her answer, eight students (15.4%) say nothing, and five students (9.6%) say that they do not know why they like or dislike peers with disabilities (Table 37 and Table 38). One third of the students (17 children, 32.7%) give a positive answer to the question (Table 37). They justify their position with disabled peers’ positive traits: *They’re good* (5 children), *They’re well-behaved* (2 children), *They’re pretty* (1 child). One child says: *He’s my friend*.

Two thirds of the children in the noninclusive group (35 children, 67.3%) say they do not like peers with disabilities (Table 38). Ten participants make generalized negative evaluations of people with disabilities: *I don’t like them; I don’t like ill people; They’re not pretty*. Two say: *They’re handicapped*. A negative image of people with disabilities is clearly visible in these statements. Thirteen children point out missing limbs, legs in particular (*I don’t like children without legs*), and describe the resulting functional disability: *They can’t walk*, and also: *They can’t speak* and *They can’t play*. One child expresses his negative attitude, saying: *I hate them*; two children are afraid of people with disabilities (*I’m scared of them*).

Students’ answers along with the cognitive, affective, and dispositional components are presented in Table 39.

Table 37
Noninclusive Group Children’s Positive Answers to the Question if They Like Peers with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	<i>I don’t know</i> (5); No reply (3)	8	15.4
Evaluation on the grounds of impairments (cognitive component)	-	0	.0
Characteristics of peers with disabilities as people (cognitive component)	<i>They’re good</i> (5); <i>They’re well-behaved</i> (2); <i>They’re pretty</i> (1)	8	15.4
Emotions in interactions with peers (affective component)	-	0	.0
Possibility/nature of peer relationships (dispositional component)	<i>He’s my friend</i> (1)	1	1.9
Total		17	32.7

Note. Number of NGr students = 52.

Table 38
Noninclusive Group Children's Negative Answers to the Question if They Like Peers with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	No reply (5)	5	9.6
Evaluation on the grounds of impairments (cognitive component)	<i>I don't like them (5); I don't like ill people (2); They're not pretty (2); I don't like children without legs (3); They don't have legs (5); They can't walk (4); They don't have arms (1); They can't speak (2)</i>	24	46.2
Characteristics of peers with disabilities as people (cognitive component)	<i>They're handicapped (2)</i>	2	3.8
Emotions in interactions with peers (affective component)	<i>I'm scared of them (2); I hate them (1)</i>	3	5.8
Possibility/nature of peer relationships??? (dispositional component)	<i>They can't play (1)</i>	1	1.9
Total		35	67.3

Note. Number of NGr students = 52.

Table 39
Noninclusive Group Students' Answers to the Question Why They Like or Dislike Peers with Disabilities Along with the Cognitive, Affective, and Dispositional Components

Component	Answer categories	Positive description	Negative description
Cognitive	Knowledge of disability	-	<i>They don't have legs; They don't have arms; They can't walk; They can't speak</i>
	Object description	<i>They're good; They're well-behaved; They're pretty</i>	<i>They're not pretty; They're handicapped</i>
Affective	Emotional response	<i>It's bad when you don't have a leg</i>	<i>I hate them; I'm scared of them; I don't like children without legs; I don't like ill people; I don't like them</i>
Dispositional	Relationship, attitude	<i>He's my friend</i>	<i>They can't play; They can't walk; They can't speak</i>

Note. Number of NGr students = 52.

Noninclusive group students' answers contain mainly descriptions of external characteristics associated with disability and express negative emotions relating to people with disabilities to a greater extent (Table 39). In the inclusive group, students point to their disabled peers' external characteristics as well as to their personality traits and abilities. Their observations prove that they know children with SEN (*She doesn't walk but is smart or They're interesting*) and can make an objective evaluation of them. The affective component is positive and positive emotions predominate. Their statements show a clearly positive attitude to interactions: *We're friends; He'll be my friend; You should respect them; They need to be taught* (Table 36). In the noninclusive group, the dispositional component is significantly less expressed. This is presumably determined by the formed stereotype of people with disabilities as people who are not able to function in a social group because they do not have legs or arms, cannot speak, and of whom you should be afraid.

A comparative analysis of the results in both groups showed statistically significant differences of $p < .001$ in participants' answers in favor of the inclusive group (Table 40).

Are even potential interactions with peers with disabilities impossible for students in the noninclusive group? to test it, all participants were given the projective test Two Houses.

Table 40

Summary of Tests in the Statistical Analysis of Answers Given by Participants in the Inclusive Group and the Noninclusive Group: "I Like Them – I Dislike Them"

Tests	Value	df	Asymptotic significance (bilateral)	Exact significance (bilateral)	Exact significance (unilateral)
Pearson's chi-squared	14.197	1	.000	-	-
Continuity correction	12.743	1	.000	-	-
Likelihood ratio	14.551	1	.000	-	-
Fisher's exact test	-	-		.000	.000
Linear-by-linear association	14.058	1	.000	-	-
N of valid cases	102	-	-	-	-

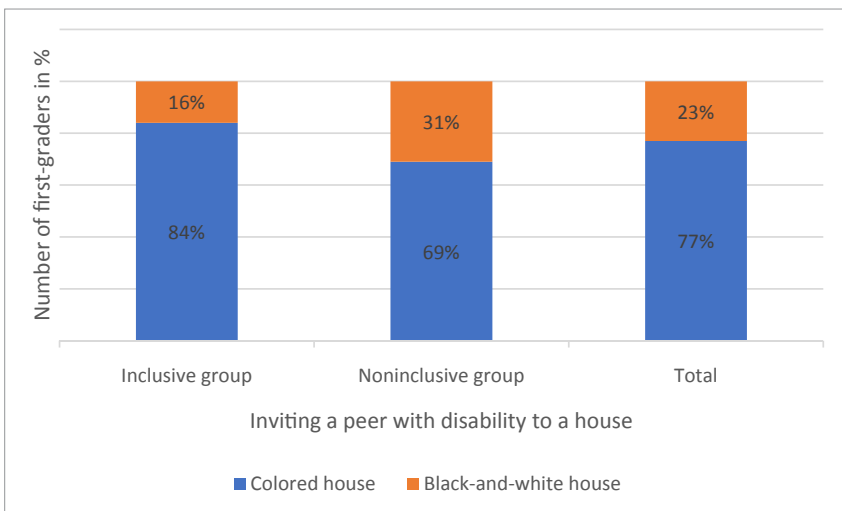
3.2.3.7. INVITING A PEER WITH DISABILITY TO A COLORED OR BLACK-AND-WHITE HOUSE – INDIRECT EVALUATION

The *Two Houses Test: A Colored House and a Black-and-White House* was used to explore nondisabled students' indirect evaluations of peers with disabilities as interaction partners. After the interview, each student was asked to point to the house he or she would invite a peer with disability to. They could choose a picture of a colored house or a picture of a black-and-white house (Appendix 2).

Children's choices split between the inclusive group and the noninclusive group are presented in Chart 12. It turns out that the vast majority of nondisabled students – regardless of the type of school attended – would invite a peer with disability to the colored house.

Chart 12

Children's Position Regarding Inviting a Peer with Disability to a House Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

Detailed distribution of results with the number of participants is shown in Table 41. Forty-two students (84%) in the inclusive group and 36 students (69.2%) students in the noninclusive group chose the colored house to invite

a peer with disability to. This shows that a substantial majority of participants (78 students, 76.5%) are ready (dispositional component) to spend time together with a girl or a boy with SEN in a nice place.

Table 41
Choosing a House for a Peer with Disability Split Between the Inclusive Group and the Control Group

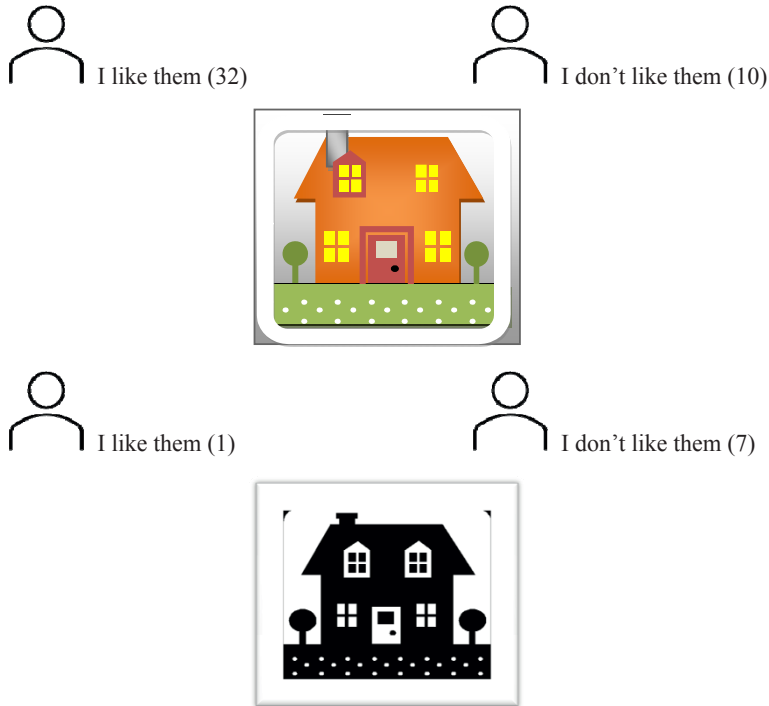
Group		House		Total
		Colored	Black-and-white	
Inclusive	Number	42	8	50
	%	84.0	16.0	100.0
Noninclusive	Number	36	16	52
	%	69.2	30.8	100.0
Total	Number	78	24	102
	%	76.5	23.5	100.0

The choice of the colored house is one of the indicators of disabled peers’ social attractiveness. Their learning and playing together with children with disabilities favors inclusive group children’s positive choices. It is then hardly surprising that, compared to the noninclusive group, more children in the inclusive group, that is children who have experience of interacting with peers with SEN, choose the colored house. Diagram 3 presents the choices made by students in the inclusive group along with their direct opinions about their peers with disabilities expressed earlier as “I like them – I dislike them” statements. Out of the 17 children who dislike their peers with SEN, ten would still invite them to the colored house, while seven would choose the black-and-white house.

The choices made by students in the noninclusive group are interesting to note. Despite the negative direct evaluation of peers with disabilities made by more than two thirds of the participants (35 children) (Table 33), a comparable number of participants (36 children) would invite a peer with disability to the nice house (Table 41). Twenty-three students said they disliked peers with disabilities first but then chose the warm-, gay-colored house to spend time with them there (Diagram 4). Therefore, it is reasonable to make a conservative assumption that their choice reveals their positive

Diagram 3

Choosing a House for a Peer with Disability by Children in the Inclusive Group Along with Their Direct "I Like Them – I Dislike Them" Evaluation



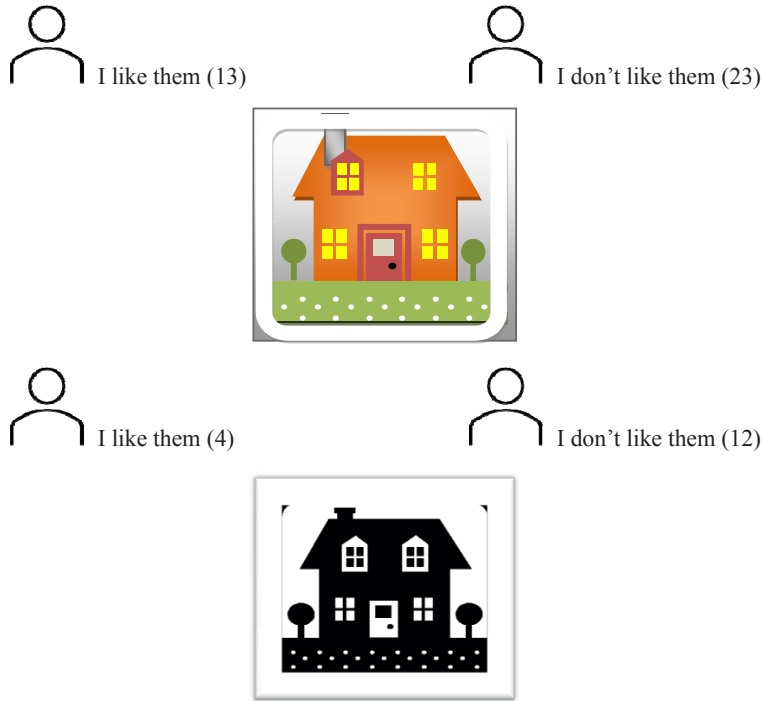
Source: Modified Clipart house

attitude and a chance for them to enjoy good relationships with friends with disabilities in the future (dispositional component). However, as many as twelve students out the 35 who made a negative evaluation of peers with disabilities still chose the black-and-white house for them. In addition, four children who made a positive evaluation of peers with disabilities first chose the black-and-white house then.

Comparison of the results in both groups did not show any statistically significant differences between the inclusive group and the noninclusive group in children's choice of the house for a peer with disability (Table 42). This gives hope that positive relationships will develop between nondisabled children and children with SEN when the inclusive education model is implemented in a school.

Diagram 4

Choosing a House for a Peer with Disability by Children in the Noninclusive Group Along with Their Direct “I Like Them – I Dislike Them” Evaluation



Source: Modified Clipart house

Table 42

Summary of Tests in the Statistical Analysis of Answers Given by Participants in the Inclusive Group and the Noninclusive Group: Choosing a Colored or Black-And-White House

Tests	Value	df	Asymptotic significance (bilateral)	Exact significance (bilateral)	Exact significance (unilateral)
Pearson's chi-squared	3.090	1	.079	-	-
Continuity correction	2.324	1	.127	-	-
Likelihood ratio	3.141	1	.076	-	-
Fisher's exact test	-	-	-	.103	.063
Linear-by-linear association	3.060	1	.080	-	-
N of valid cases	102	-	-	-	-

3.2.4. SOCIAL ATTRACTIVENESS LEVEL OF PEERS WITH DISABILITIES AS VIEWED BY FIRST-GRADERS IN AN INCLUSIVE SCHOOL AND IN A NONINCLUSIVE SCHOOL – HYPOTHESIS TESTING⁸

A seven-point scale of disabled peers' social attractiveness was developed. The scale was based on the evaluation of answers given by 102 nondisabled first-grade students regarding their behavior in real and potential interactions with a girl or a boy with disability. Depending on children's gender, they were asked about their behavior toward a girl or a boy with SEN; that is, female participants were asked about their behavior toward a girl with SEN, and male participants were asked about their behavior toward a boy with SEN. Different situational contexts were taken into consideration, in particular: 1) conversation, 2) play, 3) learning, 4) making friends, 5) invitation to a birthday party, 6) invitation to a colored or black-and-white house (indirect evaluation), and 7) direct "I like them – I dislike them" evaluation of peers with SEN. Each answer was given either 0 points or 1 point. Each student's score could range from 0 to 7 points.

The total number of points collected by individual participants is presented in Table 43.

Table 43

Social Attractiveness Intensity of a Peer with Disability – Aggregate Results of All First-Grade Students

Number of points	Number of children	Percentage of children
0	15	14.7
1	12	11.8
2	4	3.9
3	7	6.9
4	3	2.9
5	2	2.0
6	18	17.6
7	41	40.2
Total	102	100.0

⁸ Findings of research on Kazakh parents and children were presented also in Butabayeva, L., Kulesza, E.M., Autayeva, A., & Konysbayeva, A. (2017). Social attraction of first-grade pupils with disabilities by age-mates and their parents. *Man in India*, Vol. 95, No. 17, 573–585.

Out of the 102 students, as many as 40.2% (41 children) gave peers with disabilities very high attractiveness ratings, replying affirmatively to all seven questions, thus gaining the maximum number of points. By contrast, 14.7% of the participants (15 children) did not get any points, as they answered all the questions negatively. They would not invite a girl or a boy with disability to their birthday party and chose the ugly (black-and-white) house for her or him; in a word, they definitely dislike peers with disabilities. This was regarded as a very definite indication of these students’ lack of disposition to have a conversation, play, learn, or begin friendly relationships with peers with disabilities.

The distribution of results split between the inclusive group and the non-inclusive group (Table 44, Chart 13) shows a clear prevalence of children in the noninclusive school who gave peers with disabilities very low social attractiveness ratings – 12 participants had zero points (23.1%). In the inclusive group, three children did not want to have any contact with children with SEN. However, more than half of the students in this group, i.e., 27 children (54%), showed their full approval for their peers with disabilities, which is reflected in their collecting the maximum number of points (7 pts.). In the noninclusive group, disposition (willingness) to engage in interactions with peers with disabilities in various situational contexts was expressed by 14 children (26.9%).

Table 44
Distribution of Social Attractiveness of a Peer with Disability Intensity in the Inclusive Group and the Noninclusive Group (%)

Group	Social attractiveness of a peer with disability on a 0-7-point scale								Total
	0	1	2	3	4	5	6	7	
Inclusive	6.0	8.0	2.0	4.0	.0	2.0	24.0	54.0	100.0
Noninclusive	23.1	15.4	5.8	9.6	5.8	1.9	11.5	26.9	100.0
Total	14.7	11.8	3.9	6.9	2.9	2.0	17.6	40.2	100.0

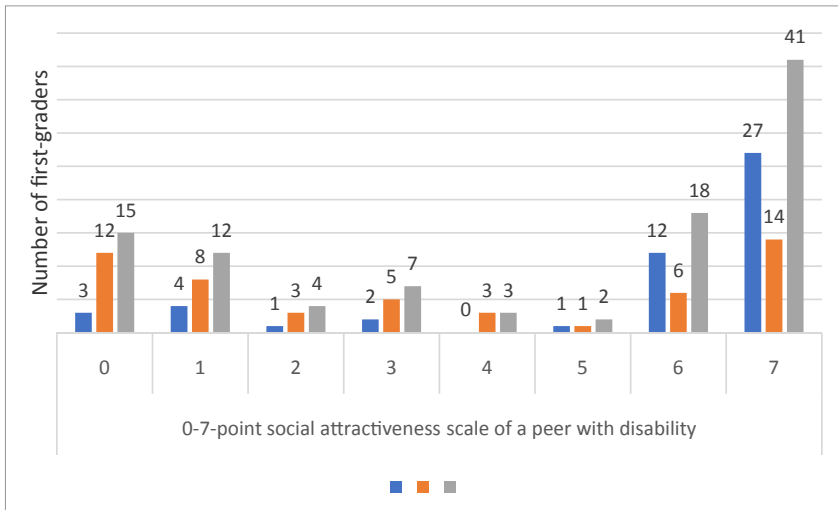
Note. Number of IGr students = 50, number of NGr students = 52, total N = 102.

Chart 13 shows an interesting phenomenon. There is a prevalence of low scores – 27 children with 0 points and 1 point, as well as high scores – 59 children with 6 and 7 points. The scores of the remaining participants (16 children) range from 2 points to 5 points. It seems that the majority of participants already have a formed position on people with disabilities – that is, their image

as interaction partners is either negative or positive. Some students are still hesitant and not sure if they would engage in interactions with peers with SEN in all situations discussed in this study.

Chart 13

Distribution of Social Attractiveness Intensity of a Peer with Disability and the Size of the Inclusive Group and the Noninclusive Group



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

SOCIAL ATTRACTIVENESS LEVEL OF A PEER WITH DISABILITY

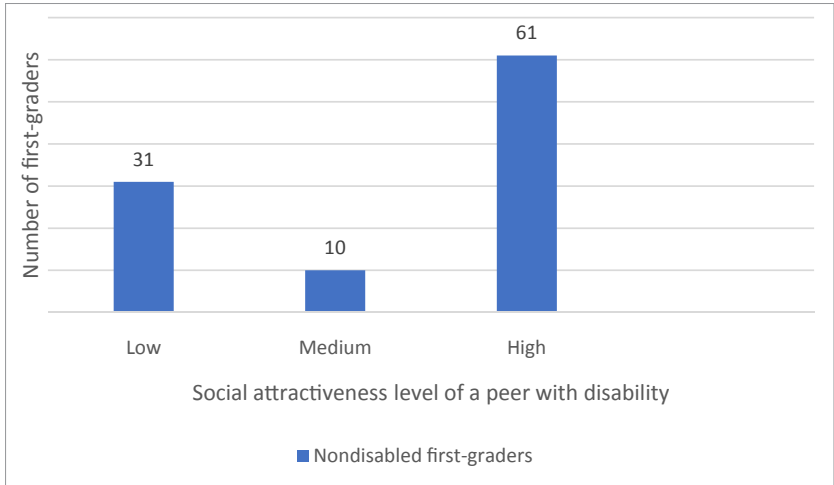
Three levels were adopted to reflect attractiveness intensity:

- low from 0 to 2 pts.;
- medium from 3 to 4 pts.;
- high from 5 to 7 pts.

The low, medium, and high levels that reflect the intensity of social attractiveness of a peer with disability as viewed by all participants are presented in Chart 14.

In total, 61 students (59.8%) rated highly the attractiveness of peers with SEN, and their scores ranged from 5 to 7 points. Every tenth student (10 children, 9.8%) had either 3 or 4 points, which shows that children with SEN are

Chart 14
Social Attractiveness Level of a Peer with Disability as Viewed by Nondisabled First-Grade Students



Note. Number of IGr students = 50, number of NGr students = 52, total *N* = 102.

Table 45
Social Attractiveness Level of Peers with Disabilities as Viewed by Students Split Between the Inclusive Group and the Noninclusive Group (%)

Group	Social attractiveness level			Total
	Low	Medium	High	
Inclusive (IGr)	16.0	4.0	80.0	100.0
Noninclusive (NGr)	44.2	15.4	40.4	100.0
Total	30.4	9.8	59.8	100.0

Note. Number of IGr students = 50, number of NGr students = 52, total *N* = 102.

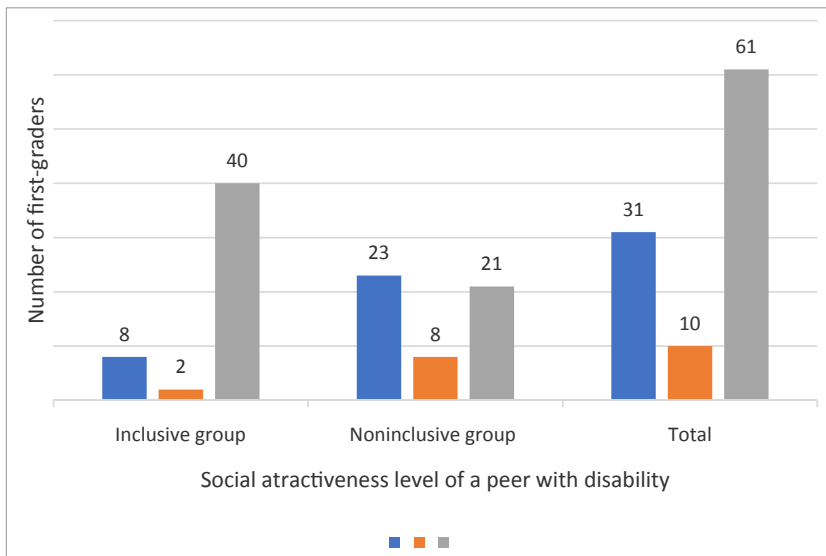
“moderately” attractive to them as friends. Every third participant (31 children, 30.4%) decided that he or she would not like to play, learn or make friends with peers with disabilities, as they are unattractive. Let us examine the results split between the inclusive group and the noninclusive group (Table 45, Chart 15).

A substantial majority of students in the inclusive group – as many as 80% (40 children) – consider their peers with disabilities as good companions in play and learning, and as friends or potential friends. They do not

highlight their disabilities and simply treat them in the same way they treat other peers. In the noninclusive group, 40.4% (21 children) share a similar approach. The medium level of disabled peers' social attractiveness was found in both groups: only two children (4%) in the inclusive group and eight children (15.4%) in the noninclusive group. The remaining students gave peers with disabilities low attractiveness ratings: 16% (8 children) in the inclusive group and 44.2% (23 children) in the noninclusive group.

Chart 15

Social Attractiveness Level of Peer with Disabilities as Viewed by Students and the Size of the Inclusive Group and the Noninclusive Group



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

The distribution of results (Chart 15) confirms the bipolarity of participants' attitudes toward children with disabilities in both groups; that is, children give them either high or low social attractiveness ratings. This is particularly visible in the case of the noninclusive group, where the low and high levels of attractiveness are comparable: 44.2% and 40.4% respectively. There are few ratings between the two – eight children. Chart 15 presents this situation clearly and shows vast disproportions between both groups' answers.

It depicts the prevalence of the high level of attractiveness in the inclusive group, which signifies that the vast majority of children (80%) are oriented at developing friendly relationships and positive emotional attitudes toward their peers with disabilities. Comparison of disabled peers' social attractiveness indicators in both groups with the use of SPSS Chi-square tests shows statistically significant differences of $p < .001$ (Table 46).

Table 46
Tests in Statistical Analysis of Social Attractiveness of Peers with Disabilities in the Inclusive and Noninclusive Groups

Tests	Value	df	Asymptotic significance (bilateral)
Pearson's chi-squared	16.743	2	.000
Likelihood ratio	17.405	2	.000
Linear-by-linear association	14.248	1	.000
N of valid cases	102	-	-

Therefore, it is reasonable to unequivocally conclude that the social attractiveness of peers with disabilities is significantly higher as viewed by IGr students compared to NGr students. Qualitative and quantitative analysis of the results confirms the first hypothesis that children with disabilities are more attractive as social partners to nondisabled students in inclusive education than to students in noninclusive education.

3.2.5. DISCUSSION OF THE FINDINGS AND SUMMARY

Nondisabled Kazakh children who learned together with children with disabilities made friends with them, described them in positive terms, and treated them as play and learning partners. They gave their peers with SEN high attractiveness ratings (80% of the children in the inclusive group). The findings of this study are consistent with reports by such Polish authors as: D. Al-Khamisy (2006, 2013), D. Kornaś (2004), and B. Oszustowicz (2004).

However, many other Polish and foreign studies conducted at the beginning of the 21 century reveal relatively low attractiveness of preschoolers and

students with disabilities to nondisabled children even when they attend mainstream schools together, which is indicated by: a) a lowly position in class (Bąbka, 2003; Chodkowska, 2004; Ćwirynkało, 2003; Kulesza, 2002; Nowicka & Ochonczenko, 2004) and b) isolation and rejection, which – according to different authors – constitute: 50% at the preschool education stage (Janion, 2001), 38.1% at the early childhood education stage (Ćwirynkało, 2003), and more than 60% in elementary school (Chodkowska, 2004). At the same time, authors stress particularly unfavorable attitudes toward students with intellectual disabilities (Chodkowska, 2004; Rudek, 2005) and less negative attitudes to students with motor disabilities and with hearing and visual impairments (Szabała, 2010). Also French authors (Vignes et al., 2009) point out the negative attitudes toward students with intellectual disabilities attending special classes within mainstream schools. In the Kazakh inclusive school where the study was conducted, there were only students with motor disabilities and with visual and hearing impairments. Therefore, it seems that the attitudes toward and evaluations of peers with disabilities revealed in this study confirm the findings of Polish researchers in some measure. Nevertheless, the integration process in the inclusive school in Astana is worth investigating more thoroughly to find the determinants of high social attractiveness ratings for students with disabilities there.

Students in the noninclusive school described children with SEN in a positive way less of ten than their peers in the inclusive school. Their knowledge was more limited, many did not answer the questions about people with disabilities. Others described people with disabilities mainly in a negative way, which was reflected in their negative attitude to interactions with peers with disabilities. A study investigating the determinants of attitudes toward children with disabilities was conducted in Toulouse on a group of 1135 students aged 10 years 8 months to 15 (Vignes et al., 2009). It was found, among other things, that positive attitudes depended on having a friend with disability and knowledge of disabilities passed on by parents and the media. The attitudes of Kazakh children with a limited knowledge of disabilities were more negative compared to children with greater knowledge. Our findings are then consistent with the reports by the French authors cited above.

The longitudinal study on the Polish people by A. Ostrowska (2015) revealed negative stereotypes and their exceptional perpetuation. Reports by other Polish researchers prove this phenomenon (Chodkowska et al., 2010;

Korzon, 2010; Kosakowski, 2010; Szabala, 2012). Arguably, negative stereotypes about people with disabilities are also present among the Kazakh people. Even though no publication on this topic was found, it is reasonable to suppose that stereotypes underlie the negative image of peers with disabilities among students in the noninclusive group.

The interrelationship between children's direct interactions with people with disabilities and their positive attitudes toward them is evidenced by most researchers around the world. This interrelationship is particularly visible when interactions with people with disabilities are frequent and when schools implement integrated education programs (Al-Khamisy, 2013; Anke de Boer et al., 2014; Armstrong, 2016; Cairns & McClatchey, 2013; Diamond & Carpenter, 2000; Georgiadi et al., 2012; Kyong-Ah Kwon et al., 2017). Therefore, there are strong arguments for concluding that attitudes to peers with disabilities depend on personal experiences and intentional interventions. If people with disabilities are present in preschool and school settings, interacting with them becomes a part of everyday life, children learn to coexist together, and their attitudes to people with disabilities are usually positive.

The results of the *Two Houses: A Colored House and a Black-and-White House* test show that although most of the children in the noninclusive school did not have any direct contact with peers with disabilities, they still saw a possibility of potential interactions. This is consistent with A. Soroka-Fedorczuk's research (2007), who found that many children at the early childhood education stage presented a positive attitude to children with disabilities despite not knowing any.

Based on the study, it is possible to draw a number of conclusions regarding the perception and evaluation of peers with disabilities by first-grade students in Kazakh schools in various social situations:

1. Students in the inclusive group are observed to have a strongly expressed positive attitude to children with SEN regarding conversation, play, learning, making friends, and invitation to a birthday party; positive opinion about peers with SEN expressed directly and indirectly prevails. Only a scatter of students exhibit a negative attitude to their peers with disabilities.
2. Children that learn with their peers with disabilities give them significantly higher attractiveness ratings as compared to children in the non-

inclusive group, which confirms the presumption about a more positive attitude to peers with SEN among students in the inclusive school as compared to students in the noninclusive school.

3. The prevalence of nondisabled children's positive attitudes to interactions with children with disabilities in the inclusive group is determined by their greater knowledge of disability (cognitive component), their experience of interactions with peers with disabilities that are full of positive emotions (cognitive-dispositional and affective components), and orientation toward interactions (dispositional component).
4. In potential social interactions (conversation, play, learning, friendship, birthday party) with peers with disabilities, students in the noninclusive group split into two almost equal groups: those who would engage in interaction (high peer attractiveness level) and those who do not want any contact with peers with disabilities (low attractiveness level). These participants have an already formed positive or negative image of people with disabilities. Only a small percentage of students do not express an explicit attitude toward interactions with peers with disabilities (medium attractiveness level).
5. The impact of negative stereotypes is manifest in the noninclusive group students' answers.
6. The majority of participants in the noninclusive group dislike people with disabilities and this constitutes a significant difference between the two groups.
7. The vast majority of noninclusive group students show willingness to share the colored house with peers with SEN. No statistically significant differences between students in the inclusive and noninclusive groups were found in this area. It was established then that paradoxically, despite the lack of or little contact with children/people with disabilities and their general unfavorable image, more than two thirds of the Kazakh students (69%) manifested a certain (potential) disposition to meet peers with SEN in a nice, colored place/house that was neither their school or home.

3.3. SOCIAL ATTRACTIVENESS OF PEERS WITH DISABILITIES AS ASSESSED BY KAZAKH PARENTS OF NONDISABLED FIRST-GRADE STUDENTS IN INCLUSIVE AND NONINCLUSIVE EDUCATION⁹

3.3.1. PARENTS' KNOWLEDGE OF DISABILITY (CC)¹⁰

First-graders' parents (102 people) were given a questionnaire with open-ended and closed-ended questions about, among other things, their knowledge of different disabilities and the sources of this knowledge as well as about their contact with children with disabilities, where they got to interact with them or sources of information about children with disabilities (see Appendix 3).

KNOWLEDGE OF DISABILITY TYPES

Respondents' answers were organized into categories reflecting typical disability types listed in classifications, starting with those that were mentioned most frequently by them:

- people with motor disabilities,
- people with hearing impairments,
- people with visual impairments,
- people with speech disorders,
- people with intellectual disabilities,
- people with physical disabilities, and
- others (Chart 16).

The “others” category includes one answer: *orphans*, given by a mother of a child in the noninclusive group. The answers of two respondents in this group: *They don't have legs or arms* and *They don't have legs* were included in the “people with physical disabilities” category. By contrast, the “people with

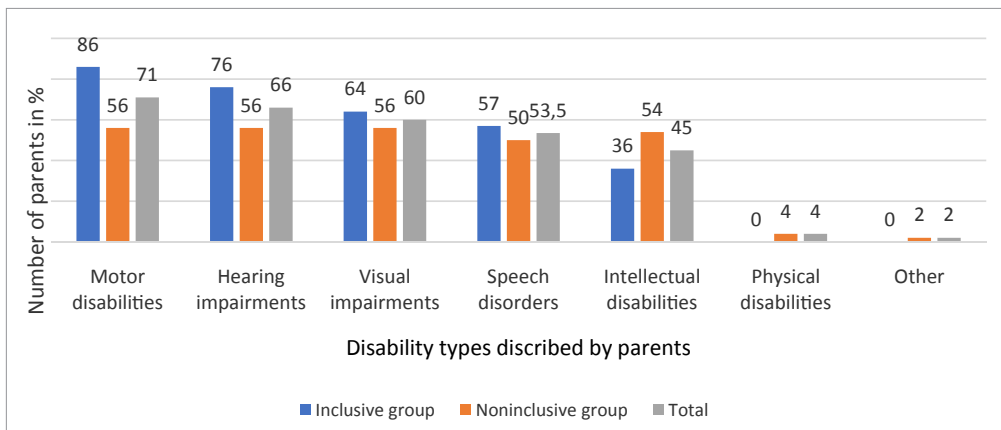
⁹ Portions of research on Kazakh parents and children were published in Butabayeva, L., Kulesza, E. ., Autayeva, A., & Konysbayeva, A. (2017): Social attraction of first-grade pupils with disabilities by age-mates and their parents. *Man in India*, Vol. 95, No. 17, 573–585.

¹⁰ Similar analyses were presented in Kulesza, E.M. & Butabayeva, A.L. (2017): the disabled in conversations between Kazakh parents and their children. In *Interdisciplinary Contexts of Special Pedagogy*, No. 16, 205–227.

motor disabilities” category includes answers that describe disability in a functional way, e.g.: *They can't walk; They can't move around like others; They live in wheelchairs*. In total, 71% of the respondents mentioned motor disabilities and they were listed most frequently. Hearing impairments were mentioned almost as frequently – 66%, while visual impairments a little bit less of ten – 60%. Every second participant described speech disorders (53.5%), less than half listed intellectual disabilities (45%). Comparison of the answers given by IGr parents and NGr parents reveals that IGr parents identified disability through functional abilities such as moving around and sensory reception, so they mentioned motor disabilities (86% IGr, 56% NGr), hearing impairments (76% IGr, 56% NGr), and visual impairments (64% IGr, 56% NGr) most frequently. They listed intellectual disabilities considerably less frequently than NGr parents: 36% and 54% respectively.

Chart 16

Disability Types Identified Based on the Accounts of Parents (Cognitive Component)



Note. Number of IGr parents = 50, number of NGr parents = 52, total $N = 102$.

This seems to be connected with IGr parents' experience of interactions with students with disabilities in the school their children attend, as there are mainly children with motor disabilities and with visual and hearing impairments in inclusive classes there.

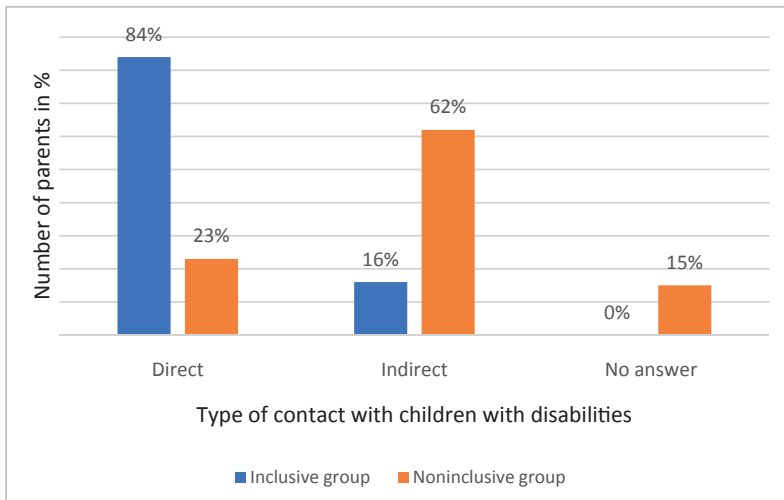
SOURCES OF DISABILITY KNOWLEDGE

Parents’ written accounts show that they learn about disability mainly from: 1) their children’s educational setting, 2) the mass media, 3) their personal observations and experiences as well as 4) their family, and 5) their local community. For IGr parents, their children’s educational setting comes first, the mass media – second. NGr parents gain information about disability mainly from the mass media, their personal observations and experiences come second. Some NGr respondents could not determine the sources of their disability knowledge.

DIRECT OR INDIRECT CONTACT WITH CHILDREN WITH DISABILITIES

Parents were also asked if they had had any direct or indirect contact with children with disabilities (if they had seen, heard of or read about children with disabilities), where they had interacted with them or what their source of information was. Respondents’ answers are presented in Chart 17 and Chart 18.

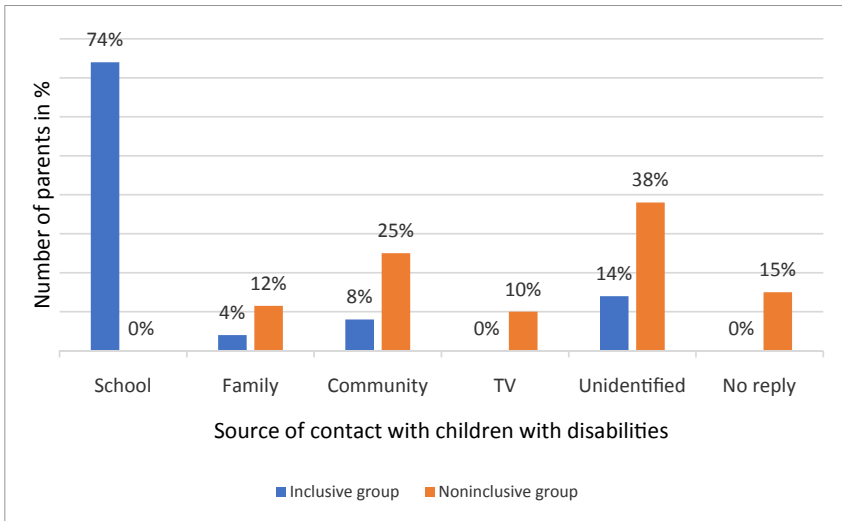
Chart 17
Parents’ Direct and Indirect Contact with Children with Disabilities Split Between the Inclusive Group and the Noninclusive Group (Cognitive and Dispositional Components)



Note. Number of IGr students = 50, number of NGr students = 52, total N = 102.

Chart 18

Parents' Source of Contact with Children with Disabilities Split Between the Inclusive Group and the Noninclusive Group (Cognitive and Dispositional Components)



Note. Number of IGr students = 50, number of NGr students = 52, total $N = 102$.

All IGr parents had contact with children with disabilities. Most of them listed direct contact – 84%, the remaining ones (16%) – indirect contact. Eight NGr parents (15%) did not give any answer. Only every fifth parent in this group (23% – 12 people) had direct contact with children with disabilities, and 62% (32 people) either heard of or saw a child with disability but of ten could not identify the place of contact or the source of information (38% – 17 people, Chart 18). A quarter of the NGr respondents (25%, 13 people) saw a child with disability in the street, at their neighbors or friends; 12% (6 people) had contact with a child with SEN within their immediate or extended family; 10% (5 people) saw a child with disability on television. This shows that many NGr parents do not have experience of direct contact with children with disabilities, and their knowledge of such children as interaction partners does not seem to be very extensive.

As many as 74% of the IGr parents (37 people) met a child with disability in the inclusive school, 12% (6 people) – within their family (child with disability as a family member) and in their local community (their friends' child). It is curious that as many as 14% (7 people) could not determine either the place of

contact or the source of information about children with disabilities. This means that, firstly, not all IGr parents saw students with disabilities in their children's school; secondly, they probably did not participate in information meetings about shared education for nondisabled students and students with special needs.

A comparative analysis of both groups' answers showed that IGr parents' experience of interactions with children with SEN was significantly more extensive as compared to NGr parents' experience ($p < .01$), and the main source and place of those interactions was their children's inclusive school.

3.3.2. CONVERSATIONS PARENTS HAVE WITH THEIR NONDISABLED CHILDREN ABOUT DISABILITIES (CC)¹¹

Parents were asked to provide information regarding their conversations with their children about people with disabilities (Appendix 3). Out of the 102 respondents, 69 (68%) declared that they had such conversations, 16 (16%) answered in the negative, and 17 (17%) did not answer the question at all (Chart 19).

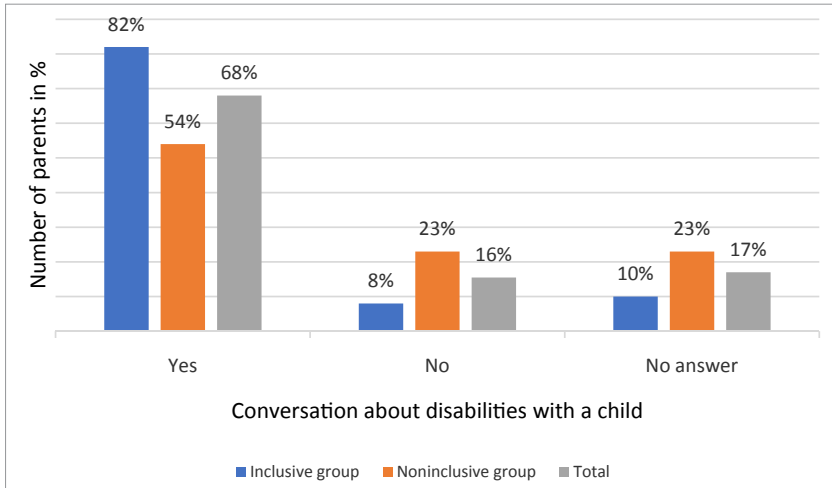
Comparison of the results shows that the topic of disability comes up significantly more frequently in IGr parents' conversations (82% – 41 people) as compared to NGr parents' conversations (54% – 28 people). However, every fifth IGr parent (18% in total) either did not talk with his or her child about disability issues (8%) or did not answer the question (10%). In the noninclusive group, such respondents were much more numerous – almost half of the parents (46%), specifically: 12 people (23%) did not discuss disability issues with their children and 12 people (23%) did not answer the question.

Let us examine attitudes toward peers with disabilities that mothers and fathers shape in their children. The aim was to group the content of parents' conversations into the same subject areas that were distinguished following qualitative analysis of children's accounts. This was possible in the case of two central areas shared by both groups, that is: a) developing a fair attitude toward children with disabilities and b) developing a helping attitude. By contrast,

¹¹ Similar analyses were presented in Kulesza, E.M. & Butabayeva, A.L. (2017): the disabled in conversations between Kazakh parents and their children. In *Interdisciplinary Contexts of Special Pedagogy*, 16, 205–227 (Polish and English).

Chart 19

Conversations About Disabilities Parents Have with Their Children – Parents' Accounts



Note. Number of IGr parents = 50, number of NGr parents = 52, total $N = 102$.

a fear-driven attitude was expressed only by NGr parents. Also, qualitative analysis of parents' answers found two new categories: one shared by both groups (increasing knowledge and shaping the image of children with disabilities as special but the same nevertheless) and one characteristic of NGr parents only (shaping the image of one's own child as a healthy, normal person).

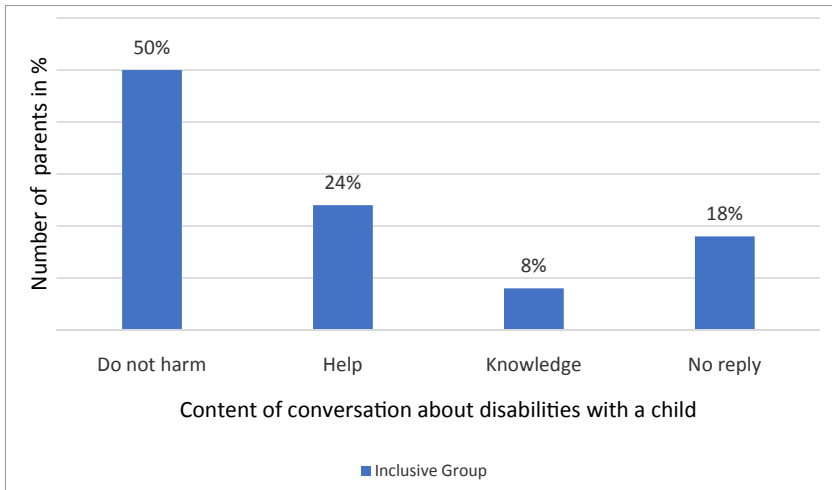
INCLUSIVE GROUP

IGr parents focus on three issues in their conversations with their children (Chart 20):

- 1) Developing a fair attitude toward children with disabilities (cognitive, emotional, and dispositional components). This is the aim of their conversations for 50% of the IGr parents (25 people). They tell their children: *Don't hurt them; They're ill, don't upset them* – 23 people; *You should treat them well* – 2 people. Parents' message says: Firstly, you should accept the presence of peers with disabilities in your community; secondly, you should be very careful and considerate when interacting with them, i.e., be sensitive because they are weak, ill, and disabled. An image of peers with disabilities as "different" is created.

Chart 20

Content of Parents-Children Conversations as Related by Parents of Inclusive Group
[Behavioral Component (Leading One), Cognitive Component, Emotional Component]



Note. Number of IGr parents = 50

- 2) Developing a helping attitude toward children with SEN (dispositional and emotional components) – 12 people (24%). Parents say: *You should help them* (5 people); *Help them* (7 people). Parents' message emerging from these statements could be interpreted in the following way: Be empathic, be ready to help, and help such children. An image of peers with disabilities as people needing help is created.
- 3) Increasing knowledge and shaping the image of children with disabilities as special but the same nevertheless) (cognitive component) – 4 people (8%). Parents' typical statements: *They're children just like you*; *So that he perceives them well*. Parents' message says: Treat children with disabilities well, they are your peers. An image of peers with disabilities is created as peers you can interact with without meeting special conditions.

A few IGr parents (9 people, 18%) did not reveal the content of their conversations, including five people who did not answer the question, three people who gave irrelevant answers (*sometimes*), and one person who wrote: *I don't know what to say*.

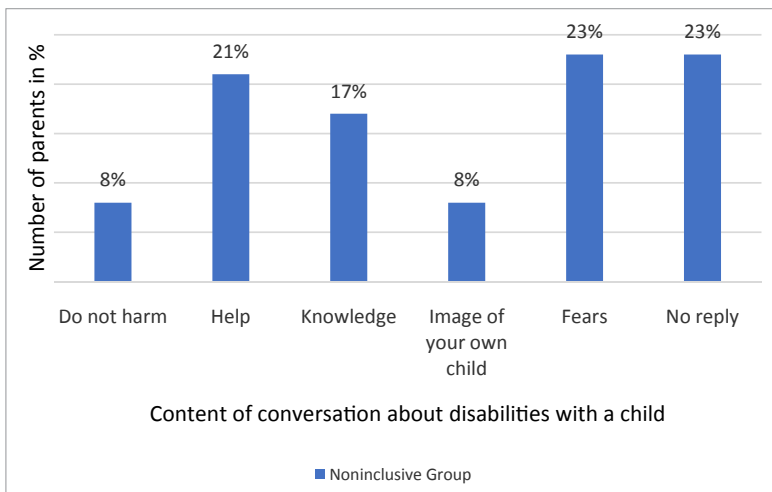
NONINCLUSIVE GROUP

Those NGr parents who talk with their children about people/children with disabilities focus on five subject areas (Chart 21):

- 1) Developing a fair attitude toward children with disabilities (cognitive, emotional, and dispositional components). Four people (8%) say the following: *You shouldn't hurt anyone; You shouldn't deride anyone.* NGr parents' message is consistent with IGr parents' message.
- 2) Developing a helping attitude toward children with SEN (dispositional and emotional components). One fifth of the parents (21% – 11 people) tell their children: *You should help them.* NGr parents' message is consistent with IGr parents' message.
- 3) Increasing knowledge (5 people) and shaping the image of children with disabilities as special but the same nevertheless (cognitive component) (4 people) – 17% (9 people) in total. Parents' typical statements: *So that he knows about them; They're children too.* NGr parents' message is consistent with IGr parents' message.

Chart 21

Content of Parents-Children Conversations as Related by Parents of Noninclusive Group [Behavioral Component (Leading One), Cognitive Component, Emotional Component]



Note. Number of NGr parents = 52

- 4) Shaping the image of one's own child as a healthy, fit, and normal person – 4 people (8%). Typical statements: *So that he appreciates his own health; So that he realizes that he's normal*. Parents' message: You are normal, a person with disability is not normal. NGr parents' message is negative.
- 5) They are concerned about their children's interactions with children with disabilities. Twelve parents (23%) justify their not talking about disability in the following way: *He's too little; I'm afraid I'll scare him; I don't know what to say*, so it is better not to talk *until they ask*. One mother definitely does not want her daughter to know anything about this subject. Parents' message: Be wary, avoid contact. NGr parents' message is negative.

There were 12 people (23%) in the noninclusive group who did not answer the question about starting conversations about disability, so they did not answer the question about the content of such conversations either.

Table 47

Tests in Statistical Analysis of the Number of Parents Who Talk about Disability Split Between the Inclusive Group and the Noninclusive Group

Tests	Value	df	Asymptotic significance (bilateral)	Exact significance (bilateral)	Exact significance (unilateral)
Pearson's chi-squared	11.757	1	.001	-	-
Continuity correction	10.284	1	.001	-	-
Likelihood ratio	12.345	1	.000	-	-
Fisher's exact test	-	-	-	.001	.001
Linear-by-linear association	11.642	1	.001	-	-
N of valid cases	102	-	-	-	-

Note. Source: Kulesza, E.M. & Butabayeva, L. (2017). The disabled in conversations between Kazakh parents and their children. In *Interdisciplinary Contexts of Special Pedagogy*, 16, p. 221.

A comparative analysis of the number of parents who talked with their children about disability made with the use of Chi-square tests showed statistically significant differences ($p < .01$) in favor of parents in the inclusive group (Table 47).

A broadened qualitative analysis indicates that parents' message in the inclusive group stresses tolerant and nondiscriminatory attitudes toward peers with disabilities to a significantly larger extent as compared to parent's message in the noninclusive group. A lot of NGr parents are clearly apprehensive about disability-related topics and think that such information would be horrifying to their children. A new content category arises in this group that shows a stereotypical, negative image of people with disabilities as people who "are not normal," based on which the image of their own child as a healthy and normal person is shaped.

3.3.3. PARENTS' ATTITUDES TOWARD THEIR NONDISABLED CHILDREN'S INTERACTIONS WITH PEERS WITH DISABILITIES¹²

This section analyzes parents' answers regarding their attitude toward their child: 1) talking, 2) playing, and 3) learning with peers with disabilities as well their evaluation of children with disabilities as 4) their child's close friends and 5) students.¹³

3.3.3.1. CONVERSATION WITH A PEER WITH DISABILITY

Asked whether they would agree to their daughter or son starting a conversation with a child with disability, all parents and legal guardians answered *yes* or *no*. Conversation approval/disapproval rates in percentage terms and the number of people in the inclusive and noninclusive groups who offered their opinion are presented in Table 48. In total, 73.5% of all the participants

¹² Research on disabled children's social attractiveness was conducted as part of bilateral cooperation between the Maria Grzegorzewska University in Warsaw and Abai Kazakh National Pedagogical University in Almaty. This cooperation resulted in a doctoral dissertation by Laura Butabayeva entitled *Social Attractiveness of Children With Disabilities as Seen by Kazakh Students and Their Parents* (2016), written under the direction of Ewa M. Kulesza. This book was based on the materials in the dissertation and complemented with new theoretical and empirical analyses.

¹³ Partial results of the research were published in Butabayeva, L. & Kulesza, E.M. (2019). Children with disabilities as social partners in the perception of Kazakh parents and their children. *EDULEARN19 Proceedings*. 11th International Conference on Education and New Learning Technologies, 1–3 July, 2019, Palma, Spain, pp. 6901–6907, doi:10.21125/edulearn.2019.1657

(75 people) are not afraid of contact with children with disabilities and declare they would allow their child to talk with a peer with disability. The remaining parents would not agree to that – 27 people, that is, 26.5% of all the participants. This shows a decided prevalence of parents who declare a positive attitude to their children’s informal interactions with peers with disabilities.

Comparison of both groups’ results shows substantial differences in parents’ attitudes. As many as 96% (48 people) of the IGr respondents accept the possibility of their child talking with a child with disability; 51.9% (27 people) of the NGr respondents share this attitude. This means that almost every second NGr parent (48.1%, 25 people) does not want his or her child to talk with peers with disabilities. Then IGr parents express a positive attitude toward their children having conversations with children with SEN significantly more frequently than NGr parents.

Interesting information can be gained when parents’ answers are compared to children’s answers split between the inclusive group and the noninclusive group (Chart 22).

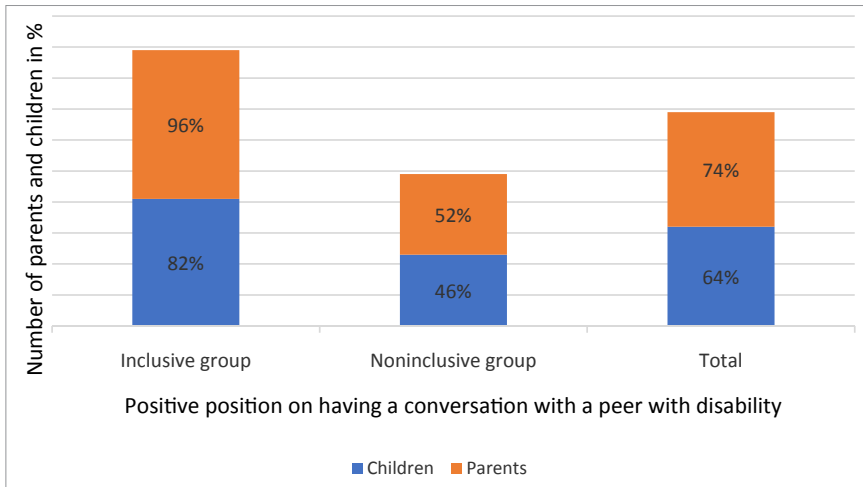
Altogether, parents take a more positive attitude toward conversations with children with disabilities (74%) than their children (64%). When we compare both groups’ results, we can see that in the inclusive group, considerably more parents declare their positive attitude toward conversations with children with disabilities as compared to their children: 96% of the parents and 82% of the children respectively. Such differences are not seen in the noninclusive group: 52% of the parents and 46% of the children respectively.

Table 48
Parents’ Attitude to Their Child Talking With a Peer With Disability and the Size of the Groups

Group		Conversation		Total
		Yes	No	
Inclusive	Number	48	2	50
	%	96.0	4.0	100.0
Noninclusive	Number	27	25	52
	%	51.9	48.1	100.0
Total	Number	75	27	102
	%	73.5	26.5	100.0

Chart 22

Parents' and Children's Positive Position on Having a Conversation With a Peer with Disability Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr parents = 50, number of NGr parents = 52, total $N = 102$; Number of IGr children = 50, number of NGr children = 52, total $N = 102$.

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Analysis of justifications for their approval of conversation showed that most parents in the inclusive group (28%) stressed developing the right attitude toward peers with SEN in their child, not hurting them, helping them as well as developing such behaviors that would be of benefit to children with disabilities in particular. Many parents mentioned that children were in school together, they were in the same classroom, and were learning together (24%). That is why they do not see anything standing in the way of children engaging in conversation, justifying: *They learn together*. Parents also believe that interactions are a natural thing, as they treat children with disabilities just as they treat other children: *They are children after all* (20%). They want their daughters/sons to grow up to be sensitive, good, and tolerant people. This is seen in such statements as: *My child will learn to be good*, for instance. This shows that parents see their children's interactions with children with SEN as a chance to develop positive personality traits in their children (16%).

Table 49

Inclusive Group Parents' Replies Regarding Justification of Their Approval/Disapproval of Conversation with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	No answer (4)	4	8.0
Shared space	<i>They learn together (9); You mustn't limit contact (2); He should know that such children exist (1)</i>	12	24.0
Developing positive traits in one's child	<i>My child will learn to be good (2); I want my child to grow up to be good (5); He'll learn to be reasonable (1)</i>	8	16.0
Developing the right attitude toward peers with SEN	<i>They must not be hurt (3); So that she learns not to hurt (2); to teach how to treat such children (1); He should learn to help (2); It's beneficial to children with SEN (6)</i>	14	28.0
Positive evaluation of children with SEN	<i>They are children after all (1); They're children too (9)</i>	10	20.0
Negative evaluation of children with SEN	<i>She will copy them (1); Sadly, I can't forbid it (1)</i>	2	4.0
Total		50	100.0

Also, two IGr parents – despite their children learning in an inclusive environment – do not approve of them engaging with their peers with disabilities: one parent does not want his child to copy her disabled classmate, the other does not explain his disapproval. Altogether, four IGr parents did not justify their position.

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Out of the 52 NGr parents, eight did not explain their position, including three parents who approved and five parents who disapproved of their children talking with children with SEN (Table 50). NGr parents justify their approval in the same way as IGr parents, i.e., on the grounds of the equal rights of children with disabilities: *They are children too; They are equal* (11 people, ~21%). They regard interactions with children with SEN as an opportunity to develop positive traits in their children, such as kindness and empathy in particular

(9 people, ~17%), including one parent who wants her child to appreciate what he has by comparing himself with children with disabilities (image of one's own child as a nondisabled person). Few respondents (3 people) justify their approval on the grounds of shaping the right attitude toward peers with SEN.

Table 50

Noninclusive Group Parents' Replies Regarding Justification of Their Approval/Disapproval of Conversation with a Peer with Disability

Categories	Detailed answers	Frequency	Percent
No justification	No answer (8)	8	15.40
Shared space	<i>He should know about such children</i> (1)	1	1.90
Developing positive traits in one's child	<i>He will learn to be good</i> (2); <i>So that he learns to sympathize with people</i> (4); <i>So that he becomes a moral person</i> (2); <i>So that they evaluate their abilities</i> (1)	9	17.30
Developing the right attitude toward peers with SEN	<i>They must not be humiliated</i> (1); <i>So that he helps</i> (1); <i>to motivate children with SEN</i> (1)	3	5.80
Positive evaluation of children with SEN	<i>This is a child too</i> (1); <i>They are children too</i> (9); <i>They are equal</i> (1)	11	21.15
Fear of interaction	<i>He's still little</i> (3); <i>He's not ready yet</i> (3); <i>He'll get scared</i> (1); <i>Children will misunderstand it</i> (1); <i>He hasn't seen such children yet</i> (1)	9	17.30
Negative evaluation of children with SEN	<i>Children will copy them</i> (3); <i>They are aggressive</i> (1); <i>He'll become like them</i> (1); <i>It's harmful to the psyche</i> (3); <i>This impacts the child's psyche</i> (1); <i>I don't want him to interact with them</i> (1); <i>I don't want to</i> (1)	11	21.15
Total		52	100.0

Eleven parents explained their disapproval of conversation, portraying children with disabilities in a negative way (~21%). They pointed out their bad, aggressive behavior and that their children might copy such behaviors. They claimed that interactions with peers with disabilities would have an adverse impact on their children's psyche. They also expressed their fear of such interactions, as their children were still little, never saw any children with disabilities and could get frightened (9 people, ~17%). Those parents based

their justifications on negative stereotypes, which they will probably transmit to their children.

Table 51

Tests in Statistical Analysis of Parents' Attitude to Conversation with Peers with Disabilities – Inclusive and Noninclusive Groups

Tests	Value	df	Asymptotic significance (bilateral)	Exact significance (bilateral)	Exact significance (unilateral)
Pearson's chi-squared	25.443	1	.000	-	-
Continuity correction	23.229	1	.000	-	-
Likelihood ratio	29.091	1	.000	-	-
Fisher's exact test	-	-	-	.000	.000
Linear-by-linear association	25.194	1	.000	-	-
N of valid cases	102	-	-	-	-

Chi-square tests revealed a difference of $p < .001$ between the inclusive group and the noninclusive group in their attitude toward conversation with peers with disabilities in favor of the inclusive group (Table 51).

3.3.3.2. PLAYING WITH A PEER WITH DISABILITY

Parents in both groups were asked the following question: *Would you allow your child to play with a child with disability?* All respondents answered *yes* or *no*. Detailed distribution of results with the number of participants is shown in Table 52.

Altogether, 71 people, i.e., 69.6% of the parents, agreed to their children playing together with peers with disabilities. One third (30.4%) would not allow it (Table 52). Just as in the case of the results regarding conversation, large differences in respondents' attitudes between the inclusive group and the noninclusive group are seen here as well. Essentially, for parents of children who attend the inclusive school, nothing stands in the way of their children playing together with children with SEN – 94% of the respondents. However, there are three parents who do not want their children to interact with their peers with disabilities. These are two people who did not approve of their

children talking with their peers with disabilities and one person who was not concerned about conversation but does not want her child to play with children with SEN. Based on these data, it is reasonable to state that positive attitudes toward their children playing – just as toward talking – with a friend with SEN are overwhelmingly prevalent among parents in the inclusive group. By contrast, parents of children who attend the noninclusive school split into two almost equal groups with a slight prevalence of negative attitudes: those who see a possibility of shared play (46.2%) and those who are afraid of contact with children with disabilities (53.8%).

Table 52
Parents' Attitude Toward Their Child Playing with a Peer With Disability and the Size of the Groups

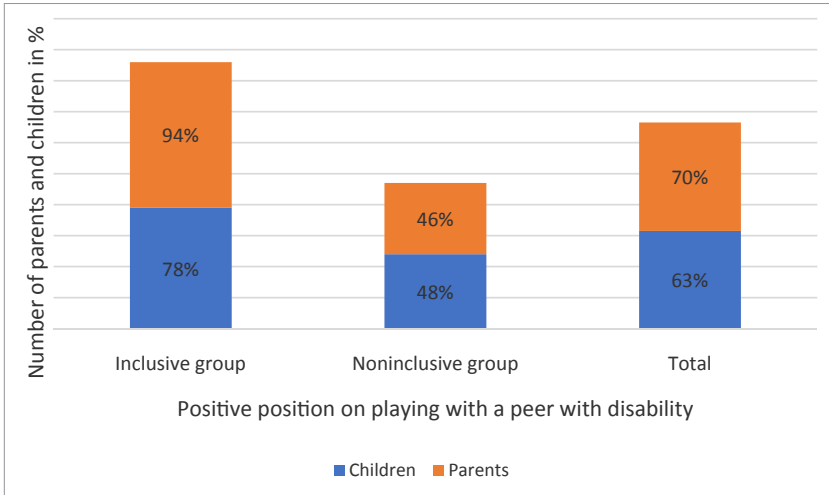
Group		Play		Total
		Yes	No	
Inclusive	Number	47	3	50
	%	94.0	6.0	100.0
Noninclusive	Number	24	28	52
	%	46.2	53.8	100.0
Total	Number	71	31	102
	%	69.6	30.4	100.0

Just as in the case of conversation (Chart 22), parents' answers were compared to children's answers split between the inclusive group and the noninclusive group (Chart 23).

Chart 23 shows a slight prevalence of positive answers among parents (70%) as compared to children (63%). However, if we compare the results inside the inclusive group, a major difference in attitudes toward play becomes apparent. There are definitely more parents than children who approve of playing with peers with disabilities – 94% and 78% respectively. Evidently, play is a very important activity to children and every fifth student (22%) who shares the classroom with a peer with SEN perceives his or her limitations that make playing together impossible.

Chart 23

Parents' and Children's Positive Position on Playing with a Peer with Disability Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr parents = 50, number of NGr parents = 52, total $N = 102$; Number of IGr children = 50, number of NGr children = 52, total $N = 102$.

In the case of the noninclusive group, there is almost no dissonance in respondents' answers and they are consistent: 48% of the children and 46% of the parents approve of playing with children with SEN. In other words, more than half of the NGr children and their parents do not see a possibility of playing together with peers with disabilities. This result is not very optimistic.

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

IGr parents justify their positive position, saying that every child has the right to play: *They are children too, they want to play* (34 people out of 50). They say that developmental defects do not interfere with shared play and create an image of children with SEN as peers: *Everyone is equal*. It is important to them to develop proper attitudes to peers with disabilities in their children (*I want my child to perceive them as normal*) and empathic positions (*Children with SEN will be happy*) (7 people, 13.9%).

Table 53

Inclusive Group Parents' Replies Regarding Justification of Their Approval/Disapproval of Playing with a Child with Disability

Categories	Detailed answers	Frequency	Percent
No justification	No answer (5); <i>I don't know</i> (1)	6	12.0
Developing positive traits in one's child	<i>So that he feels responsibility</i> (1)	1	2.0
Developing the right attitude toward peers with SEN	<i>I want my child to perceive them as normal</i> (5); <i>Children with SEN will be happy</i> (1); <i>So that children with SEN can play</i> (1)	7	13.9
Positive evaluation of children with SEN	<i>They are children too</i> (30); <i>They are children too, they want to play</i> (1); <i>Everyone is equal</i> (1); <i>They are smart</i> (1)	33	66.1
Negative evaluation of children with SEN	<i>I'm worried that this child could hurt him</i> (1); <i>She will be copying them</i> (1); <i>He will feel awkward</i> (1)	3	6.0
Total		50	100.0

Only few IGr respondents (3 people) express certain concerns: *I'm worried that this child could hurt him; She will be copying them; He will feel awkward.*

Let us examine now how parents in the noninclusive group justify why they approve/disapprove of their child playing with peers with disabilities.

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Many NGr respondents did not explain their position – 22 people (42.3%) (Table 54). Approximately 17% of the parents perceive children with disabilities just as children who want to and have the right to play – like parents in the inclusive group: *They want to play too after all; They are children too.*

Some see shared play as an opportunity to shape their children's personality traits: *He will learn to be good* (4 people). Four people make shared play conditional on circumstances and the child's decision: *She chooses herself; He will decide himself; If he wants to.* Nine people (~17%) express their anxiety about their children's interactions with peers with disabilities: *I'm worried they will hurt him; I'm worried he'll be copying their actions; They can punch;*

Table 54
Noninclusive Group Parents' Replies Regarding Justification of Their Approval/Disapproval of Playing with a Child with Disability

Categories	Detailed answers	Frequency	Percent
No justification	No answer (20); <i>I don't know</i> (2)	22	42.30
Circumstances and the child's decision	<i>If we're visiting someone with such children</i> (1); <i>If he wants to</i> (1); <i>She chooses herself</i> (1); <i>He will decide himself</i> (1)	4	7.70
Developing positive traits in one's child	<i>So that he is good</i> (2); <i>He will learn to be good</i> (1); <i>It's morality</i> (1)	4	7.70
Developing a proper, empathic attitude toward peers with SEN	<i>I want them to play</i> (1); <i>So that they don't feel they have no friends</i> (1); <i>It's better for them</i> (1)	3	5.80
Positive evaluation of children with SEN	<i>They are children too</i> (7); <i>They want to play too after all</i> (1); <i>They will learn a lot from one another</i> (1)	9	17.30
Fear of interaction	<i>He's afraid of them</i> (1)	1	1.90
Negative evaluation of children with SEN	<i>I'm worried they will hurt him</i> (1); <i>They can punch</i> (1); <i>They can be aggressive</i> (2); <i>I'm worried he'll be copying their actions</i> (1); <i>This impacts the psyche</i> (1); <i>They don't know how to play</i> (1); <i>They're not equal to him</i> (1); <i>I want him to play with normal children</i> (1)	9	17.30
Total		52	100.0

Table 55
Tests in Statistical Analysis of Parents' Attitude to Play with Peers with Disabilities – Inclusive and Noninclusive Groups

Tests	Value	df	Asymptotic significance (bilateral)	Exact significance (bilateral)	Exact significance (unilateral)
Pearson's chi-squared	27.583	1	.000	-	-
Continuity correction	25.368	1	.000	-	-
Likelihood ratio	30.811	1	.000	-	-
Fisher's exact test	-	-	-	.000	.000
Linear-by-linear association	27.313	1	.000	-	-

They are aggressive. A stereotypical, negative image of children with disabilities emerges from these parents' accounts, of children who behave in an unacceptable way, are dangerous, and do not know how to play. That is why they want their children to play with *normal children*.

Analysis with the use of Chi-square showed statistically significant differences of $p < .001$ in favor of parents in the inclusive group (Table 55).

3.3.3.3. LEARNING WITH A PEER WITH DISABILITY

Parents' answers (*yes – no*) to the question if they would agree to their child learning together with peers with disabilities are presented in Table 56. The overall acceptance of shared learning is higher (55.9%, i.e., 57 people) than disapproval (44.1%, i.e., 45 people).

Table 56

Parents' Attitude Toward Their Child Learning Together with a Peer with Disability and the Size of the Groups

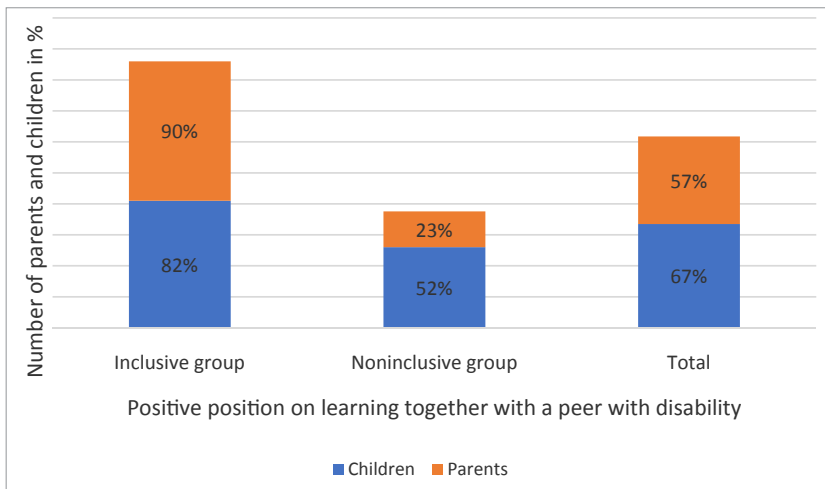
Group		Shared learning		Total
		Yes	No	
Inclusive	Number	45	5	50
	%	90.0	10.0	100.0
Noninclusive	Number	12	40	52
	%	23.1	76.9	100.0
Total	Number	57	45	102
	%	55.9	44.1	100.0

Comparison of parents' answers in both groups shows significant differences in their attitude to their child learning together with peers with SEN. The vast majority of IGr parents – 90% (45 people) would agree again (their children are already learning together with children with disabilities) to their daughter or son learning with peers with disabilities. Five people, i.e., every tenth IGr parent, would take the opposite decision. These parents do not want nondisabled children and children with disabilities to learn in the same classroom. It will be interesting then to find out what their arguments are (see Inclu-

sive group – Justifications of answers). In the noninclusive group, there are more parents – almost three fourths of the respondents (76.9%, i.e., 40 people) – who do not see a possibility of their child learning together with children with disabilities. Only 12 parents (23.5%) would agree to that. This is the lowest approval rate for NGr parents compared to their acceptance of conversation (51.9%) and play (46.2%). This suggests that NGr parents would be more willing to allow informal interactions rather than formal interactions within the confines of the school between their child and children with disabilities.

Are parents’ answers about shared learning consistent with their children’s answers and to what extent? the answers of all participants split between the inclusive group and the noninclusive group are presented in Chart 24.

Chart 24
Parents’ and Children’s Positive Position on Learning with a Peer with Disability Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr parents = 50, number of NGr parents = 52, total N = 102; Number of IGr children = 50, number of NGr children = 52, total N = 102.

Comparison of all parents’ and children’s answers shows that children are more willing (67%) than their parents (57%) to agree to formal interactions, i.e., learning, than to informal interactions. This manifests particularly starkly in the case of the noninclusive group: as many as 52% of the children and

only 23% of the parents agree to shared learning. This might be determined by the fact that to children aged 7–8, shared spontaneous peer activities and informal interactions at the playground are still more important than education – in contrast to their parents, who put schooling first and think that students with disabilities can have a negative impact on the course of the educational process (see: Noninclusive group – Justifications of answers).

In the case of the inclusive group, there are still more positive answers among parents (90%) than among their children (82%). However, if we compare parents' approval of shared learning (90%) with their approval of conversation (96%) and play (94%), we see a slight downward trend.

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Those IGr parents who accept shared learning justify their position mainly with the equal right to education for all (12 people) and with its beneficial impact on their child (18 people) (Table 57). These are typical answers: *Each child has the right* (to education); *Our children are learning to help them; They will become good.*

The main reasons for five IGr parents who disapprove of shared learning include the following: children with disabilities absorb too much of the teacher's attention (*The teacher devotes a lot of time to them* – 3 people), which shows they are concerned that their nondisabled child will not be given enough attention; they also point to disabled children's disruptive behavior during classes (1 person). One parent does not justify her negative answer regarding shared learning.

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

NGr parents, similarly to IGr parents, underline that all people are equal and have the right to learn if they can (7 people). They justify their approval in the following way: *All people are equal; Everyone has the right to education; Everyone decides for themselves where they want to study and I have nothing against it; They're following.* Some are afraid that nondisabled children can sneer at peers with disabilities, who will then feel humiliated and aware of their impairments (5 people).

Table 57

Inclusive Group Parents' Replies Regarding Justification of Their Approval/Disapproval of Education Shared with Children with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	No answer (9); <i>I can't answer</i> (1)	10	20.0
Developing positive traits in one's child	<i>He will be good</i> (2); <i>They will become good</i> (9)	11	22.0
Developing the right attitude toward peers with SEN	<i>Our children are learning to help them</i> (7)	7	14.0
Nondisabled peer's negative attitude toward peers with SEN	-	0	.0
Positive evaluation of children with SEN	<i>Each child has the right</i> (2); <i>They have their rights too</i> (9); <i>They're good students</i> (1)	12	24.0
Perspective of children with SEN	<i>If a child wants to learn</i> (4); <i>If it's not too hard for them</i> (1)	5	10.0
School factors	<i>If it's not difficult for the teacher</i> (1); <i>the teacher devotes a lot of time to them</i> (3)	4	8.0
Fear of interaction	-	0	.0
Negative evaluation of children with SEN as students	<i>They'll be disturbing others</i> (1)	1	2.0
Total		50	100.0

Most frequently, however, they raise the issue of children with disabilities not keeping up with the curriculum: *They won't be able to do well at school; Difficult content* (9 people, 17.3%), that is, they evaluate children with disabilities as students negatively. One respondent admits that shared education has a positive impact on the socialization of students with disabilities; some parents, however, are of the opinion that special school is the best placement for such students, as they will be provided with suitable conditions there and also – they will be *among their fellows* (4 people). Almost half of the NGr respondents ((24 people, 46.1%) did not justify their (usually negative) attitude to their child learning together with peers with disabilities.

Table 58

Noninclusive Group Parents' Replies Regarding Justification of Their Approval/Disapproval of Education Shared with Children with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	No answer (23); <i>I don't know</i> (1)	24	46.1
Developing positive traits in one's child	-	0	.0
Developing the right attitude toward peers with SEN	-	0	.0
Nondisabled peer's negative attitude toward peers with SEN	<i>He'll sneer at them</i> (1); <i>Children will sneer at them</i> (2)	3	5.80
Positive evaluation of children with SEN	<i>They have their rights too</i> (2); <i>All people are equal</i> (2); <i>Everyone has the right to education</i> (1); <i>Everyone decides for themselves where they want to study. I have nothing against it</i> (1); <i>They're following</i> (1)	7	13.5
Perspective of children with SEN	<i>If a child wants to learn</i> (1); <i>They will feel humiliated</i> (1); <i>They will be aware of their impairments</i> (1)	3	5.8
School factors	<i>School conditions are unsuitable for them</i> (1); <i>They should study in special schools</i> (1); <i>Special equipment is needed</i> (1); <i>They should be among their fellows</i> (1); <i>They will be socialized</i> (1)	5	9.6
Fear of interaction	<i>He (son) is afraid</i> (1)	1	1.9
Negative evaluation of children with SEN as students	<i>They won't be able to do well at school</i> (6); <i>They're not following</i> (1); <i>Difficult content</i> (1); <i>They'll be disruptive in the classroom</i> (1)	9	17.3
Total		52	100.0

Parents' answers were analyzed with the use of SPSS Chi-square tests. The differences were statistically significant, with $p < .001$. IGr parents approved of shared education significantly more frequently than NGr parents (Table 59).

Table 59

Tests in Statistical Analysis of Parents' Attitude to Their Child Learning Together with Peers with Disabilities – Inclusive and Noninclusive Groups

Tests	Value	df	Asymptotic significance (bilateral)	Exact significance (bilateral)	Exact significance (unilateral)
Pearson's chi-squared	45.373	1	.000	-	-
Continuity correction	42.709	1	.000	-	-
Likelihood ratio	50.179	1	.000	-	-
Fisher's exact test	-	-	-	.000	.000
Linear-by-linear association	44.923	1	.000	-	-
N of valid cases	102	-	-	-	-

3.3.3.4. EVALUATION OF A CHILD WITH DISABILITY AS A FRIEND AND AS A STUDENT

All parents and legal guardians were asked if, firstly, a girl or a boy with disability could be their child's friend, and secondly, if students with disabilities were able to follow the curriculum at the same level as nondisabled students. Results in percentage terms and the number of people in the inclusive and noninclusive groups who provided their evaluation are presented in Table 60. Altogether, 68.6% of all the respondents (70 people) are not afraid of children with disabilities and declare they would allow their daughter or son to have a close friendly relationship with such a peer. The remaining parents would not agree to that – 32 people, that is, 31.4% of all the respondents. This means that there are more parents with a positive attitude toward the possibility of a friendly relationship between their child and a child with disability.

Comparison of the results in both groups shows significant differences in parents' attitudes: as many as 94% of the IGr parents, i.e., 47 people, accept children with disabilities as their child's friends, while less than half of the NGr parents (44.2%, 23 people) take the same attitude.

Quite surprising are the results regarding the evaluation of children with disabilities as students who are to follow the curriculum along with nondisabled children. It turns out that their potential to manage learning tasks just as other students do is rated very low. Out of the 102 respondents, only 27 people

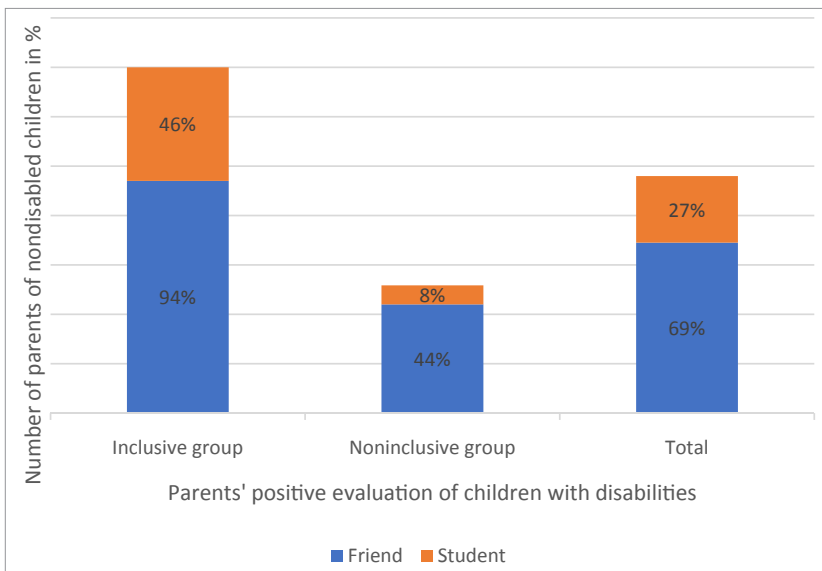
(26.5%) said that children with disabilities were able to learn at the same level as nondisabled peers. This is clearly illustrated in Chart 25.

Table 60
Parents' Evaluation of a Child with Disability as a Friend and as a Student and the Size of the Groups

Group		Friend		Student	
		Positive	Negative	Positive	Negative
Inclusive	Number	47	3	23	27
	%	94.0	6.0	46.0	54.0
Noninclusive	Number	23	29	4	48
	%	44.2	55.8	7.7	92.3
Total	Number	70	32	27	75
	%	68.6	31.4	26.5	73.5

Note. Number of IGr parents = 50, number of NGr parents = 52, total N = 102.

Chart 25
Parents' Positive Position on Children with Disabilities as Friends and as Students Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr parents = 50, number of NGr parents = 52, total N = 102.

Almost all IGr parents (94%) allow of close interactions between their children and their peers with disabilities, which means they consider them good playmates; by contrast, children with disabilities are ranked high as students by less than half of the IGr respondents. That means that every second IGr parent (54%) claims that children with SEN are not able to learn curriculum content. As many as 92% of the NGr parents share this opinion. However, analysis with the use of SPSS Chi-square reveals statistically significant differences of $p < .001$ in favor of parents in the inclusive group. Compared to NGr parents, IGr parents perceive children with disabilities as more attractive as their child's friends and as better students.

3.3.4. POSITION OF PARENTS OF NONDISABLED CHILDREN ON INCLUSIVE EDUCATION

In this chapter, parents' choice of school for students with disabilities will be analyzed along with their justification of this choice and their knowledge of and opinions on inclusive education (advantages and disadvantages).

3.3.4.1. TYPE OF SCHOOL FOR STUDENTS WITH DISABILITIES

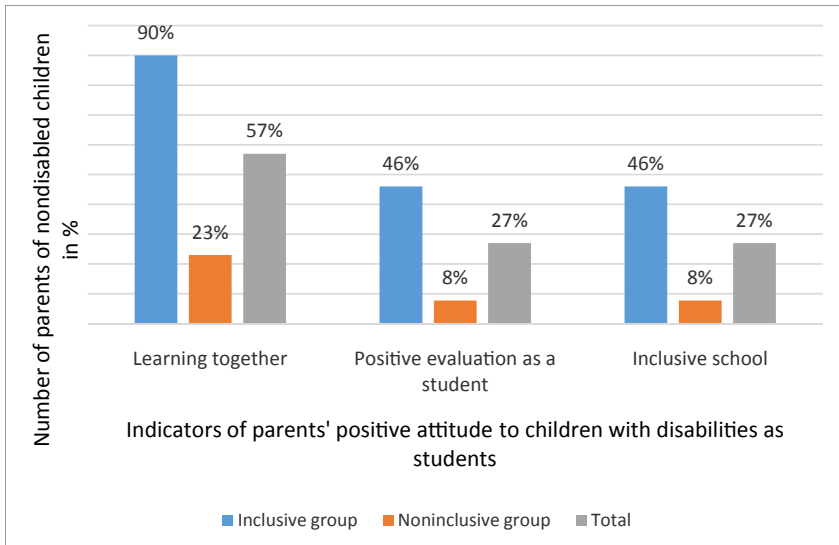
Parents were asked to choose a school for students with disabilities. Three answers to choose from were offered: "mainstream school (inclusive): students with disabilities learn together with nondisabled students", "special school: only for students with disabilities", and "other" (specify) (Appendix 3). Thanks to the analysis of respondents' answers, it was possible to distinguish three categories of answers: mainstream school, special school, and homeschooling. Three parents from the noninclusive group put homeschooling in the "other" field. Homeschooling is provided in Kazakhstan (in Poland as well) to students with disabilities, among others. That means that they are isolated from the community of nondisabled students and this type of instruction can be included in the "special school" category. Table 61 shows parents' choices concerning the type of school for children with SEN.

The vast majority of respondents (73.5%, 75 people) hold a view that special schools are the most appropriate educational setting for students with SEN.

Table 61
Type of School for Students with Disabilities – Parents’ Answers and the Size of the Groups

Group		Type of setting		Total
		Special	Mainstream/ Inclusive	
Inclusive	Number	27	23	50
	%	54.0	46.0	100.0
Noninclusive	Number	48	4	52
	%	92.3	7.7	100.0
Total	Number	75	27	102
	%	73.5	26.5	100.0

Chart 26
Parents’ Positive Attitude to Children with Disabilities as Students, to Their Child Learning Together with Children with Disabilities, and the Choice of Inclusive School



Note. Number of IGr parents = 50, number of NGr parents = 52, total *N* = 102.

Only every fourth parent (26.5%) chose mainstream schools, which means they think that nondisabled children and children with disabilities can learn together. Parents in both groups show certain inconsistency in their answers.

This is illustrated in Chart 26, where the following data are compared: a) parents' attitude to their child learning together with children with disabilities, b) their evaluation of children with SEN as students, and c) their choice of school for students with SEN.

Previous analyses revealed that positive attitudes to their child learning together with peers with disabilities prevailed among parents in the inclusive group (90% of the respondents). However, their choices concerning the type of school for students with SEN prove their attitudes are unstable. Only 46% of the IGr parents chose inclusive schools as an appropriate educational setting for children with disabilities and the same parents also evaluated them positively as students. The remaining parents (54%) think that special schools will be better for children with disabilities. The vast majority of NGr parents – 92.3% (48 people) – are of the same opinion. Only four parents (7.6%) in this group think it is possible to provide education to children with disabilities in inclusive schools. It should be pointed out that three NGr parents (5.7%) believe that children with SEN should learn at home, i.e., they should be provided with homeschooling (these answers were included in the “special school” category).

A dissonance is apparent in the answers of parents in both groups when we compare their approval of their child learning together with children with SEN (90% IGr and 23% NGr) and their choice of inclusive school (46% IGr and 7.6% NGr). It is probable that they wanted to come out as tolerant parents in the study, accepting the integration of people with disabilities, hence their approval of their child learning together with children with SEN. However, their attitudes are unstable, they are not fully convinced of inclusive education, as they choose special schools as the placement for students with disabilities.

Let us examine how parents justify their answers.

INCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

According to almost half of the IGr parents (23 people), mainstream/inclusive schools are the appropriate placement for students with disabilities (Table 62). They justify their answer with benefits for children with disabilities, including their socialization (12 people) and strengthening their motivation for learning (2 people). They also emphasize each student's right to education (4 people) and the need to shape accepting attitudes toward people with disabilities (*Our*

kids should become accustomed to such children) (2 people). Three parents opt for inclusive schools, making learning in such settings conditional on the severity of the student's disability.

Table 62

Inclusive Group Parents' Replies Regarding Justification of Their Choice of School for Students with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	No answer (3)	3	6.0
Special schools, their staff, and services are tailored to the needs of students with SEN	<i>There are specialists there</i> (10); <i>Good conditions are provided there</i> (12); <i>It's convenient for them</i> (1)	23	46.0
Negative evaluation of children with SEN as students	-	0	.0
Positive evaluation of children with SEN	<i>Children will decide themselves</i> (the right to choose) (1); <i>They have their rights too</i> (3)	4	8.0
Benefits from inclusive education for students with SEN	<i>They will have motivation</i> (2); <i>Good for their socialization</i> (12)	14	28.0
Benefits from inclusive education for nondisabled students	<i>Our kids should become accustomed to such children</i> (2)	2	4.0
Severity of disability	<i>It depends on the child's condition</i> (3)	3	6.0
Perspective of children with SEN	<i>They won't have complexes</i> (in special schools) (1)	1	2.0
Total		50	100.0

Out of the 27 IGr parents who chose special school as an educational setting for students with SEN, three did not explain their position. The remaining ones said: *There are specialists there* (10); *Good conditions are provided there* (12); *It's convenient for them* (1), and *They won't have complexes* (1). It may be therefore supposed that they feel that the inclusive school their child attends does not provide suitable conditions for the education of children with disabilities or that they do not know how the inclusive education process is organized in the school.

NONINCLUSIVE GROUP – JUSTIFICATIONS OF ANSWERS

Only few NGr parents (4 people) chose inclusive school as an educational setting for students with disabilities (Table 63). Three people mentioned everyone's right to education: *They have the right to education; They're all equal*. An interesting thread came up in one NGr respondent's answer: *There should be classes for them in mainstream schools*.

Table 63

Noninclusive Group Parents' Replies Regarding Justification of Their Choice of School for Students with Disabilities

Categories	Detailed answers	Frequency	Percent
No justification	No answer (12)	12	23.1
Special schools, their staff, and services are tailored to the needs of students with SEN	<i>There are specialists there (10); A degree in special education is necessary (1); They need special care (1); Good conditions are provided (15); It's better for them (special school) (4); They follow a special curriculum (1); They are given attention (1)</i>	33	63.5
Negative evaluation of children with SEN as students	<i>They can't learn in mainstream schools (1); They can be homeschooled (1); They should learn with children like themselves (1)</i>	3	5.7
Positive evaluation of children with SEN	<i>They have the right to education (2); They're all equal (1); There should be classes for them in mainstream schools (they are equal) (1)</i>	4	7.7
Benefits from inclusive education for students with SEN	-	0	.0
Benefits from inclusive education for nondisabled students	-	0	.0
Severity of disability	-	0	.0
Perspective of children with SEN	-	0	.0
Total		52	100.0

Out of the 48 respondents who chose special school, 12 did not explain their choice. Three parents claim that children with disabilities *can't learn in mainstream schools* and *they should learn with children like themselves*. The vast majority (33 people) are in favor of special schools for students with SEN because such schools provide qualified teaching staff, specialist care, and students with SEN will feel better there than in inclusive schools.

Justifying their choice of special school, parents in both groups give very similar answers. First of all, they point to the fact that special schools, their teaching staff, and services are tailored to the needs and abilities of children with disabilities. These parents show they know well the specific nature of such settings: *A degree in special education is necessary; There are specialists there; Good conditions are provided there; They follow a special curriculum.*

Table 64

Tests in Statistical Analysis of Parents' Choice of School for Children with Disabilities – Inclusive and Noninclusive Groups

Tests	Value	df	Asymptotic significance (bilateral)	Exact significance (bilateral)	Exact significance (unilateral)
Pearson's chi-square	19.219	1	.000	-	-
Continuity correction	17.301	1	.000	-	-
Likelihood ratio	20.698	1	.000	-	-
Fisher's exact test	-	-	-	.000	.000
Linear-by-linear association	19.030	1	.000	-	-
N of valid cases	102	-	-	-	-

Parents' answers were analyzed with the use of SPSS Chi-square tests. Differences in their choice of school turned out to be statistically significant, with $p < .001$. Parents of children attending the inclusive school chose mainstream schools as an educational setting for children with disabilities significantly more frequently (Table 64).

3.3.4.2. ADVANTAGES AND DISADVANTAGES OF INCLUSIVE EDUCATION¹⁴

Before parents were asked to list the advantages and disadvantages of inclusive education, they were asked if they had any knowledge/heard of inclusive schools, that is, schools where nondisabled children and children with disabilities learn together (Appendix 3). As expected, all respondents in the inclusive group answered in the affirmative. They are aware of the specific nature of the school their child attends. In contrast, as many as 47 parents in the noninclusive group never heard of such settings before, i.e., before filling in the survey questionnaire. Only five people had some prior knowledge of this type of school in this group. This seems to be the reason why the majority of NGr parents (92.3%, Table 61) chose special school as an educational setting for children with disabilities. It will be interesting to find out their opinion on the advantages and disadvantages of education provided to nondisabled students and students with disabilities in inclusive schools as well as the opinion of parents who already have some knowledge and experience in this area thanks to their child's learning in an inclusive setting.

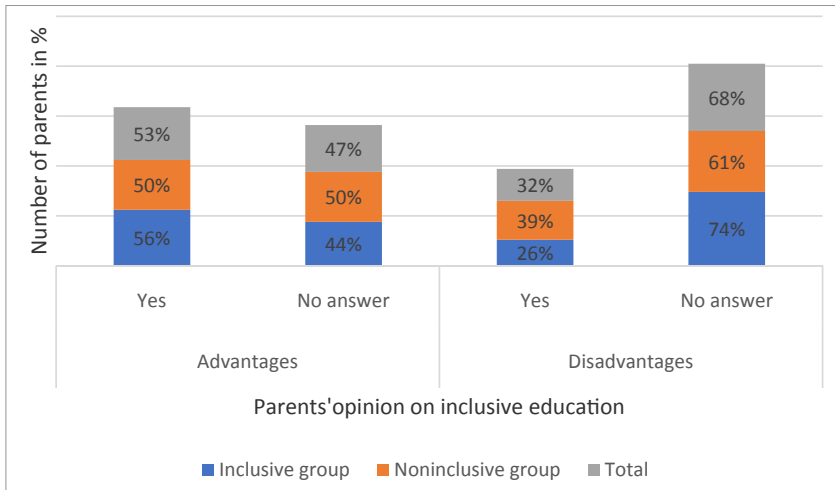
The data given in Chart 27 show that respondents were quite reluctant to answer both the question about the advantages of inclusive education and the question about the disadvantages. As many as 48 people out of the 102 respondents (47%) did not answer the question about the advantages, including 44% of the IG parents (22 people) and 50% of the NGr parents (26 people, including 24 – no answer and 2 – *I don't know*). Perhaps these respondents see no advantages or – especially in the case of NGr parents – are unfamiliar with this issue and that is why they skipped this field.

Altogether, more than two thirds of the respondents (68%, 69 people) did not fill in the field with the disadvantages of inclusive education, including 74% (37) of the IG parents and 61% of the NGr parents (27 – no answer and 5 – *I don't know*) (Chart 27). We can speculate that either this type of education does not have disadvantages according to respondents or they did not want to list them, or maybe they are unfamiliar with inclusive education and that is why they left this field empty.

¹⁴ Similar analyses were published in Kulesza, E.M. & Butabayeva, L.A. (2017). Pros and cons of inclusive education in the opinion of the Kazakh parents of first grade pupils. *Actual Problems of the Correctional Education*, Issue 9, Volume 2, pp. 85–95, ISSN 2413-2578.

Chart 27

Parents who Listed/Did Not List the Advantages and Disadvantages of Inclusive Education Split Between the Inclusive Group and the Noninclusive Group



Note. Number of IGr parents = 50, number of NGr parents = 52, total $N = 102$.

ADVANTAGES OF INCLUSIVE EDUCATION

Tables 65 and 66 show all the answers concerning the advantages of inclusive education given by parents. Based on these answers and a qualitative analysis, a number of main areas were distinguished that covered the topics respondents listed as the advantages of inclusive education, in particular: 1) benefits for children with SEN; 2) benefits for nondisabled children; 3) mutual benefits, and 4) other benefits (Table 67).

Respondents in both groups see the benefits of inclusive education for both children with disabilities and nondisabled children. They observe that interactions with children with SEN will develop positive personality traits (*Kids will be good; They will learn to sympathize*) and accepting attitudes in nondisabled students (*Kids will learn that such children exist too; They will learn to see one another*). It is interesting to note that parents list more benefits of inclusive education for children with disabilities (26 people) than for nondisabled children (17 people) (Table 67). IGr parents underline the motivating aspect of the peer community [*It motivates children with SEN (to learn); They*

Table 65
Advantages of Inclusive Education According to Parents in the Inclusive Group

Parents' answers	Frequency	Percent	Cumulative percentage
No reply	22	44.0	44.0
<i>Thanks to the teachers</i> (qualified teaching staff)	1	2.0	46.0
<i>Kids will be good</i> (nondisabled children)	1	2.0	48.0
<i>Children with SEN will feel good</i>	1	2.0	50.0
<i>Children with SEN will be trying their best</i>	2	3.9	54.0
<i>Kids will become good</i> (nondisabled children)	1	2.0	56.0
<i>Kids will learn that such children exist too</i>	9	18.0	74.0
<i>It motivates children with SEN</i> (to learn)	1	2.0	76.0
<i>It motivates them</i> (children with SEN)	3	6.0	82.0
<i>It motivates children</i> (with SEN)	1	2.0	84.0
<i>It's motivating for children with SEN</i>	1	2.0	86.0
<i>They will learn to see one another</i>	1	2.0	88.0
<i>Our kids will learn that children are different</i>	1	2.0	90.0
<i>Parents of children with SEN will be happy</i>	1	2.0	92.0
<i>They'll take an interest in life</i> (children with SEN)	3	6.0	98.0
<i>They'll take an interest in learning</i> (children with SEN)	1	2.0	100.0
Total	50	100.0	

will take an interest in learning (9 people in total)] (Table 65). NGr parents are of a similar opinion and say that children with SEN will be doing better as students in an inclusive educational setting: *They will be trying their best; Their thinking skills might improve; They'll learn a lot* (9 people). They also add that spending time with nondisabled students will have a positive impact on disabled students' wellbeing and self-esteem. Examples of their answers include: *They will feel fully fit; They will have fun* (4 people). This emotional aspect of peer interactions was pointed out by one IGr parent: *Children with SEN will feel good* (Table 65). NGr parents' answers relating to the benefit for students with disabilities were more diverse (Table 66).

Table 66

Advantages of Inclusive Education According to Parents in the Noninclusive Group

Parents' answers	Frequency	Percent	Cumulative percentage
No reply	24	46.2	46.2
<i>They'll have motivation for learning</i>	1	1.9	48.1
<i>The child will feel fully fit</i>	1	1.9	50.0
<i>They will feel fully fit</i>	1	1.9	51.9
<i>They will socialize faster</i>	1	1.9	53.8
<i>Kids will value their health</i>	1	1.9	55.8
<i>Kids will be good</i>	2	3.8	59.6
<i>Children will take an interest in learning</i>	1	1.9	61.5
<i>It's good for their socialization</i>	1	1.9	63.5
<i>They will have fun</i>	1	1.9	65.4
<i>Their thinking skills might improve</i>	1	1.9	67.3
<i>They will learn to sympathize</i>	1	1.9	69.2
<i>They will learn to be in a community</i>	1	1.9	71.2
<i>I don't know</i>	2	3.8	75.0
<i>There aren't any (advantages)</i>	8	15.4	90.4
<i>They communicate with nondisabled people</i>	1	1.9	92.3
<i>They'll learn a lot (children with SEN)</i>	1	1.9	94.2
<i>They'll want to (learn)</i>	1	1.9	96.2
<i>Kindness will develop in children</i>	1	1.9	98.1
<i>They would feel fully fit</i>	1	1.9	100.0
Total	52	100.0	

Compared to the noninclusive group (5 people), more parents in the inclusive group (12 people) listed the benefits of inclusive education for nondisabled students (Table 67). They think that thanks to inclusive education, (...) *kids will learn that children are different* (10 people) and will become better (2 people). Eight NGr parents claimed that inclusive education did not bring

Table 67
Advantages of Inclusive Education as Viewed by All Parents

Answer categories	Group			
	Noninclusive		Inclusive	
	Frequency	%	Frequency	%
No answer; <i>I don't know</i>	26	50.0	22	44.0
<i>There aren't any advantages</i>	8	15.4	0	.0
Benefits for students with SEN	13	24.9	13	26.0
Benefits for nondisabled students	5	9.7	12	24.0
Mutual benefits	0	.0	1	2.0
Other benefits	0	.0	2	4.0
Total	52	100.0	50	100.0

any benefits, two people could not answer this question, and 24 did not give any answer. Twenty-two IGr parents did not list any benefits of inclusive education and left the question blank (Table 67).

Table 68
Disadvantages of Inclusive Education According to Parents in the Inclusive Group

Parents' answers	Frequency	Percent	Cumulative percentage
No reply	37	74.0	74.0
<i>They will be disturbing the process of instruction</i>	1	2.0	76.0
<i>There'll be little time left for our kids</i>	3	6.0	82.0
<i>There aren't any (disadvantages)</i>	2	4.0	86.0
<i>There are no specialists</i>	1	2.0	88.0
<i>They're not following</i>	1	2.0	90.0
<i>They hinder the instruction process</i>	1	2.0	92.0
<i>It's hard for the teacher</i>	1	2.0	94.0
<i>They are damaging to the educational process</i>	3	6.0	100.0
Total	50	100.0	

DISADVANTAGES OF INCLUSIVE EDUCATION

All the answers concerning the disadvantages of inclusive education given by parents are shown in Tables 68 and 69. It is worth recalling that two thirds of the IGr respondents (37 people) and more than half of the NGr respondents (32 people) did not answer the question at all or said: *I don't know*. The content

Table 69

Disadvantages of Inclusive Education According to Parents in the Noninclusive Group

Parents' answers	Frequency	Percent	Cumulative percentage
No reply	27	51.9	51.9
<i>They're not following</i>	1	1.9	53.8
<i>Kids may sneer at them</i>	1	1.9	55.8
<i>The curriculum will be simplified</i>	1	1.9	57.7
<i>They will hinder the instruction process</i>	1	1.9	59.6
<i>Kids will sneer at them</i>	1	1.9	61.5
<i>Kids sneer</i>	1	1.9	63.5
<i>Children with SEN might be jealous</i>	1	1.9	65.4
<i>They can have complexes</i>	1	1.9	67.3
<i>They can sneer</i>	1	1.9	69.2
<i>They won't be able to do well at school</i>	1	1.9	71.2
<i>They can't follow</i>	1	1.9	73.1
<i>Insufficient attention (given by the teacher to nondisabled students)</i>	1	1.9	75.0
<i>I don't know</i>	5	9.6	84.6
<i>(Children with SEN) will feel awkward, inferior</i>	1	1.9	86.5
<i>Conditions are unsuitable</i>	1	1.9	88.5
<i>There are no disadvantages</i>	1	1.9	90.4
<i>The curriculum is difficult for them</i>	1	1.9	92.3
<i>They hinder the instruction process</i>	2	3.8	96.2
<i>They hinder learning</i>	1	1.9	98.1
<i>I have nothing against it (there are no disadvantages)</i>	1	1.9	100.0
Total	52	100.0	

of parents' answers was qualitatively analyzed and the following categories were distinguished: 1) negative impact on the process of instruction; 2) negative evaluation of students with SEN; 3) negative attitudes toward students with SEN; 4) negative sentiments of students with SEN; 5) lack of an appropriate educational setting (Table 70).

Table 70
Disadvantages of Inclusive Education as Viewed by All Parents

Answer categories	Group			
	Noninclusive		Inclusive	
	Frequency	%	Frequency	%
No answer; <i>I don't know</i> (NGr – 5 answers)	32	61.6	37	74.0
There aren't any disadvantages	2	3.8	2	4.0
Negative impact on the process of instruction	6	11.5	8	16.0
Negative evaluation of students with SEN	4	7.7	1	2.0
Negative attitudes toward students with SEN	4	7.7	0	.0
Negative sentiments of students with SEN	3	5.8	0	.0
Lack of specialists and suitable conditions	1	1.9	2	4.0
Total	52	100.0	50	100.0

The analysis showed that parents – regardless of the type of school their child attends – were mostly concerned about the standard of teaching in inclusive schools. They think that students with disabilities *hinder the instruction process, they will be disturbing (...), and there'll be little time left for our kids*, so they have a negative impact on their child's educational progress. This is the opinion of 14 people, including eight IGr parents and six NGr parents (Table 70). The sources of such a narrative can be sought in the stereotypical, negative image of students with SEN: *the curriculum is difficult for them; They're not following; They won't be able to do well at school* (NGr – 4 people, IGr – 1 person).

NGr parents' written answers show that they are afraid that nondisabled children, including their own child, would behave inappropriately toward students with disabilities: *Kids may sneer at them* (4 people). Furthermore, three

NGr parents express concern about the sentiments of students with SEN; they think they will feel inferior among nondisabled students: *They can have complexes; They will feel awkward, inferior; Children with SEN might be jealous.* IGr parents mention teachers and their qualifications in inclusive education (2 people). The lack of suitable conditions to teach children with SEN is pointed out by one NGr parent.

Comparison of the disadvantages of inclusive education listed by respondents reveals that, firstly, NGr parents' answers are more nuanced and those parents perceive a wider spectrum of "threats," and secondly, that parents in both groups focus on academic performance and are concerned that students with disabilities in the classroom will make following the curriculum more difficult.

3.3.5. SOCIAL ATTRACTIVENESS LEVEL OF A PEER WITH DISABILITY IN THE OPINION OF PARENTS – HYPOTHESIS TESTING

A seven-point scale of disabled students' social attractiveness as viewed by parents was developed (detailed description in Chapter 2). The following aspects were considered: a) parents' position on their child's formal and informal interactions with children with disabilities, including talking, playing, and learning together; b) their evaluation of children with SEN as their child's close friends and students; and c) their choice of educational setting for students with SEN. One point was awarded for: a positive attitude to formal and informal interactions, positive evaluation of children with SEN as close friends and students, and for choosing inclusive school as an educational setting for them. Otherwise, zero points were awarded. Each parent's score could range from 0 to 6 points. Three levels were adopted to express attractiveness intensity:

- low level: 0–2 pts.
- medium level: 3–4 pts.
- high level: 5–6 pts.

Table 71

Social Attractiveness Intensity of Children with Disability – Parents' Aggregate Results

Number of points	Number of parents	Percent	Cumulative percentage
0	22	21.6	21.6
1	7	6.9	28.5
2	2	1.9	30.4
3	19	18.6	49.0
4	27	26.5	75.5
5	0	.0	75.5
6	25	24.5	100.0
Total	102	100.0	

The total number of points collected by respondents is presented in Table 71.

One fourth of the parents, i.e., 25 (24.5%) people out of the 102 respondents, gained the maximum number of points. They expressed a positive attitude toward children with disabilities in all formal and informal situations investigated and positively evaluated them as close friends and students. One fifth of the respondents – 22 people (21.6%) – did not gain a single point (Table 71), which reveals their negative attitude to their child talking, playing, and learning together with peers with disabilities. They also chose special school as the most appropriate placement for children with SEN. These data show that nearly the same number of people had the highest and lowest scores: 6 points – 25 people and 0 points – 22 people.

The largest group were parents who gained 4 points (27 people – 26.5%). They were usually positively disposed to their child talking and playing with children with disabilities, had a good opinion of them as friends, and approved of their learning together. Another quite large group were parents who got 3 points for their answers – 19 people, 18.6% of all the respondents. Most frequently, they approved of their child talking and playing with children with disabilities and evaluated them positively as their child's close friends.

The distribution of results split between the inclusive group and the non-inclusive group (Table 72, Chart 28) shows large differences in the evaluation of social attractiveness made by parents in both groups. The highest scores – 6 points – are overwhelmingly prevalent among respondents in the inclu-

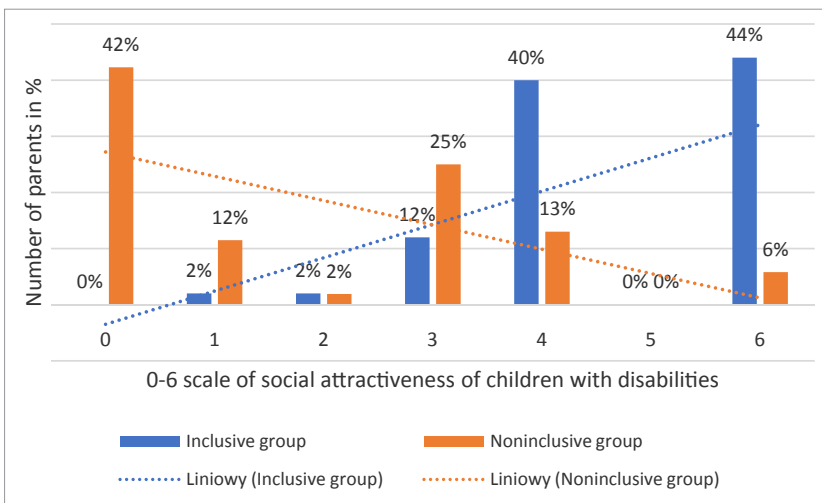
Table 72

Distribution of Social Attractiveness Intensity of Children with Disabilities and the Number of Parents in the Inclusive and Noninclusive Groups

Group		Attractiveness intensity on a 0- 6-point scale							Total
		0	1	2	3	4	5	6	
Inclusive	Number	0	1	1	6	20	0	22	50
	%	0%	2%	2%	12%	40%	0%	44%	
Noninclusive	Number	22	6	1	13	7	0	3	52
	%	42%	12%	2%	25%	13%	0%	6%	
Total	Number	22	7	2	19	27	0	25	102
	%	21.6	6.9	1.9	18.6	26.5	.0	24.5	

Chart 28

Social Attractiveness of Children with Disabilities on a 0–6 Scale As Perceived by Parents in the Inclusive and Noninclusive Groups



Note. Number of IGr parents = 50, number of NGr parents = 52, total N = 102.

sive group – 22 people (44%), with only three people with the highest score in the noninclusive group. As many as 22 parents (42%) in the noninclusive group gave children with disabilities very low social attractiveness ratings (0 points). There were no people with 0 points in the inclusive group.

In the inclusive group, the distribution of results is right-skewed, i.e., the higher score, the higher number of people with high scores – between 4 and 6 points in particular (84% of the IGr respondents), which reflects

a prevalence of approving attitudes toward formal and informal interactions between nondisabled children and their peers with disabilities. There are also two people in the inclusive group who gave children with SEN low attractiveness ratings – they had 1 and 2 points (Table 72).

In the noninclusive group, the distribution of results is clearly left-skewed – the number of people with low scores, close to the lower limit in particular, increases dramatically. Most NGr respondents' results (81%) are between 3 and 0 points with a decided prevalence of people who got 0 points – as many as 42% of the parents in this group. In their case, disapproval of children with disabilities as conversation partners and playmates is strongly expressed; they do not value them as students or close friends. A few NGr respondents (7 people, 13.5%) got either 1 point (6 people) or 2 points (1 person). This means that they do see a possibility of interactions between their child and children with disabilities in some rare situations – usually talking and playing together. Also the large group of NGr parents who got 3 points (25%) and 4 points (13%) should be pointed out. Three people gained the maximum number of points. This shows that there are parents in this group too who take a positive attitude toward children with disabilities as interaction partners in many situations.

According to the scoring system adopted, three levels were distinguished to reflect the intensity of social attractiveness: low, medium, and high (Table 73).

In total, 25% of all the respondents rated highly the social attractiveness of children with disabilities (Chart 29). Almost every second parent (45%, 46 people) had either 4 or 3 points, which means that they perceive children with SEN as “moderately” attractive as friends and students. Every third respondent (30%, 31 people) took the view that they would rather their child did not

Table 73

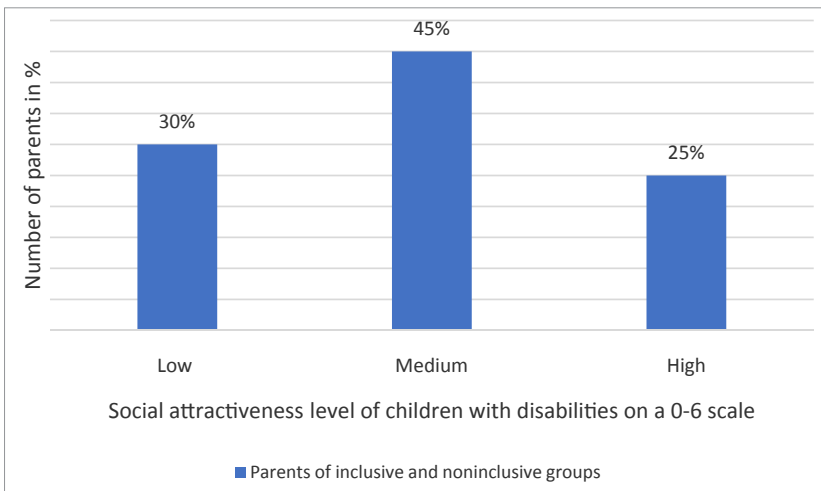
Level of Disabled Children's Social Attractiveness on a 0-6 Scale as Perceived by All Parents and the Number of Respondents

Attractiveness level	Number of points	Number of parents	Percent
Low	0–2	31	30.4
Medium	3–4	46	45.1
High	5–6	25	24.5
Total		102	100.0

interact with peers with disabilities, as they are unattractive partners. The largest group are then parents whose ratings of children with SEN as social partners are at the medium level. And what does the situation look like in the individual groups? Comparison of the results of attractiveness level evaluations (Table 74) shows that respondents with the medium level are still the largest group among IGr parents (26 people). In the NGr group, there are 20 people with the medium level, and as many as 29 parents are at the low level.

Chart 29

Level of Social Attractiveness of Children with Disabilities on a 0–6 Scale as Perceived by All Parents



Note. Number of parents = 102.

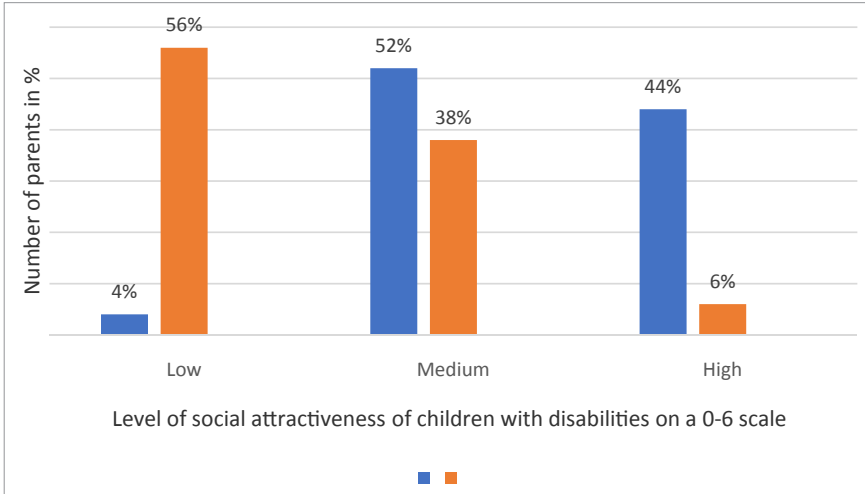
Table 74

Social Attractiveness of Children with Disabilities as Perceived by Parents in the Inclusive and Noninclusive Groups and the Number of Respondents

Group		Attractiveness levels			Total
		Low	Medium	High	
Inclusive	Number	2	26	22	50
Noninclusive	Number	29	20	3	52
Total	Number	31	46	25	102
	%	30.4	45.1	24.5	100.0

Chart 30

Level of Social Attractiveness of Children with Disabilities as Perceived by Parents in the Inclusive and Noninclusive Groups



Note. Number of IGr parents = 50, number of NGr parents = 52, total $N = 102$.

Almost half of the IGr parents (44%) perceive children with disabilities as good companions in play and learning (Chart 30). Only 6% of the NGr parents are of the same opinion. The medium level of the social attractiveness of children with SEN was found in both groups, and disproportions in the number of parents evaluating children with SEN at this level are not that significant: it is 52% in the inclusive group and 38% in the noninclusive group. The remaining parents gave children with disabilities low attractiveness ratings: 4% in the inclusive group and 56% in the noninclusive group. This shows marked divergences in the evaluation of disabled children's social attractiveness made by parents in the groups being compared.

Results of disabled children's social attractiveness were statistically analyzed with SPSS Chi-square tests. Statistically significant differences of $p < .001$ were revealed between the inclusive and noninclusive groups in favor of the inclusive group. It is safe to conclude that the attractiveness of children with SEN according to parents of children in the inclusive school is significantly higher than according to parents of children in the mainstream school. Thus, qualitative and quantitative analysis of the results confirmed the second hypothesis.

3.3.6. DISCUSSION OF THE FINDINGS AND SUMMARY

The study on parents of children attending inclusive and noninclusive schools found certain differences between the two groups in terms of their contact with the issue of disability. Parents in the inclusive group demonstrate – which is not surprising – more extensive experience of direct interactions with children with disabilities than parents in the noninclusive group. They draw their knowledge of disability mainly from their child’s educational setting, which is the inclusive school, and the mass media. Other authors’ reports indicate that parents of children in inclusive preschools and schools have greater knowledge of disability than parents of children in noninclusive settings (Paseka & Schwab, 2019; Sekułowicz, 2002). Moreover, they reveal that parents whose children attend inclusive settings are more interested in specialist literature and professional counseling (Al-Khamisy, 2006). This demonstrates then the impact of the social environment on how knowledgeable both Kazakh parents and parents in other countries are.

Altogether, more than two thirds of the respondents in our study (68%) declare that they talk about disability with their children at home. A. Soroka-Fedorczuk (2007)¹⁵ asked 299 Polish parents of Grade 1 and Grade 3 students in inclusive and noninclusive settings about it. About 84% of the respondents answered in the affirmative. It can be seen then that the majority of both Polish and Kazakh parents raise the issue of disability in conversations with their children. However, it happens more frequently at homes of those children who go to school together with their peers with disabilities – as we have demonstrated in the study.

The topics mentioned in the conversations of IGr and NGr parents with their children focus on developing socially acceptable attitudes in their children – in particular, fair, helping, and tolerant attitudes toward children with disabilities. These conversations also aim at increasing children’s knowledge of disability. Similar content of conversations between Polish parents and their children is reported by A. Soroka-Fedorczuk (2007). According to the author’s data, about 24% of the conversations relate to providing support, about 20% concern tolerant attitudes, and 12% increase the knowledge of the causes of

¹⁵ Our data will be compared with A. Soroka-Fedorczuk’s (2007) data wherever this is possible.

disability. This suggests that parents – regardless of their nationality and culture – think that the acceptance of otherness and social sensitivity are very important coexistence skills.

The majority of Kazakh parents (~70%) are not afraid of informal interactions between their child and peers with disabilities (talking and playing together), explaining that such contact provides positive experience and shapes the sensitivity of children. Parents' attitudes differ, however, when answer distributions in the inclusive group and the noninclusive group are compared. Parents of NGr children split into two almost equal groups of supporters and opponents of such interactions. Some of them (23%) convey their anxiety about contact with children with disabilities at home (see Chapter 3.3.2), thus developing a fear-driven attitude toward children with SEN in their children. In contrast, the vast majority of parents whose children go to school together with their peers with disabilities demonstrate a positive attitude toward their children talking and playing with their peers with disabilities. Polish data indicate that out of 299 parents, more than 90% are in favor of play interactions (Soroka-Fedorczuk, 2007). Even though the publication quoted does not include information that would take into account parents split into groups depending on the type of school their children attend, it is evident that approval of interactions is higher in Poland. This could probably be explained by the fact that the idea of social integration has been intensively promoted since the mid-eighties in Poland, and the idea of inclusive education – since the early nineties. The presence of people with disabilities in Polish public space is becoming a part of everyday life, that is why society's fear of contact with the "other" is less intense.

Therefore, it is hardly surprising that in Kazakhstan, a country where the idea of inclusion is relatively new, every second parent in our study would not agree to their child learning together with peers with disabilities. Differences in attitudes become apparent when we compare parents' answers, taking into consideration their child's educational setting. IGr parents express a positive attitude toward their child learning together with children with SEN significantly more frequently than NGr parents. It is worth recalling that students in the inclusive school where we conducted our study are children with sensory impairments (visual and hearing impairments) and with motor disorders. Reports from different countries reveal more positive attitudes toward nondis-

abled children learning together with children with sensory and motor impairments than with children with behavioral problems and with severe cognitive disabilities (Avramidis & Norwich, 2002; de Boer, Pijl, & Minnaert, 2010; Paseka, 2017; Schwab, 2018). Our data are consistent with these reports.

Interesting are the results concerning the choice of school for students with disabilities by parents of nondisabled children. Most of them (~73%) point to special school as the most appropriate placement for children with SEN. Less than half of the IGr parents (46%) and only a few NGr parents choose inclusive school. The vast majority of NGr respondents approve of segregated education (~92%). Both IGr parents and NGr parents justify the choice of special school with the fact that special schools are tailored to the needs and abilities of students with disabilities. Polish data are more optimistic. Out of 299 respondents, special school was chosen as a placement for students with disabilities by 43 people, that is, 14.4% of all the parents (answers: “strongly agree” and “agree” were added up) (Soroka-Fedorczuk, 2007). Parents’ attitudes toward inclusive education split between inclusive and noninclusive groups found by D. Al-Khamisy (2006) correspond to the results quoted above. According to this researcher approximately 90% of the parents in the inclusive group and 60% of the parents in the noninclusive group were in favor of education shared by nondisabled children and children with disabilities (answers: “strongly agree” and “agree” were added up). Polish parents are therefore more convinced that the idea of inclusive education is right than Kazakh parents. Many researchers from different countries with longer experience in inclusive education than Kazakhstan find that both parents of nondisabled children and parents of children with disabilities who attend inclusive settings generally have positive or neutral attitudes toward this form of instruction (Brażel & Kaniok, 2016; Boer, 2009; Boer, Pijl, & Minnaert, 2010; Paseka & Schwab, 2019; Zamkowska, 2019). The relationship between the tradition of inclusive education and the attitudes of nondisabled children’s parents is clearly visible – the longer experience, the more positive attitude to this form of education.

Even though the majority of Kazakh parents (including almost half of the IGr parents) are in favor of segregated education (special school) for students with disabilities, many respondents – including those in favor of special school – recognize the advantages of inclusive education. Above all, they

underline the benefits of inclusive education for students with disabilities (strengthening motivation for learning and developing skills). Similar conclusions concerning greater benefits for children with SEN were reached by Polish researcher D. Al-Khamisy (2006). Then Kazakh parents list the positive sides of inclusive education relating to their own children, that is, developing positive personality traits in them (kindness and sympathy) and shaping an accepting attitude. The findings of our study in this area correspond to reports by researchers from other countries (Brażel & Kaniok, 2016; Boer, 2009; Kazanowski, 2011; Myśliwczyk, 2016; Remziye & Neriman, 2016).

Among the negative sides of inclusive education listed by Kazakh parents in both groups are issues relating to the lowering of educational standards by students with disabilities, who – seen from the angle of their poor skills – hinder learning curriculum content. According to respondents, such students slow down nondisabled children’s learning. Similar concerns are expressed by parents in other countries (Leysler & Kirk, 2007; Doménech & Moliner, 2013; Ostrach, 2011).

SUMMARY OF THE STUDY

Analysis of the results obtained from the questionnaire for Kazakh parents of first-grade students showed that:

- 1) The main disabilities identified by parents include: motor disabilities (listed by IGr respondents more frequently), hearing and visual impairments, speech disorders, and intellectual disabilities (the latter listed by NGr respondents more frequently);
- 2) IGr parents learn about children with SEN mainly from their child’s educational setting and the mass media, NGr parents – from the mass media and their own experiences (work, street, sometimes there is a person with disability in the family);
- 3) Most of the respondents in both groups know children with disabilities directly or indirectly; the vast majority of IGr parents had contact with them in their child’s inclusive school, NGr parents – in their local community, family, and the media;
- 4) IGr parents talk with their children about disability significantly more frequently than NGr parents;

- 5) Parents in both groups talk mainly about proper behavior toward children/people with disabilities with their children (*Don't hurt them; They're just like you; Help them*);
- 6) There were just a few cases (noninclusive group) where the image of children with disabilities as inferior was shaped;
- 7) The vast majority of parents in the inclusive group and half of the parents in the noninclusive group approve of social interactions (talking and playing together); differences in the attitudes of both groups toward informal interactions with children with SEN are statistically significant, with $p < .001$;
- 8) As many as 90% of the IGr parents and ~23% of the NGr parents approve of their child learning together with children with disabilities; differences in the attitudes toward shared learning are statistically significant, with $p < .001$;
- 9) Overall, every second NGr parent (44%) and the vast majority of IGr parents (94%) make a positive evaluation of children with disabilities as close friends;
- 10) Only 46% of the IGr respondents make a positive evaluation of children with SEN as students who are able to follow the mainstream curriculum; positive evaluations are rare in the noninclusive group (8%);
- 11) Divergences are seen in the attitude toward informal interactions (talking and playing together) and formal interactions (learning together) between parents and children – which is especially pronounced in the inclusive group. IGr parents are more willing to agree to their child's informal interactions with children with disabilities than their children. In contrast, IGr children are more willing to learn together with their peers with SEN than engage in informal interactions with them as compared to their parents;
- 12) Almost all NGr parents (~92%) and more than half of the IGr parents (54%) choose special school as an educational setting for children with disabilities; differences are statistically significant, with $p < .001$, in favor of IGr parents, i.e., they are in favor of inclusive education more frequently than NGr parents;
- 13) Arguments for choosing special school given by parents in both groups are very similar: they point out that students with disabilities learn

more slowly and have lower learning potential, that they need extra time, which teachers give them at their children's expense, and that special schools are tailored to disabled students' needs and have special staff;

- 14) Respondents' justifications concerning their choice of inclusive school have two dimensions: on the one hand, they list benefits for nondisabled children (shaping positive attitudes and character traits); on the other hand, they emphasize benefits for children with disabilities (strengthening motivation, stimulating their development). The latter prevail;
- 15) Parents in the inclusive group know significantly more about inclusive schools and their specific nature than parents in the noninclusive group, where only a few people have heard about inclusive schooling;
- 16) Arguments in favor of inclusive education include the right to education and the favorable impact on the development of prosocial attitudes in nondisabled children. Among arguments against inclusive schooling, parents list the issue of children with disabilities not keeping up with the curriculum, nondisabled children's negative attitudes (*They will sneer at them*), and disabled students' low self-esteem (*They will be aware of their impairments*). More than half of the respondents did not fill in the advantages and disadvantages of inclusive education field; the remaining ones point out: a) the benefits for nondisabled children (acceptance, empathy, and knowledge) and the benefits for children with disabilities, stressing the latter in particular (socialization, increased motivation for learning, and a feeling of normality), b) negative attitudes toward students with disabilities and hindering learning, c) the need to train teachers and prepare appropriate conditions;
- 17) Parents' aggregate results (their answers and choices concerning conversation, play, learning, evaluation as a friend and a student, and school type) were the basis for the scale of disabled students' social attractiveness; a comparative analysis of parents' answers in both groups showed statistically significant differences ($p < .001$) in their evaluation of disabled children's attractiveness;
- 18) Disabled students' attributes as partners of formal and informal interactions and as friends one can talk, play, and learn with are rated much

higher by parents whose children attend the inclusive school as compared to parents whose children attend the noninclusive school.

Many researchers report that inclusive educational settings along with actions that take place within them, shared use of space, and the frequency of interactions with children/people with disabilities influence the development of positive attitudes toward them (Al-Khamisy, 2006; Gonçalves & Lemos, 2014; Hong, Kwon, & Jeon, 2014; MacMillan et al., 2014; Reiter, Schanin, & Tirosh, 1998; Paseka & Schwab, 2019; Oszustowicz, 2004; Zamkowska, 2019). This is confirmed by our analyses as well.

CONCLUSIONS FROM THE STUDY AND RECOMMENDATIONS FOR PEDAGOGICAL PRACTICE

Based on analysis of empirical data on disabled students' social attractiveness, a main conclusion can be formulated that there are distinct differences in how children with disabilities are evaluated as classmates, students, and friends both by parents and by their nondisabled children – first-grade students – in present-day Kazakh mainstream (noninclusive) schools and in schools of a new type – inclusive schools.

However, it should be noted that students in the noninclusive (mainstream) school and students in the inclusive school differ slightly in the meaning of the term people with disabilities. Both groups perceive them mainly as people with visible external defects. The vast majority of participants link disability with motor impairments; hearing and visual impairments are listed second. Students are less familiar with speech disorders and intellectual disabilities. (Cognitive component – predominant image of peers with motor disabilities).

There are differences between the groups in terms of the sources of their knowledge of disability and their experience of interactions with peers with SEN. Children in the inclusive school point to their educational setting; they acquire knowledge of disability while interacting with their peers with disabilities on the one hand and broaden it while talking with their parents on the other. Disability is not a taboo for them because they encounter it every day in their learning environment. That is why they talk freely about children with disabilities with their parents. Parents of students in the mainstream (non-inclusive) school rarely take up the issues of disability at home. According

to children's accounts – regardless of the school type – conversations focus on developing positive attitudes to people with disabilities and above all, on not hurting them. Parents explain that people with disabilities have difficulties with functioning and it is necessary to help them, which they are trying to instill in their children most frequently. (Cognitive and dispositional components – image of children with disabilities as people who need help).

The vast majority of students in the inclusive school express their positive attitude to informal interactions – such as conversation – with their peers with disabilities. (Cognitive and dispositional components – image of children with disabilities as people who communicate). In contrast, students in the non-inclusive school show two opposing attitudes to conversation: willingness and unwillingness. They explain their negative attitude, saying that such children *don't hear, don't speak, don't understand*. This shows they do not value children with disabilities as interaction partners because they cannot communicate with them. (Cognitive and dispositional components – image of children with disabilities as people who do not communicate).

The majority of students in the inclusive school declare they are willing to play and learn with their peers with disabilities, who are well-perceived as classmates and students by them. First-graders in the study are friends with children with SEN, they call them their close friends, and describe them in positive terms, such as: *smart, kind, good, he's my friend, we're friends*. (Cognitive, emotional, and dispositional components – positive image of children with disabilities).

More than half of the students in the noninclusive school have a distrustful, fearful attitude toward children with disabilities and would not like to establish closer relationships with them, especially play interactions. Justifying their attitude, they focus on disabled children's impairments and poor skills: *they don't have legs, they can't walk, they can't play*. Most of the NGr students cannot explain their position on interactions with peers with SEN. (Cognitive, emotional and dispositional components – negative image of children with disabilities).

More than 80% of the children in the inclusive group and slightly more than half of the children in the noninclusive school (52%) accept learning together with children with SEN. In the case of IGr students, a positive image of peers with disabilities as classmates prevails (cognitive component). In

contrast, NGr students' attitude to the prospect of learning together with students with SEN is more ambiguous, they are often unable to explain their negative position. Among those who justify their reply, there are statements that indicate a negative image of children with disabilities as students: *they won't be able to learn, they're poor students* (cognitive component).

Close friendly relationships with peers with SEN and inviting them to one's birthday party are approved by the vast majority of students in the inclusive school, 84% and 76% respectively, and by only half of the students in the noninclusive school, 46% and 48% respectively. This shows that an image of peers with SEN as close friends, positive emotions, and positive attitude to interactions prevail among IGr students.

NGr children consider the possibility of becoming friends with peers with disabilities and inviting them to their birthday party as situations that are controlled by their parents: it is their mom or dad who decides who they will become friends with and who they will invite to their birthday party, and this is how they usually justify their negative answer (*Mom/Dad won't let me*) (dispositional and emotional components). In our opinion, treating peers with disabilities as people with physical defects who do not know how to play or learn results from negative stereotypes and this phenomenon is more visible in the case of parents and children in the noninclusive group (cognitive component).

There are significant differences between the groups of Kazakh students in their general evaluation of disabled peers' social attractiveness. The majority of participants in the inclusive school (80%) rate highly the social attractiveness of children with SEN. Less than half of the students in the noninclusive school (40%) rate it highly. Analyses showed statistically significant differences in students' evaluations in favor of participants in the inclusive group. Thus the presumption about higher social attractiveness of peers with disabilities as perceived by first-grade students in the inclusive school was confirmed.

It was also observed that participants in the noninclusive group demonstrated willingness to engage in informal interactions with peers with disabilities in nice, warm shades of a non-school space. There were no differences found between the two groups in terms of their choice of a place to meet: 84% of the students in the inclusive school and ~70% of the students in the noninclusive school pointed to the colored house. An optimistic assumption can be made that there is a chance that NGr students will establish a good rapport

with peers with disabilities (dispositional component) when the inclusive education model is introduced.

Furthermore, the study made it possible to determine how much parents knew about disability types and to identify their sources of information on disability, interactions with people with disabilities, position on their child's actual or potential contact with peers with disabilities, their attitude to inclusive education, and general evaluation of disabled children's social attractiveness.

For parents with children in the inclusive school, their children's educational setting is the most important source of knowledge. Both groups gain information about disability from the mass media. Parents with children in the noninclusive school gain knowledge and experience mainly through indirect contact and, rarely, direct interactions with people with disabilities at work and in their neighborhood. Frequently, they cannot name their sources. Parents of students in the inclusive school have greater knowledge of disability, especially of motor, hearing, and visual impairments, because students with such disabilities go to school together with their children. The answers of parents with children in the noninclusive school indicate they have a good general knowledge of disability types; they list motor disabilities, hearing and visual impairments, speech disorders, and intellectual disabilities. However, parents in both groups list motor disabilities first from among all impairments: 86% IGr and 71% NGr. This proves that a person with disability is usually associated with a person who has difficulty moving around (cognitive component).

Kazakh parents have conversations about disability with their children, but those with children in the inclusive school dedicate much more attention to this issue. Talking with their children, they shape tolerant and helping attitudes but also create an image of children with SEN as children who are just like their own children. By contrast, the conversations of parents whose children attend the noninclusive school include – apart from developing fair and helping attitudes – a thread of creating an image of one's own child as healthy and clever compared to children with disabilities. This is an adverse phenomenon because it reinforces and transmits stereotypes of people with disabilities as not only different but also inferior (cognitive, emotional, and dispositional components).

Parents in the inclusive group adopt a significantly more positive attitude to interactions between their child and children with disabilities than parents

in the noninclusive group – both in informal situations (talking and playing together) and in formal situations (learning together) (dispositional component). However, even they are not fully convinced of the idea of inclusive education, as half of them (54%) choose special school as a more appropriate placement for students with disabilities than inclusive school. It appears that the teaching staff in the inclusive school should rethink their cooperation with parents, taking into consideration the recommendations given by the inclusion strategist D. Mitchell (2008).

Parents of children in the mainstream (noninclusive) school – in principle – do not see a possibility of their children learning together with children with disabilities. They justify their position mainly with disabled students' low level of ability to learn curriculum content, their feeling of otherness, nondisabled students' negative attitudes, and say that special schools are better tailored to the needs of children with disabilities than mainstream (traditional, noninclusive) schools. At the same time, it turns out that parents in the noninclusive group do not know much about inclusive schools. It is probable that this is the reason for their anxiety about nondisabled students and students with disabilities learning together (cognitive, emotional, and dispositional components).

Parents point out the disadvantages of inclusive education (developing a feeling of otherness and being inferior; hindering learning; lack of specialist teaching staff); they also see the advantages of this form of instruction: developing fine traits of character in nondisabled children, especially empathy (*He'll be a good person*) and prosocial attitudes. According to parents, inclusive education will be more beneficial for children with disabilities. An inclusive environment will first of all socialize such students and motivate them to learn.

A comparative analysis showed that parents of children in the inclusive school give children with disabilities significantly higher social attractiveness ratings as compared to parents of children in the mainstream (noninclusive) school; therefore, the second hypothesis was confirmed.

Based on the study conducted, the following can be ascertained: firstly, first-graders in the noninclusive school have a certain willingness to interact with peers with SEN; secondly, the inclusive school promotes the development of positive relationships between nondisabled students and their peers with disabilities at the early elementary education level. Inclusive education pro-

vides conditions for building relationships between students and for increasing the social attractiveness of peers with SEN; in particular:

- social environment of inclusion – school: spacial proximity between nondisabled children and children with disabilities; frequent interactions; effect of closeness and physical contact between children/students while playing and doing tasks together; effect of simply being in the visual field; relationship between liking and the frequency of interactions;
- social environment of inclusion – parents: conversations with parents or other significant adults about disability; developing positive attitudes toward people with disabilities;
- shared social environment of inclusion – school and family: developing positive emotional attitudes toward people with disabilities, including sympathy, concern, and protectiveness as well as – which is crucially important – creating an image of classmates with disabilities as peers one can learn, play, and make friends with.

Recommendations for pedagogical practice

An important area of pedagogical interventions – which aim at increasing the social attractiveness of peers with disabilities – concerns creating conditions that will activate emotional components, including a) an emotionally positive attitude toward interactions with peers with SEN in first-graders that will stimulate and strengthen their willingness/motivation to participate in playing and learning together; b) developing the culture of emotional response in interactions; c) stimulating first-graders' willingness to offer and accept support while interacting with their peers.

Teachers are recommended to engage nondisabled students and those with disabilities in pair work that will promote the development of communication and interaction skills. Students should be paired up according to their preferences. This will ensure that classes will be a positive experience for children and will help to generate and strengthen their motivation to interact. Students would start to have closer relationships and would support their peers with SEN. It is recommended that teachers plan special situations for students working in pairs that will promote interactions, such as changing partners during the class, changing tasks to be done, etc.

The “School of the Future” project is an interesting solution based on cooperation. Students are asked to design a school (with their teacher’s support) where all children can learn regardless of their health condition and skills. Children with SEN should take an active part in the project. Presenting their solutions, children will be discussing the issue of people with disabilities and then will try to convince other children to support their idea.

The teacher’s authority should be used as one of the means to shape positive attitudes toward children with disabilities in nondisabled children within inclusive education. Observing their teacher, students notice his or her behavior when children with disabilities need support or care. It is the early elementary teacher who shapes behaviors toward students with SEN that nondisabled students will consider standard. That is why it is so important not to lose the learning period in the first and second grades when the mechanism of imitating the teacher is the most effective. During this stage, the teacher should model behavior patterns that will be imitated.

Students with special educational needs of ten feel negative emotions relating to failure. They have been rejected by others and encountered negative attitudes all too often. Many of them have learnt not to trust their school environment. Educators should know that there is a risk of lowered self-esteem, depression, anger, fear, and anxiety in such students. Teachers can break this vicious circle if:

- They understand students’ emotions and how their emotions make learning easier or more difficult;
- They create an environment that reinforces positive emotions and decreases negative emotions;
- They understand that students come to school in a different frame of mind every day and their emotions might distract them;
- They try to show mainly positive emotions in the process of instruction;
- They provide a setting that is marked by stability and consistency, security, warmth, empathy, support, reliability, a sense of belonging, fairness, and calmness;
- When appropriate, they use humor to ease the tension and make learning more amusing.

It is quite common that – due to their frequent academic failures – students with SEN think they are unable to learn. The risk increases if educators and parents have low expectations of them. That is why teachers need to:

- Believe that all students are capable of learning;
- Keep striving to raise the expectations students have of themselves as well as their parents' expectations;
- Help students realize that success does not depend only on one's abilities but also on their efforts;
- Help them develop confidence in their own abilities: "I can do almost everything if I try," "If I can understand math, I can understand ... too," "If I learn diligently, I know;"
- Give students enough time to ask questions and participate in discussions.

Also, theater pedagogy methods are recommended to develop a positive attitude toward children with disabilities among their nondisabled peers. Making theatrical performances unites children and positive feedback from spectators, parents, and students in other grades will make them happy and proud of their joint production.

One of the most challenging issues relating to inclusive education is the fact that some parents of nondisabled children do not accept the situation where their children learn together with children with special educational needs. At the same time, parents of children with SEN want them to be included in regular classrooms and go to school in their neighborhood. That is why the issue of developing a positive attitude toward children with SEN among parents of nondisabled children who go to school together with children with disabilities is of crucial importance. As parents play an important (if not key) part in their children's education mainly because they are parents with all the rights and responsibilities and also partners in designing and implementing educational programs for their children, this problem should be given careful consideration. D. Mitchell (2008) suggests that parents should be gradually involved in the school's educational process:

- Stage 1. Informing. The school informs parents about the programs it runs and parents, in turn, ask for information.
- Stage 2. Participation. Parents are involved in the school's activities to a limited extent. For example, they are invited to specific events that take place within the academic and extracurricular process.
- Stage 3. Dialogue and exchange of opinions. Parents are invited so that they can understand the goals and needs of the school and the class.

Stage 4. Participation in making decisions. Parents are asked their opinion when a decision needs to be made that will have an impact on their child. An example of this level of involvement is a meeting to design an individual plan.

Stage 5. Full participation in the educational process. This is the highest level of involvement when parents make decisions together with the school, they take part both in planning and in evaluating the school program.

The above stages of parent involvement increase the likelihood that inclusive education will be successful. Also helpful are the author's guidelines concerning school culture: 1) creating school culture – ethos – consists in developing and implementing conceptual goals for the school; 2) these goals reflect the values, views, traditions, and behavioral norms of all the members of the school community; 3) in the case of inclusive schools, this means, above all, acceptance and support of diversity and sensitivity to individual needs (Mitchell, 2008).

Family projects are of great educational value where the youngest students would be involved in socially useful work together with their families. Their involvement in socially meaningful activities distracts children with SEN from their own problems, arouses feelings of pride, self-esteem, and self-confidence and lets them experience success. It is necessary to teach parents how to cooperate with their child while working on this project. That is why one of parent-teacher conferences needs to be devoted to organizational procedures for family projects. Also, it is important to create conditions that will enable non-disabled students to learn practical skills in providing support, to enrich their experience of interacting with people with disabilities other than their peers, especially with young people but also with older people with disabilities who have been successful in sports, science, business, etc. The above recommendations do not exhaust the full spectrum of actions connected with creating an inclusive environment; however, it is our conviction that they develop a friendly attitude toward children with disabilities and increase their social attractiveness.

The findings of the study described here support the authors' view, which is also shared by L. Florian and J. Sprat (2013) among others, that positive attitudes toward students with SEN are of key importance in the effective implementation of inclusive education, which is encouraged by creating a positive image of children with disabilities as classmates, friends, and students both at home and at school.

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APPENDIX

APPENDIX 1

SOCIAL ATTRACTIVENESS OF STUDENTS WITH DISABILITIES SURVEY QUESTIONNAIRE FOR CHILDREN (VERSION 1)

Developed by Ewa M. Kulesza

Dear Parents and Guardians,

Please give consent for your child to participate in an interview (conversation) by signing in the space provided below.

The aim of the conversation is to get to know your child's attitude toward interactions and education shared with children with disabilities (with special educational needs). The results will be used for scientific purposes and will be the basis for making pedagogical recommendations. The conversation is confidential.

I agree

.....

Signature of the legal guardian

The interviewer fills in demographic information.

DEMOGRAPHIC INFORMATION

1. Gender: girl boy
2. Age: ... years ... months
3. Place of residence:

- village
 - town with up to 20 thousand inhabitants
 - city with 20 thousand up to 100 thousand inhabitants
 - city with over 100 thousand inhabitants
4. Type of educational setting:
- inclusive public school (nondisabled children learn together with children with disabilities)
 - noninclusive public school (no students with disabilities in school)
5. The child attends:
- preschool Grade 1 Grade 2

QUESTIONS

The interviewer records the child's responses.

The interviewer asks the child:

What's your name? (The student says his or her name.) Beautiful name.

(The interviewer says the child's name), we'll talk about girls and boys with whom you'd like to play and learn.

(The interviewer says the child's name), tell me:

1. What does it mean that a person is fit?
2. What does it mean that a person is disabled/handicapped?
3. How do you know that?
4. Have you met such a person? Where did you see them?
5. Do your parents (mom, dad) talk with you about such people/children?
 yes no
6. If they do, what do they say?
7. If there was a girl or a boy with disability in your class, would you talk to her/him?
 yes no
8. Why?
9. Would you play with him/her? yes no
10. Why?
11. Would you like to sit at the same desk with a girl or a boy with disability? yes no

12. Why?

13. Do you like her/him? yes no

14. Why?

15. Could a girl or a boy with disability be your friend? yes no

16. Why?

17. Would you invite a girl or a boy with disability to your birthday party?

yes no

18. Why?

Duration of the interview: about 5–10 minutes.

APPENDIX 2

TWO HOUSES TEST

Developed by Ewa M. Kulesza

Multiple choice test: Black house and colored house

The interviewer asks the child and marks his or her answer.

Question: to which house will you invite a girl or a boy with disability?



Source: Modified Clipart house

Duration: about 1 minute

APPENDIX 3

SOCIAL ATTRACTIVENESS OF STUDENTS WITH DISABILITIES SURVEY QUESTIONNAIRE FOR PARENTS (VERSION 1)

Developed by Ewa M. Kulesza

Dear Parents and Guardians,

The purpose of the survey is to get to know your opinion on interactions between your child and children with disabilities (with special educational needs) and their shared education. The results will be used for scientific purposes and will be the basis for making pedagogical recommendations. Therefore, please answer the questions as honestly as possible. Information given in the questionnaire will remain confidential in line with laws protecting sensitive personal data.

DEMOGRAPHIC INFORMATION

1. Person completing the questionnaire: mother father other guardian (who?)
2. Parent's/guardian's: 25–30 31–35 36–40 41 years old or older
3. Parent's/guardian's education: elementary secondary higher
4. Place of residence:
 - village
 - town with up to 20 thousand inhabitants
 - city with 20 thousand up to 100 thousand inhabitants
 - city with over 100 thousand inhabitants
5. Gender of your child: girl boy
6. Type of educational setting:
 - inclusive public school (nondisabled children learn together with children with disabilities)
 - noninclusive public school (no students with disabilities in school)
7. The child attends: preschool Grade 1 Grade 2

QUESTIONS

Please choose an answer or write your own.

1. What types of disabilities do you know?
2. Where do you get your knowledge about disabilities?
3. Have you had any contact (seen, read, or heard about) with children with disabilities?
 yes no
4. If you have, where did you have contact with them?
5. What school, in your opinion, should students with disabilities attend?
 mainstream school (inclusive): students with disabilities learn together with nondisabled students
 special school: only for students with disabilities
 other (specify)
6. Please explain your answer:
7. Do you talk to your daughter/son about people with disabilities?
 yes no
8. If you talk to your child about people with disabilities, what information do you give your child?
9. Would you allow your child to talk to a peer with disability?
 yes no
10. Please explain your answer:
11. Would you let your child play with a peer with disability?
 yes no
12. Please explain your answer:
13. Would you agree to your child learning together with a child with disability?
 yes no
14. Please explain your answer:

-
15. Do you think that a child with disability can be a good friend for your child?
 yes no
16. Do you think that students with disabilities are able to follow the curriculum at the same level as nondisabled students?
 yes no
17. Do you know anything about inclusive schools where nondisabled students and students with disabilities learn together?
 yes no
18. If so, where does your knowledge of such schools come from?
.....
19. What are the advantages of inclusive education in your opinion?
.....
20. What are the disadvantages of inclusive education in your opinion? .
.....

