# INTERNATIONAL JOURNAL
## of SPECIAL EDUCATION

**1**

vol 35

2 0 2 0

# INTERNATIONAL JOURNAL
## of SPECIAL EDUCATION

# 1
**vol 35**

2 0 2 0

**DEAR ALL,**

We proudly present to you the first issue of International Journal of Special Education (IJSE) in a revised formula. That is due to the death of its long-term Editor-in-Chief professor Marg Csapo. Our main goal is the further, intensive development of the journal and increase of its quality. Thus, we would like to continue the work of its Creator.

With this issue we want to begin a new chapter in the history of IJSE. The formula of our magazine is about to change a little and I would like to, as Editor-in-Chief, present to you those changes and our ambitious intentions.

The International Journal of Special Education will still continue its publishing efforts, but will also bring together knowledge from all areas of science which address the problems of functioning of people with disabilities in a very broad range of the concept. It will pay special attention to building the idea of inclusion.

We do want to publish articles from all over the world, thus starting up a broad discussion about the educational, economic and social situation of those people and their families.

Therefore, we would like to invite representatives of the humanities, social, natural and exact sciences to cooperate. In that way, we want to broaden the problem area of disability research and make available a means of international communication for the effective promotion of research results.

The aim of our activities is also to promote interdisciplinary research cooperation between communities representing different fields of humanities (including science of culture and religion), social science (including sociological science, psychology and pedagogy, social work), natural science (including medical science, physical culture studies) and science (especially in the field of research experiments dealing with disability issues).

IJSE will publish scientific texts combining two paradigms. We invite both researchers located in the current of qualitative and quantitative research to publish, so that everyone can present their latest scientific achievements.

I think there has never been a situation when special education in an age of inclusion faced such diverse requirements. Understood as a full-life process today, it covers a range of issues which is intended, among other things, to enable a coherent construction of the image of the world - understanding the phenomena and mechanisms that govern it and the ability to learn and search for reliable information. Finally, improving the qualifications already acquired and changing them according to the needs and gaining new competences which enable people with disabilities to function in a complex area of social relations.

Such a vision of the modern world will be a starting point for our selection of texts that will present this broad scientific perspective.

Professor Małgorzata Sekułowicz
Editor-in-Chief

# A Change in Interpersonal Relational Capital:
# Through mentoring relationships and homework activities in a university setting

Ann-Louise Ljungblad[1] and Girma Berhanu[1]

[1]Department of Education and Special Education, Gothenburg University, Sweden

**ABSTRACT**

This article presents an innovative project revolving around student participation in homework activities. The theoretical framework is relational pedagogy with a focus on student-mentor relationships in a university setting. The authors used semi-structured interviews combined with observations of the interactions between the participants. The findings are analysed at a micro- and meso-level, based on an interpersonal relational perspective on teaching, Pedagogical Relational Teachership (PeRT). The popular claim that homework time is positively related to scholastic achievements gains was observed. The findings from this study add to the general knowledge of how participants perceive their school activities and future careers. Furthermore, relational values like *connecting, belonging, trusting, including and confidence-building* emerged between students and mentors over time. The examination of the mentor-student relationships highlights how a new *interpersonal relational capital* launched a movement with a possible change in social position, in terms of entering future university studies. The article discusses the results at a societal level in relation to equity and young people's possibilities of participating in future university studies. Since the study shows the positive aspects of 'enriching' activities supporting immigrant youth in homework activities at university facilities, we encourage other institutions of higher education to open up their premises for similar projects, in order to improve engagement, raise achievement levels and enhance inclusiveness in the larger social fabric.

*Keywords:* homework; mentor-student relationship; trust; interpersonal relational capital; equity; inclusion

## INTRODUCTION

This study is part of a larger project aiming to explore the impact of 'enriching' activities, such as community development that supports immigrant youth in school-work (homework) in order to enhance engagement, raise achievement levels and create interest in future university studies. The goal of the homework project is to show how collective engagement, represented by measures of informal social controls, mobilisation of residents/families, sustainable community development, social cohesion and trust can help buffer communities counteract the negative effects of being isolated from attending higher education. Based on an interpersonal relational view of teaching and education (Bingham & Sidorkin, 2010; Aspelin, 2014; Ljungblad, 2019), the specific objectives and goals of this study are to find out why the students participate in homework activities, and what is their reasoning concerning the mentoring experiences offered at a university setting in the evenings. Hopefully, the findings from this study will add to the general knowledge of how mentor-student relationships can support young people's future careers and opportunities.

As a consequence of the recent massive immigration in Sweden, the education system has lately come under serious pressure. This rapid demographic change has brought with it ethnic segregation and inequality, which presents a major challenge for policymakers in terms of social integration and educational inclusion (OECD, 2016). The challenges inclusive education faces, such as issues of equity in education in general and immigrant integration more specifically, are varied and complex. Sweden's cultural and political heritage could have been an ideal setting to fully implement inclusive education as envisioned in *The Salamanca Statement and Framework for Action* (UNESCO, 1994). However, the new political movements and policies that dominate the Swedish education system have created contradictory and conflicting realities, which not only work against fundamental equity issues but also against the Swedish traditions of universalism, comprehensiveness and egalitarianism. The challenge on a national level is to address these changes while continuing to guarantee equivalence in the education system. However, the meanings of core concepts can shift across time and context. For instance, the concept of equivalence has been linked with freedom of choice and education as a civil right (the rights of students/parents). This contrasts with the tradition of uniformity, which has been more closely associated with the idea of education as a social right (Englund, 2005; Beach & Dyson, 2016; Pihl et al., 2018).

Marginalisation and segregation of socially disadvantaged and ethnic minority groups have increased. Result and resource differences have widened among municipalities, schools and students (Berhanu, 2016; Beach & Dyson, 2016; UNICEF, 2018). Swedish efforts in the past to promote equity through a variety of educational policies have been fascinating. Early educational policies, including the macro-political agenda, focused on the social welfare model, have helped to diminish the effects of differential social, cultural and economic background on outcomes. This has lately come under threat (Skolverket, 2015). Researchers emphasise that a 'spatial mismatch' between increasingly suburban job opportunities and the minority residents of poor urban neighbourhoods has magnified the new challenges (Bauer et al., 2005; Lange, 2008). This combination of barriers creates communities subject to serious crime, health issues and educational problems that, in turn, further restrict the opportunities of those growing up and living in them. One approach to tackle the problem, as we envisage it here, is community-based activities, such as homework support and mentoring offered to students in disadvantaged situations (Kerr et al., 2014).

This specific study deals with homework activities for high school students from one of Gothenburg's suburbs. The project was started by one of the authors and, after running for a couple of years, we received reports from participating schools that students have developed aspirations as manifested in their school performance. This has raised a profound eagerness to deepen our understanding of the mentor-student relationships to support cross-cultural efforts (Freeman & Kochan, 2018). The aim of this study is to explore the interpersonal relational aspects transpiring between participating students and mentors.

**The research questions are:**

1. **Why do students and mentors actively choose to attend homework activities?**

2. **What relational values emerge between the participants involved in the activities?**

The study aims to provide increased relational understanding and knowledge of the interpersonal relationships that develop during homework support activities created for high school students at a university setting. The study also discusses how young people's social capital (Woolcock, 2001) can be understood in order to explore possibilities and obstacles for the students' future university studies.

## HOMEWORK ACTIVITIES IN A UNIVERSITY SETTING

The project is volunteer work with students from schools in a suburb of Gothenburg. This homework activity presents an innovative approach and is unusual in Sweden since it is situated on the university premises. The students come to the Pedagogen, University of Gothenburg every Thursday from 17:00 to 19:30. The activities began five years ago with the first group. Now we have started homework support for the sixth time with new students. We provide mentoring that stimulates and inspires students to aim higher in their studies. We want to give them the feeling that they are able to continue with high school and college. We try to demystify the university as an institution and help students focus on schoolwork—despite different backgrounds. Since the situation in some areas of Gothenburg has undergone a major change in recent years in relation to school achievements, the aim is to support the students in their schoolwork and identity formation. Sweden is not a closed society and can thereby provide many alternative opportunities. We want to help change the social climate and show young people that a variety of future opportunities exists.

This particular homework activity is an innovative approach since the mentoring process takes place solely within the university setting. Students visit the university once a week and receive mentoring support in math, natural sciences and languages from mentors (volunteers), who are prospective teachers, former teachers, retired professors, and anyone with teaching skills. Among the participating students, tens of languages are spoken. The number of participants varies but the mentors can generally expect 35 students. Most of the participants in this project come from a low socioeconomic class, and have generally settled into impoverished or immigrant concentrated urban neighbourhoods (suburbs[1]) characterised by unemployment, some violence, segregation and structural barriers. Such neighbourhoods offer suboptimal schooling to their residents; schools there are typically under-resourced with a high teacher and principal turnover. Thus, mentoring offered by the homework activities for this population should be designed and structured so that it becomes an opportunity to develop academic Swedish skills while reinforcing content knowledge. In this project, there is some encouraging evidence that many of the young people from the area have benefited significantly from the homework activities. The two authors of this article have participated in the homework activities for some time. After a while, the authors deve-

loped an interest in exploring an interpersonal understanding concerning the participation of students and mentors, in the specific context of the downtown university setting. By highlighting relational values of importance for young people (Gergen, 2009), we offer an alternative relational perspective on school, to discuss society and the future of young people.

## ETHNIC MINORITIES AND SOCIALLY DISADVANTAGED STUDENTS

The geographical concentration of immigrants is a frequent source of public concern. Spatial segregation is thought to delay the proper integration of immigrants (Suárez et al., 2016). Educationally, the concentration of immigrants and ethnic minorities in schools is believed to damage the school performance of both the children of immigrant and autochthonous families. As a result, host families in societies receiving immigrants are concerned about the concentration of immigrants in certain parts of the school map and try to avoid stigmatised schools, which in turn increases the over-representation of immigrants (Szulkin & Jonsson, 2007; Cebolla-Boado & Garrido-Medina, 2011; Reichenberg & Berhanu, 2017).

Students subjected to a higher immigrant concentration in primary school more often attend lower tracks and have higher dropout probabilities in secondary school. Higher immigrant concentration in secondary schools also increases the likelihood of dropping out. Previous studies seem to have underestimated this effect[2]. A large body of current research supports the conclusion that enrichment programs, adequate training, contextual matters, mediation and the way social environments are structured could make substantial differences in acquisition and retention of knowledge and proficiencies (Berhanu, 2001; Cooper et al., 2006; Kerr et al., 2014; Suárez et al., 2016). Currently much more optimism prevails regarding human development, in particular, pertaining to enhancing young people's aspirations for a successful future.

Many researchers emphasise that a 'spatial mismatch' between increasingly suburban job opportunities and the minority residents of poor urban neighbourhoods has magnified other challenges, such as crime, the movement of middle-class residents to better neighbourhoods (inclu-

---

[1] In Swedish 'förorten', a place on the outskirts of the city.

[2] (Personal communication, mailto:Carla.Haelermans@maastrichtuniversity.nl 2018). The effects of immigrant student concentration on educational outcomes of native and immigrant students, Carla Haelermans (TIER, Top Institute for Evidence Based Education Research, Maastricht University) and Marieke Heers (FORS, Swiss Expertise Centre for the Social Sciences, University of Lausanne).

ding the phenomenon of 'white flights') and a perpetual shortage of capital, stores, employment opportunities and institutional resources, including persistently lower performance in school (Grönqvist, 2006; Szulkin & Jonsson, 2007). Immigrants and their children often live, at least temporarily, in neighbourhoods that have high concentrations of fellow immigrants. Typically, these neighbourhoods also have high poverty levels and are located near concentrations of the native-born poor. The conventional wisdom is that living in poor neighbourhoods leads to 'concentration effects' that exacerbate the problems of poverty and limit economic opportunity (Wilson, 1987; Nieuwenhuis et al., 2017). Such neighbourhoods may provide adolescents with less knowledge about the education system (Ainsworth, 2002; Noam et al., 2002; Suárez et al., 2016). The analysis in this study shows how even a minimum effort in the form of homework support and extracurricular activities can alleviate the problem. Overall, the study highlights the relevance of mentoring (Marciano et al., 2019) and homework involvement in academic achievement among immigrant students.

## HOMEWORK AND TEACHER-STUDENT RELATIONSHIPS

There is ample evidence suggesting that homework has positive effects on school performance (Bang et al., 2009). Previous studies have demonstrated that students who do their homework generally attain higher class grades and achievement test scores than their peers who do not (Cooper et al., 2006). Most of the literature, reviewed for this specific purpose, suggests that immigrants living in ethnically concentrated neighbourhoods are more likely to lack the social capital that would allow them to succeed in the education system. In worse cases, they might have higher rates of negative social capital, actually working against their development (Labianca & Brass, 2006; Bang et al., 2009; Nieuwenhuis et al., 2017). Schools seldom support the building of newcomers' social capital as 'a critical part of their transition to a new country and system' (Hos et al., 2019, p. 101). Therefore, one of the purposes of the homework project at the university is to understand this phenomenon at close range, where the spotlight is aimed at the interpersonal relationships between participating students and volunteers, in order to explore if the students might develop a new social capital.

The popular claim that homework time is positively related to achievement gains was tested in three studies (Trautwein, 2007). The results indicate that homework assignments are positively associated with achievement

(class level effect) and that doing homework is associated with achievement gains (student-level effect). Research on homework conducted during the past three decades has consistently demonstrated a positive influence of homework on achievements as measured by tests as well as class grades (Cooper et al., 2006). Among students who may benefit from the greater learning opportunities offered by homework is the increasing population of immigrant adolescents. Twenty-two per cent of children in the United States today have at least one foreign-born parent; these students comprise the fastest-growing segment of the school-aged population (Hernández et al., 2007). A similar trend has been observed in Sweden (OECD, 2016). As many immigrant youths are learning Swedish and complex academic subjects simultaneously, they often lag behind their native-born Swedish-speaking peers in academic achievement. One way to bridge this achievement gap may be through the use of homework activities similar to those demonstrated in this article.

Since the new millennium, international research has shown the importance of well-functioning teacher-student relationships (Wubbels & Brekelmans, 2005; Hattie, et al., 2009; Mitchell, 2014). In Hattie's meta-study, a trustful teacher-student relationship demonstrates a strong correlation factor (d=0,72), with a clear impact on student achievement. The students themselves emphasise the importance of the teacher's *openness*, *care* and *respect* as fundamental values of the interpersonal relationships (Bernstein-Yamashiro & Noam, 2013). Furthermore, the students stress the significance of teachers showing concern for students' different kinds of needs, as well as the importance of seeing the child as a person, not merely a student. Classroom research (Ljungblad, 2016) that followed teachers, who from a child's perspective manage to meet their students in a secure way, conducive to development, presents how these teachers develop a *trustful and respectful teacher-student relationship*. The four participating teachers in the above study worked in different school types, such as compulsory school, upper secondary school and upper secondary school for students with learning disabilities. There was a wide variation among the 100 participating students, such as many students being of different kinds of special needs, as well as groups of students with severe learning disabilities. The results demonstrate in detail what happens in the now, face-to-face, between the teacher and the students; the teachers had developed a *welcoming*, *tolerant* and *non-judgmental stance* – a way of being in the moment. The teachers' way of relating to their students emerged as adaptability that could meet student's different kinds of needs. This form of adaptability was understood as

*pedagogical tactfulness*. The findings also highlight how the teachers showed belief in the students' potential and took interest in each and every student. The teachers were curious and stood by a student's side in a mutually explored process, and developed a *warm and permissive atmosphere* with their students. Over time, the teachers' pedagogical tactfulness created trustful and respectful teacher-student relationships. Hence, such a pedagogical tactfulness can be understood as fundamental to inclusive education (Ljungblad, 2019). However, in the relational field, there exists limited research focusing on interpersonal mentoring relationships in homework activities, which this article attempts to highlight.

## A RELATIONAL THEORETICAL FRAMEWORK

This research takes its theoretical point of departure from *Relational Pedagogy* (Bingham & Sidorkin, 2010; Aspelin, 2014; Ljungblad, 2019), Historically, educational knowledge has centred on either an individual perspective or a collectivist focus; however, relational pedagogy can be seen as a new third alternative to the dominant traditions, where teaching and education are to be understood relationally. This relational perspective is based on the concept of human beings as relational beings and about teaching as relational processes. Its philosophical roots are derived from intersubjective traditions of philosophy with classical relational philosophers, such as Arendt, Levinas and Buber. Essentially, the ontological point of view places the interpersonal relationship as primary and actions as secondary (Gergen, 2009; Bingham & Sidorkin, 2010). This new relational approach in educational theory rests on pluralism and diversity, emphasising the responsibility of the education system to enhance possibilities for students to participate in relational processes from the local to the global (Gergen, 2009). Such a relational view of education is based on a humanistic view that emphasises human being's existential development. In a time of measurement, it is a shift from an instrumental approach to knowledge and skills to an interpersonal and existential approach (Biesta, 2017; Saevi & Biesta, 2020). Such a view of children's growth is based on a relational view of knowledge and people (Ljungblad, 2019).

Within the field of a relational pedagogy, a new theoretical inclusive perspective *Pedagogical Relational Teachership* (PeRT) (Ljungblad, 2016, 2019) has been developed. The concept of *relational teachership* originates from empirical classroom research (Ljungblad, 2016), exploring how successful teachers relate to their students in ways that create *trustful and respectful teacher-student relationships*. Additio-

nally, PeRT was developed to support new opportunities for students to participate in their education and to emerge as unique individuals and speak with their own voices (Biesta, 2014; United Nations, 1989). PeRT has a three-dimensional model for exploring educational relationships in empirical studies, in a wider web of relations from social to societal levels. In this study, PeRT has been used to explore interpersonal relationships between students and mentors to create sustainable conditions for student participation in activities beyond school boundaries.

The second dimension of the PeRT model reveals the relationships between teachers and students. This part of the model is inspired by Bronfenbrenner's (1979) ecological model. However, it has another focus and highlights interpersonal relational processes within the education system, where (A) is the ontological point of departure that emphasises the *relationship as primary*.
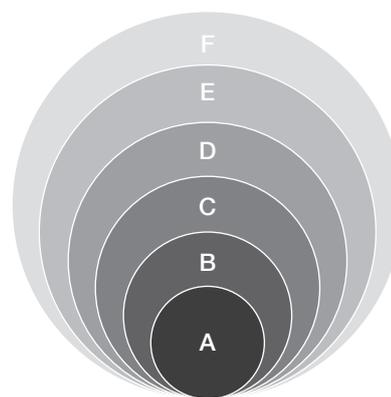


Figure 1: **The second dimension of PeRT (Ljungblad, 2019).**

This study analyses relational processes, conditions and values of interpersonal relationships between students and mentors. The focus of the analysis is on how the mentors relate to the students; this acknowledgement is interpreted in order to explore what kind of interpersonal relationships, relational conditions and relational values emerge over time. The micro-level (B) zooms in on the *interpersonal interaction* when mentor and student meet face-to-face. The next level (C) focuses on *the relationship* between mentors and students. The next level (D) *reveals relational aspects of what it means to teach and be a teacher*. The meso-level (E) illustrates how people in school, or in this case during homework activities, cooperate within and manage the organisation of teaching. Finally, the model shows an *overall societal macro-level* (F) with laws, political intentions, governance, power relations, research, knowledge and global influences. It is of great importance to reveal different systems that together form the social

macro system since children can belong to different macro systems depending on social belonging, ethnicity and religious backgrounds, as well as families living in various areas. Other aspects related to social macro systems are relationships within the family's and child's relationships in their spare time outside of school as part of the overall experience of participating in education. Even though the micro-, meso- and macro-levels are closely intertwined, this study mainly focuses on and analyses the B, C and D levels. These three levels were triangulated in order to deepen an understanding of the mentor-student relationship and to understand what relational conditions and values have emerged over time. Due to space constraints in this article, the observations of the interaction between mentors and students are only briefly described (Level B). However, Level B is included in the triangulation and corroboration of the results. The results are then discussed in relation to the societal (Level F) and Woolcock's (2001) characterisation of social capital. Hence, the concepts of *bonding social capital, bridging social capital* and linking social capital are also relevant as our project is based on trusting, connecting, belonging, including and confidence-building (Allan & Persson, 2018).

## METHODOLOGICAL ASPECTS

The method that has been used in this study is a qualitative case-study (Merriam, 1998) in the spirit of ethnography. The choice of this method is based on the assumption that:

> "the closeness of the case study to real-life situations and its multiple wealth of details are important in two respects. First, it is important for the development of a nuanced view of reality, including the view that human behavior cannot be meaningfully understood as simply the rule governed acts found at the lowest levels of the learning process, and in much theory. Second, cases are important for researchers' own learning processes in developing the skills needed to do good research. (Flyvbejer, 2006, p. 6)

In the first phase, a semi-structured interview guide with open-ended questions was developed (Bryman, 2012). During a period of six months, twenty interviews were carried out and recorded. The sampling of the interviews is primarily based on consent. The majority of the respondents were girls. The conversation lasted 30-40 minutes. In some cases, there was a second round of conversations in the form of respondent validation. Besides,

tens of hours of observations of the interaction were carried out with a focus on the mentors' ways of relating to the students. The focus of the observation revolved around gender aspects, new and veteran participants, mentor and mentoree, as well as the mediated learning experiences and relational aspects embedded in the interaction. In the final phase, all the empirical data were transcribed and analysed from a relational perspective, PeRT (Ljungblad, 2019). The first step in the analysis of the process focused on how the mentors relate to the students (Level B). Here, a relational pattern where adaptability and reciprocity became visible (Ljungblad, 2016). The next phase analysed how mentors and students talked about their participation and the interpersonal relationships in the homework activities (Levels C and D). In the interpretation, different kinds of relational conditions and values emerged over time, which were then thematised. After the analysis process, some follow-up interviews were carried out to clarify some of the details. The Findings section below presents an understanding of the students' participation in three themes, which is followed by one theme concerning the mentors' participation. Finally, a deeper understanding of relational values and conditions that developed between the mentors and the students over time are presented.

This project is supported and approved by the university leadership and goes in line with the university's vision of Widening Participation of diverse student groups. Our work is in line with engagement, listening to multiple voices and having a willingness to be self-reflective rather than adhere to 'brutal facts.' In no way are we in a position to fully and accurately present our subjects or 'even ourselves' (Lather & Smithies, 1997). Nonetheless, we have done our best to provide systematic, in-depth analysis and we have tried to write authentically and critically about the narratives offered in ways that serve the public good, including theory building, generating new knowledge and shaping public policies with a view to effect social change. To the extent possible, we have maintained the anonymity of the participants. We made every effort to get our respondents' informed consent, respect their lives, understand them, continually investigate our relationship with them and question our interpretation of them. Hence, the research process involved discovering and deriving patterns in the data and looking for general orientations. Lincoln and Guba (1985) pointed out that this kind of an approach to data analysis and interpretation involved 'making sense of the data in ways which will facilitate the continuing unfolding of the inquiry and lead to an optimal understanding of the phenomenon being studied' (p. 224).

## FINDINGS

The homework activities are situated at the university in the city, requiring the students to take a long journey from their homes in the suburbs. The young people are dependent on school staff or other persons informed about the activities being carried out on the university's premises. The results show that there are various reasons why young people participate in homework activities. In the interviews, three themes have emerged: *Active support of parents, Forthcoming career choices* and *Special educational needs*.

### Active Support of Parents

The active support of parents is paramount since the children require parental consent to enter the city in the evening to participate in homework activities at the university; this especially applies to female students. The active support of parents emerges in different ways in the family's everyday activities, such as when mothers follow their daughters to the homework activity. The parental active support also can transcend *time* and *space*, as described in the following excerpt. Aisha (16 years old) explains how her mother, as a young woman in Africa with her first son, carefully thought through her children's future opportunities:

> My mother knew when she had children … our homeland education did not work as well as in other countries. So, she thought it was better that we move to some country in the western world where the education … can be something.

Aisha clarifies that her parents worked and were successful in Africa, and that the family is also doing well in Sweden. It was primarily the mother's thoughts about creating new opportunities for their children, by providing access to good education in different countries, which led to the decision to move to a country on another continent. Since then, the parents have actively supported the education of their five children, with homework being one of the activities that the children were encouraged to participate in.

The family of Bella (15 years old) also moved from Africa. After discussion with her parents, Bella chose not to go to the school in the suburbs where she lived, but rather attend a school in the city. Bella describes her mother's thoughts about the daughter's school choice by saying: 'Mom thought I would learn more Swedish and get a better education and a good future if I went to a "Swedish" school.' Bella emphasises the drive to deepen her Swedish language skills as the reason for attending a school where more students spoke Swedish among themselves. Therefore, her parents are enthusiastic about actively supporting their daughter's participation in homework activities.

### Forthcoming Career Choices

Sara (16 years old) has a clear focus on her future career, but she wants to keep the doors open before deciding on her occupation. Her favourite school subjects are physics and chemistry, and Sara loves to read about nuclear physics, the universe, stars and supernovas. When she looks ahead, she reflects and emphasises:

> In the future, I want to do something for the outside world. I cannot change the whole world, but I want to do something important and help in the poor countries. I want to do something for the people.

When we talk about different future professions, Sara highlights various possible alternatives. At one time she contemplates, 'a dream would be the Nobel Prize.' Thus, young people's dreams about their future inspire them to wonder about different possible career choices.

Kendra (15 years old) is looking forward to her adult life, but has not yet decided what she wants to do for her career. Kendra emphasises that: 'We participate in the homework activities to get support with different topics. We come here because we want to learn.' The group she refers to includes her three girlfriends who usually come every week with Kendra. This group of girls wants to get passing grades so they can keep several career paths open in the future.

Other students have already begun to focus on a future career, such as Yonas (17 years old), who attends a technical program at upper secondary school. He wants to become a Civil Engineer in Environment and Natural Resources. Yonas is dedicated and clarifies that he could hang out with friends, but he prefers to stay home and study to get good grades, with the goal of attending university. Such a clear endeavour to achieve a special Engineering profession also implies that Yonas may renounce recreational activities during his current schooling.

Zoltis (13 years old) plays handball in her spare time. Her teacher told her about the homework activities where several volunteers are Engineers and professors proficient in mathematics. Zoltis, who wants to become an architect, thought this might be a good activity for her, as she sometimes finds herself spending too much time on social media. Participating in homework activities helps her focus on school work and at the same time receive support from well-educated mentors.

Other possible career choices that young people highlight in the interviews are doctors of various kinds, such

as surgeons, gynaecologists or dentists. One girl expresses her hope of becoming the first doctor in the family. Other professions that the students want to achieve are Engineering professionals, as well as architects, pilots, pharmacists and designers. This group of young people participating in homework activities focus on looking far ahead into the future for their career choices, which differs from the next group that emphasises the present.

### Special Educational Needs

Maryam (13 years old) has passing grades in Swedish and other subjects, but not in mathematics. During a student/parent/teacher meeting, the teacher discussed Maryam's situation based on special educational needs in mathematics. The teacher informed them about homework activities and Maryam's mother, who is a single mother of four children, directly supported this opportunity and said: 'Do what you want with your life. To be able to become something, you must learn.' Maryam herself describes that she does not get the support she needs in her school, and she emphasises that mathematics teachers need to be better at explaining to students with mathematical difficulties.

Nasrin (13 years old) says that she has passing grades in other subjects, but mathematics has been difficult for her since the first day of school. According to her teacher, an assessment has been carried out, which indicates specific mathematical difficulties. Nasrin explains her mathematical work as follows: 'It's just a lot of numbers and I don't understand.' Her school has no Special Educational Needs teacher in mathematics. Furthermore, maths teachers often move to other schools, and her current maths teacher cannot explain different mathematical concepts in Swedish. Nasrin sounds resigned when she clarifies:

> They just employ new mathematics teachers. It may be that a teacher tries to explain to me maybe four times. But then I still do not understand and then I cannot tell them that I do not understand... When they cannot explain the math words in Swedish it becomes even more difficult for me.

Nasrin emphasises that she needs a well-educated maths teacher who speaks Swedish. The teacher also needs to be 'more pedagogical and patient and take the time to explain in different ways and with different methods.' This is a student in need of special education aid in mathematics, who does not get the support she needs at her local school, which is the reason she participates in homework activities. Both the observation data and school staff involved in homework activities confirm that there is a group of students

who are in acute need of special education support in different school subjects.

### Mentors Participation

The adults involved in the homework activities are comprised of two different groups. The first group includes pedagogues from the school, appointed by the principal, and the homework duties are part of their regular working hours. These teachers express how they appreciate the homework activity, which takes place in a different context with the students outside the usual school environment. The second group consists of mentors who reside in the city and are willing to support homework activities on a voluntary basis. When it comes to both the volunteers and the school staff, there is one common theme that emerged in all interviews, namely the desire *to support an opportunity to change the lives of the young people.*

### Life Opportunities for Young People

Linda, a school pedagogue, has been involved in the project since the beginning, and emphasises a basic core value of 'how to win a childhood.' She explains her thoughts about the quality of life and life changes when young people create new contacts and see what kind of opportunities are offered outside their suburbs when they attend homework activities. Linda also meets parents who themselves are illiterate, but who 'want, want, want' their children to receive a good education, and consequently, she clarifies: 'socio-economic and socio-cultural aspects do not always go hand in hand.' Linda's colleague, Thomas, emphasises that those students who come to homework activities have 'bought the concept of doing school.' He accentuates that these young people come from families where education is important, and where 'it's deeply grounded that they all do their best in school.' Thomas also underlines that 'there is a social value' of participating in homework activities that creates emancipation with respect to lifelong-term perspective. From the students' point of view, he stresses the importance of participating one evening a week on the university campus, in a different educational environment, where one can 'meet and connect in a little different way than in school.'

> It's a meeting with another world. Here the young people can calmly solve a problem with someone who is very knowledgeable ... instead of the stressed school environment. Here is peace and quiet. You can get the time you need. You can even familiarize and acquaint yourself with some adults beyond school bounds ... Interesting relationships are formed here.

The mentors have varied professional backgrounds and experiences. In common, they all have an educational interest in supporting today's young generation. Philip, a retired Engineer, became involved in the homework activities because he actively sought an activity in the municipality where he could support students in need of mathematical assistance. He finds it is interesting to get to know young people and learn about their experiences and different backgrounds. Another mentor, Richard, has also retired after working as a researcher in education. He states that 'it feels very good to spend time on something that supports young people.' The homework activity project is important and it feels like 'we can stimulate them … and the young people get a little glow.' He raises a current problem with qualitative differences between different schools at the same time as many young people feel excluded. What inspires Richard is that he wants to share his knowledge with the young generation of today.

Noel is another mentor with an unusual background. He first educated himself as a sea captain, but after a tragic event in a suburb, he began to reconsider his career choice. Noel felt that he wanted to support new opportunities for the youth in the suburbs so he went back to university and graduated as a preschool teacher and a school leader. In addition, he moved to one of the suburbs to really 'see what kind of worlds the children are living in.' Noel explained:

> I go out in the evenings and meet them, talk to parents and young people. Although it becomes my interpretations, it becomes a different perspective. It is better that you are there and feel it with body and soul … The most precious thing you can give to someone is the time. It never comes back. You give away the most precious thing to someone else. It is beautiful! You want to be part of this. It is exciting!

What drives Noel is similar to what drives other mentors: 'Supporting a better future for the young people, one wants to be a part of a possible change.' The statement, *supporting the young people to a better future*, is a common theme that runs throughout the volunteers' remarks.

**The Mentor-Student Relationship**

The following section provides examples of how homework activities are typically conducted. The mentors gather shortly before the activity starts. When the students arrive, they find a place and initiate small social conversations, greet each other and ask how their friends are. After a couple of minutes, books and computers are picked up. The mentors move around the room to make eye contact with certain students that appear to want assistance. When they make contact, the mentor will ask if he or she can offer any support. Usually, the mentor sits down next to the student and it does not take long before they are both engrossed in their work. An intense conversation starts with their heads bent over the task at hand. The mentors are engaged and their foreheads are often furrowed in deep thought. The mentors' acknowledgement emerges in form of frequent eye contact and a soft tone of voice. In the acknowledgement, the mentors show *adaptability* and *flexibility* (Ljungblad, 2016) and they listen and resolve students' questions and concerns.

The environment can be described as a quiet working atmosphere with plenty of activity. Sometimes the noise levels rise, but it is a harmonious atmosphere free of any loud disturbances. Throughout the course of an evening, many smiles and laughs emerge between the participants. One paramount characteristic of the conversations is that they take a longer time compared to what we observe in ordinary school environments, which specifies the value of the mentors engaging in a one-to-one interaction without stress. Another general pattern is that the conversations are usually about Swedish words or scientific expressions that require the students to seek clarification. At times, the mentors describe concepts with gesticulations, search for synonyms, draw pictures, explain critical aspects, while, at the same time, the students try to describe the concepts in their own words. Christian emphasises that throughout the evening he usually walks among the students and 'as long as a student has not gotten her answers, I will not leave her, which sometimes might lead to a long conversation' because these young people are seeking answers to many questions.

Over time, different types of relationships develop between the participants. Some mentors circulate and meet several young people in one evening. Other mentors usually work with the same student, like Noah and Richard who 'search for each other and sit all evening and work together.' A similar example occurs when a girl arrives a few minutes late, immediately goes up to a mentor, smiles and asks:

> - How are you?
> - It is just fine. How are you? he wondered smiling at her.
> - I have bought a thing for you, he continues and picks up a protractor from his bag.
> - This is a protractor.
> The mentor begins to explain, asks questions and is interested in the student's answer.

After a while he tells that he thought of her during the week and wondered how it went for her in the math test. He listens to how she experienced the test and then emphasises that when the next test becomes relevant, they practice together.

(From field notes, 180315)

This conversation reveals that the mentor has a *curiosity* and an interest in the student's school activity. The adult clarifies that he will be by the student's side when she needs support. The scenario shows a long-term relationship between a mentor and a student that includes the value of *trust* (Ljungblad, 2016). In the interview, the mentor also confirms that a close *trustful relationship* has developed. There are also short-term relationships emerging between the students and the mentors. In spite of the short duration of the interaction between the mentors and students, *confidence* still emerges in the interactions. Hannah (13 years old) says: 'Here I am safe. I can ask all kinds of questions. The volunteers listen to me and take the time to explain.' The students themselves describe a notable difference: 'ordinary school is boring' when the teachers teach and the students do not understand, which differs from homework activities where they are free to ask the mentors who 'can explain in a new, easier way.' Furthermore, the students support each other and there is an atmosphere of thoughtfulness among the young people which becomes evident when they try not to interject in ongoing conversations. It is a nice atmosphere and a 'break from the fuss in school,' clarifies Thomas.

The interpersonal relationships deepen over time and the students describe their memories of visiting the university for the first time. One girl, Ansha (16 years old), reveals how her first time taking the tram over the big bridge, from the suburb to downtown, was like traveling to a new world; she describes: 'It was like coming to real Sweden.' Another student, Maria (13 years old), explains her experience from the first visit: 'I was so nervous when I entered the university campus the first time. It was intimidating, but now it feels safe and comfortable.' Having participated in the activities for several years, Nathalie (16 years old) and Amid (16 years old) talk about their experiences in a mutual manner: 'When you say to yourself that you will do your homework at the University of Gothenburg, it is a different thing, compared to doing it at the public libraries. Then I have a plan. It's more professional. I have a plan and a goal. You make your own decision ... It's not like at school. In homework activities you come primarily to improve your knowledge. In school you have a schedule that you have to strictly follow. But here, you come because you have a will of your own.' When discussing how they view their relationships with the volunteers, Amid clarifies: 'I would say that relationships are stronger here … They are volunteers … Compared to the ordinary school, where it is obvious that the teachers' job is to teach … Some of the teachers have the passion at the ordinary school. But here the volunteers come by their own will, it is not that they have to.' Nathalie clarifies her experiences by saying: 'Here I feel safe. You get closer to some volunteers than others ... You build a relationship. In the classroom, it is usually a teacher who needs to help everybody. Then, the teacher may not be able to catch up with all students and then you will not get the help you need. Here, the volunteers sit with me until I really understand.' The students also reflect on the feeling of spending a lot of time at the university and emphasise that they are now used to and feel comfortable studying within the premises of the university. The young people clarify that if they had not participated in this homework project, their positive experiences towards higher education would not have been as strong. As a result of these experiences the young people begin to believe: 'Now I know that university is a possibility for me!'

## Summary

Investigating the reasons for the *students' participation* in the homework activities in the university setting reveals that there are some barriers that need to be bridged. The challenges are tied to the active support of the parents, as well as finding ways to travel into the city in the evenings. The young people's participation can be seen in the light of two-time aspects. One group of students with special needs stresses the importance of immediate support from well-educated pedagogues that can explain new Swedish concepts in different ways. The other group of students looks more into the future and at their forthcoming carrier choices. The mentors support the students with information about different kinds of professions that the young people have not heard of before, as well as clarify what preconditions will help them be eligible to pursue higher education (cf. Ainsworth, 2002; Noam et al., 2002; Suárez et al., 2016). The main reason for the *volunteers' participation* is to support young people in seeking a better future; the mentors give their time to inspire the young people, and genuinely *want to change the young people's lives*.

When the students came to the university for the first time, they appreciated that some teachers from the school joined the activity. By exploring the relational scenarios

of what happens when the volunteers and students meet face-to-face, (Ljungblad, 2016, 2019; Marciano et al., 2019), a deeper interpersonal understanding of mentor-student relationships was achieved. The results highlight different kinds of *relational conditions and relational values* (Gergen, 2009). The volunteers share *confidence* and high expectations of the students' potential, they are *curious*, and *listen* to the students' questions and explain concepts in different ways. Furthermore, the volunteers prove they are flexible by adapting in a pedagogical tactful way to the students' different needs (Ljungblad, 2016). The atmosphere surrounding the students is harmonious, calm, free of stress and it includes plenty of engagement and humour. Such an atmosphere, manifested in a socially enjoyable setting, is meaningful for young people to participate in their school work.

In the homework activities, some interesting relationships were formed, and the results of the research indicate two types of relationships: short-term relationships where students felt *confident* and dared to ask their questions and long-term relationships where a mentor and a student got to know each other well. In such interpersonal relationships, deep relational values like trust emerge (Ljungblad, 2016), which can have a lasting impact on the young person's life.

## DISCUSSION

This study has shown that there are obstacles that need to be bridged for young people to successfully participate in homework activities at a university setting. The parents need to actively support their children and solve problems concerning how, in particular, the girls can travel into the city at night. An important pattern in the results is that close and trusting relationships between the children and parents are foundational for new opportunities opening up. Even close relationships between the young people can be important as peer groups travel together by public transport to the university and interact playfully during the study. Once parents support their children's participation in the homework activities, new opportunities arise for students who need extra support in their current schooling, but also for their upcoming career choices.

During the homework activities, volunteers have more time for in-depth conversations, which differs from an ordinary school environment. The mentors who have professional pedagogical competence can explain problematic concepts in a multitude of ways. The results highlight the importance of the mentor's engagement in and acknow-

ledgement of the interaction, characterised by *adaptability* and *flexibility* (Ljungblad, 2016). Overall, interesting short-term and long-term relationships between mentors and young people are being developed. The interpersonal relationships grow over time and develop into an atmosphere of relational values, where *confidence* and *trust* emerge (Ljungblad, 2016). Such mentor-student relationships at a university setting also open new opportunities towards what is offered outside the suburbs.

This study highlights the relational room, *the in-between* (Biesta, 2014), the face-to-face interaction, which creates a deeper understanding of the relationship between student and mentor (Marciano et al., 2019). The findings reveal two dimensions, highlighting both the present and the future. First, the importance of creating opportunities for the students' social participation—the social and relational values of *the child's being* in the moment—which explicates the existential horizon (Ljungblad, 2019). Second, the relational conditions, relational values and interpersonal relationships, such as *connecting, belonging, including, trusting and confidence building* that evolved over time create a movement, which highlights another social aspect, namely, a new social and relational capital (cf. Allan & Persson, 2018). This new *interpersonal relational capital* can support the *child's becoming*; it can be understood as a relational and social capital with transformative power for the young people's future possibilities. Hence, trustful and sustainable mentor-student relationships in homework activities show opportunities for a young person's change into *being*, as well as *becoming* (Ljungblad, 2019). Accordingly, students' participation has a social and relational value of being in the moment, since we become somebody within a relationship (Gergen, 2009). As young people participate in such social space with new interpersonal relationships, and occupy a new social position, an elevated *interpersonal relational capital* is developed where 'one is given the opportunity to occupy a different position than that which one was born into' (Säfström, 2015, p. 23 *our translation*). These opportunities might enhance social mobility to a more positive social capital (cf: Labianca & Brass, 2006; Bang et al., 2009; Nieuwenhuis et al., 2017).

Research shows that lack of positive role models is responsible for students not being aware of how education can benefit upward social mobility (Ainsworth, 2002; Noam et al., 2002; Suárez et al., 2016). The mentors in this project have attempted to bridge this gap with regard to positive role models. Woolcock's (2001) characterisation of *bonding social capital, bridging social capital and linking social capital* has been found to be relevant as an analytical tool for this specific project and continuing work. The

exposure to positive role models within a university setting can encourage the students to aim high. The analyses of the encounters between students and mentors illustrate how such an *interpersonal relational capital* can launch a *movement*, and develop a new insight that 'the university is for me.' Hence, a change in social position leads to a new social capital that goes beyond the group belonging. These endeavours help create sustainable relationships, which include race, ethnicity and diversity within educational institutions (Berhanu, 2016; Ljungblad, 2016; Freeman & Kochan, 2018). Thus, trying to understand this power for social change is a springboard to a new, improved educational capital with new opportunities and future careers.

This study confirms the importance of 'enriching' activities, such as community development in the form of supporting immigrant youth in homework activities, to improve engagement, raise achievement levels and enhance inclusiveness in the larger social fabric. The project is still underway in the spirit of *Afterschool Education: Approaches to an Emerging Field* (Noam et al., 2002). Allan and Persson (2018) have summed up their study, which is in the same line of thinking as ours, so succinctly: 'Inclusive education plays a more important role than ever before in mitigating these risks through the cultivation of trust and confidence' (p. 9–10). The results underscore the importance of interpersonal *relational capital* at different educational strata that can broaden opportunities for young people to have a better future.

To conclude, the implications of this study are important for raising awareness with the hope of replicating similar homework activity projects at other universities. Essentially, institutions of higher education can be a hub, a meaningful meeting place which dismantles isolation and promotes inclusion.

## REFERENCES

Ainsworth, J. W. (2002). Why does it take a village? The mediation of neighbourhood effects on educational achievement. *Social Forces*, 81(1), pp. 117–152.

Allan, J., & Persson, B. (2018). Social capital and trust for inclusion in school and society. Education, *Citizenship and Social Justice*, 1–11. https://doi.org/10.1177/1746197918801001

Aspelin, J. (2014). Beyond individualised teaching: A relational construction of pedagogical attitude.*Educational Inquiry*, 5(2), pp. 233–245.

Bang, H. J., Suárez-Orozco, C., Pakes, J., & O'Connor, E. (2009). The importance of homework in determining immigrant students' grades in schools in the USA context. *Educational Research*, 51(1), 1–25.

Bauer, T., Epstein, G., & Gang, I. (2005). Enclaves, language, and the location choice of migrants. *Journal of Population Economics*, 18(4), pp. 649–662.

Beach, D., & Dyson, A. (2016). *Developing equity in cold climates*. London, Tufnell Press.

Berhanu, G. (2001). Learning in context: *An ethnographic investigation of mediated learning experiences among Ethiopian Jews in Israel,* PhD diss., Gothenburg Studies in Educational Sciences, 166, Gothenburg, Acta Universitatis Gothoburgensis.

Berhanu, G. (2016). Concepts of equity in Swedish society and education: Historical perspectives. 27–42. In D. Beach and A. Dyson (Eds.), *Equity and education in cold climates in Sweden and England,* London, Tufnell Press.

Bernstein-Yamashiro, B., & Noam, G. (2013). Relationships, learning, and development: A student perspective. *New Directions for Youth Development, Spring* 2013(137), 27–44.

Biesta, G. (2014). *The beautiful risk of education. Boulder,* Paradigm.

Biesta, G. (2017). Education, measurement and the professions: Reclaiming a space for democratic professionality in education. *Educational Philosophy and Theory*, 49(4), 315–330.

Bingham, C., & Sidorkin, A. (Eds.) (2010). *No education without relation.* New York, Peter Lang.

Bronfenbrenner, U. (1979). *The ecology of human development.* Cambridge, Harvard University Press.

Bryman, A. (2012). *Social research methods.* (4ᵗʰ Ed.). Oxford University Press, New York.

Cebolla-Boado, H., & Garrido-Medina, L. (2011). The impact of immigrant concentration in Spanish schools: School, class, and composition effects. *European Sociological Review*, 27(5), 606–623. http://dx.doi.org/10.1093/esr/jcq024

Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987–2003. *Review of Educational Research*, 76(1), 1–62.

Englund, T. (2005). The discourse on equivalence in Swedish education policy. *Journal of Education Policy*, 20(1), 39–57.

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12(2), 219-245. doi: 10.1177/1077800405284363

Freeman Jr, S., & Kochan, F. (2018). Exploring mentoring across gender, race, and generation in higher education. *International Journal of Mentoring and Coaching in Education*, 8(1), 2–18.

Gergen, K. (2009). *Relational being: Beyond self and community*. Oxford, Oxford University Press.

Grönqvist, H. (2006). Ethnic enclaves and the attainments of immigrant children. *European Sociological Review*, 22(4), 369–382.

Hattie, J. (2009). Visible learning: *A synthesis of over 800 meta-analyses relating to achievement.* London, Routledge.

Hernández, B., Hidalgo M. C., Salazar-Laplace, M. E., & Hess, S. (2007). Place attachment and place identity in natives and non-natives. *Journal of Environmental Psychology*, 27(3), 310–319.

Hos, R., Murray-Johnson, K., & Correia, A. (2019). Cultivating capital for high school newcomers: A case study of an urban newcomer classroom. *Journal of Ethnic and Cultural Studies*, 6(1), 101–116.

Kerr, K., Dyson, A., & Raffo, C. (2014). *Education, disadvantage and place: Making the local matter.* Bristol, CT, Polity Press.

Labianca, G., & Brass, D. J. (2006). Exploring the social ledger: Negative relationships and negative asymmetry in social networks in organizations. *The Academy of Management Review*, 31(3), 596–614.

Lange, T. (2008). Homework and minority students in difficulties with learning mathematics: the influence of public discourse. *Nordic Studies in Mathematics Education*, 3(4), 51–68.

Lather, P., & Smithies, C. (1997). *Troubling the angels.* New York, Routledge.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Beverly Hills, CA, SAGE.

Ljungblad, A-L. (2016). *Takt och hållning – en relationell studie om det oberäkneliga i matematikundervisningen* [Tact and Stance – a relational study about the incalculable in mathematics teaching], PhD diss., Gothenburg Studies in Educational Sciences, 381. Gothenburg, Acta Universitatis Gothoburgensis.

Ljungblad, A-L. (2019). Pedagogical Relational Teachership (PeRT) – A multi-relational perspective. *International Journal of Inclusive Education*. https://www.tandfonline.com/doi/full/10.1080/13603116.2019.1581280

Marciano, J., Farver, S., Guenther, A., Wexler, L., Jansen, K., & Stanulis, R. (2019). Reflections from the room where it happens: *Examining mentoring in the moment. International Journal of Mentoring and Coaching in Education*, 8(2), 134–148.

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* San Francisco, CA, Jossey-Bass.

Mitchell, D. (2014). *What really works in special and inclusive education: Using evidence-based teaching strategies.* Abingdon, Oxon, Routledge.

Nieuwenhuis, J. G., Hooimeijer, P., van Ham, M., & Meeus, W. H. J. (2017). Neighbourhood effects on migrant and native youth's educational commitments, an enquiry into personality differences. *Urban Studies*, 54(10), 2285–2304.

Noam, G., Biancarosa, G., & Dechausay, N. (2002). *Afterschool education: Approaches to an emerging field.* Cambridge, MA, Harvard Educational Publishing Group.

OECD. (2016). *Programme for international student assessment (PISA): Results from PISA 2015.* Access date 2018-10-23. https://www.oecd.org/pisa/PISA-2015-Sweden.pdf.

Pihl, J., Holm, G., Riitaoja, A-L., Kjaran, J. I., & Carlson, M. (2018). Nordic discourses on marginalisation through education. *Education Inquiry*, 9(1), pp. 22–39. doi: 10.1080/20004508.2018.1428032

Reichenberg, M., & Berhanu, G. (2017). Immigrants' job expectations: A study of what predicts immigrants' job expectations after completing language training programmes. *International Journal of Special Education*, 32(2), 355–386.

Saevi, T., & Biesta, G. (Eds.) (2020). *Pedagogikk, periferi og verdi. Existentiell dialog om skole og samfunn* [Education, periphery and values]. Bergen, Fagbokforlaget.

Skolverket [The Swedish National Agency for Education (2015). *Skolverkets lägesbedömning, 2015* [The National Agency for Education's positions assessment 2015]. Rapport 421. Stockholm, Fritzes.

Suárez N., Regueiro B., Epstein J. L., Piñeiro I., Díaz, S. M., & Valle, A. (2016). Homework involvement and academic achievement of native and immigrant students. *Front. Psychol.* 7(1517). doi: 10.3389/fpsyg.2016.01517.

Szulkin, R., & Jonsson, J. O. (2007). Ethnic segregation and educational outcomes in Swedish comprehensive schools. The Stockholm University Linnaeus Center for Integration Studies (SULCIS). *SULCIS Working Paper Series.*

Säfström, C-A. (2015). *Jämlikhetens pedagogik* [The Pedagogy of Equity]. Malmö, Gleerups.

Trautwein, U. (2007). The homework–achievement relation reconsidered: Differentiating homework time, homework frequency, and homework effort. *Learning and Instruction*, 17(3), 372–388.

UNESCO. (1994). *The Salamanca statement and framework for action: On special needs education.* Paris, United Nations Educational, Scientific and Cultural Organization.

UNICEF. (2018). *An unfair start: Inequality in children's education in rich countries.* Innocent Report Card 15, UNICEF Office of Research.

United Nations General Assembly. (1989). *Convention on the Rights of the Child.* United Nations, Treaty Series, Vol. 1577.

Wilson W. J. (1987). *The truly disadvantaged: The inner city, the underclass and public policy.* Chicago, University of Chicago Press.

Woolcock, M. (2001). The place of social capital in understanding social and economic outcomes. *Canadian Journal of Policy Research*, 2(1), 11–17.

Wubbels, T., & Brekelmans, M. (2005). Two decades of research on teacher-student relationships in class. *International Journal of Educational Research*, 43(1-2), 6–24.

# Teachers' Instructional Interaction in an Inclusive Classroom: Interaction Between General Teacher and Special Assistant Teacher

Rasmitadila[1], Anna Riana Suryanti Tambunan[2], Reza Rachmadtullah[3], Yeni Nuraeni[4], Achmad Samsudin[5] and Muhammad Nurtanto[6]

[1] Djuanda University, Indonesia
[2] Universitas Negeri Medan, Indonesia
[3] Universitas PGRI Adi Buana Surabaya, Indonesia
[4] Universitas Muhammadiyah Tangerang, Indonesia
[5] Universitas Pendidikan Indonesia,
[6] Universitas Sultan Ageng Tirtayasa, Indonesia

**ABSTRACT**

The purpose of this study was to determine the categories of instructional interaction, the basic patterns of instructional interactions, and the functions of the basic model of instructional interaction that occurs between the English teacher (ET) and the special assistant teacher (SAT) to help the slow learner student (SLS), in terms of instructional interaction that occurs between two teachers in an English lesson. The researchers used single-case study method research. Data were collected through observation, as well as through semi-structured interviews with the two teachers. Findings from this study indicate that the category of instructional interaction that occurs between the two consists of academic and non-academic interactions. The instructional interaction basic patterns that are formed between ET and SAT in academic interaction are initiate-response-follow-up (IRF) and initiate-response (IR). The function of the basic pattern of academic interactions is to inform delegation of academic tasks from ET to SAT and to help SLS perform academic assignments. The instructional interaction basic pattern of non-academic interaction is initiate-response (IR). The function of the basic pattern of non-academic interactions is to enhance the provision of non-academic assistance from SAT to SLS, such as motivating, and focusing on learning. If instructional interactions between ET and SAT have not been carried out optimally, then the collaboration has not been well planned.

*Keywords:* Instructional interaction; general teacher; special assistant teacher; inclusive classroom
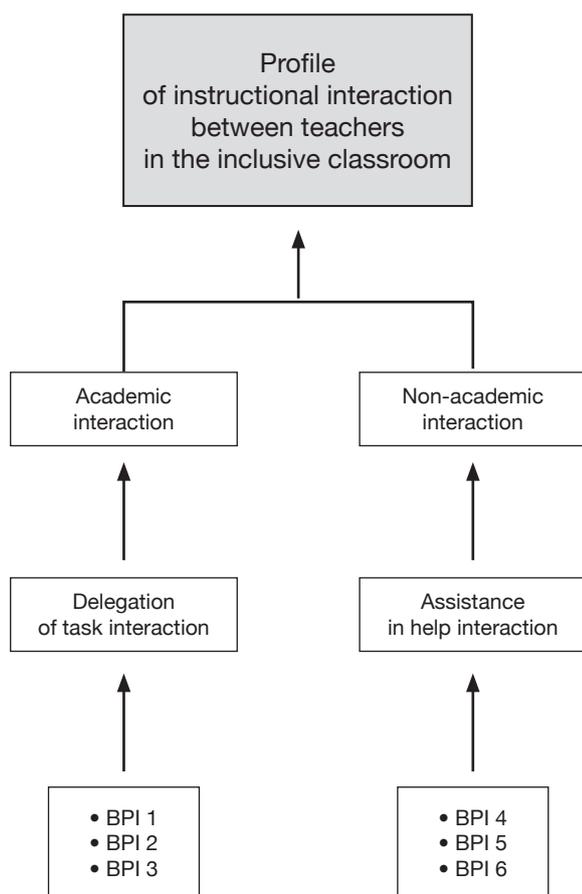
# INTRODUCTION

Inclusive education in Indonesia has been in effect since many researchers piloted it for three years from 1998 to 2001. The results of the government study showed a need for the development of inclusive education as a form of education for all. Numerous studies conducted around the world have illustrated that inclusive education emphasizes the differences, diversity, and specific peculiarities of each child without discrimination or judgment. As a result, the establishment of inclusive education in Indonesia is still being developed; yet many problems continue to appear in its implementation. For example, only 814 schools had organized inclusive education by 2008 whereas the number of students identified as having disabilities numbered 15.181 (Education and Culture Ministry of the Republic of Indonesia, 2011). This number increased in 2011 to 9.957.600 children with category disabilities and 1.185.560 with unique and exceptional individual intelligence (Empowerment Women and Child Protection Ministry of the Republic of Indonesia, 2013). Though more recent data on the number of schools and the number of students with special needs is not yet available, every year the number of students identified with special needs increases.

In addition to physical infrastructure (such as the availability of classrooms and the presence of adequate room facilities) the curriculum, environment, and teacher quality also determine the success of the inclusive school. The teacher's role becomes one of the main determinants in the implementation of learning in inclusive classrooms because, in these classrooms, all students should be able to learn according to their ability -- especially students with special needs who require specialized handling of behavior and engagement in learning (Niesyn, 2009). Therefore, educators (such as classroom teachers, subject teachers, special teachers) should help each other by working together (Borko, 2004; Harrison & Killon 2007; Lindstrom & Speck, 2004) to focus on problem-solving (Hehir & Katzman, 2012; McLeskey et al, 2012) and cooperate in providing useful and practical interventions (Hoover & Patton, 2008; Simonsen et al, 2010). Through collaboration, teachers can assist one another (Evans & Weiss, 2014), and accommodate learning and support services for all students (Devecchia, Dettorib, Dovestona, Sedgwicka, & Jamenta, 2012). Collaboration between teachers dramatically affects the efficacy of inclusive classrooms (Hines, 2008; Sileo, 2011; Hang, and Rabren 2009; Murawski, and Lochner, 2010; Scruggs, et al., 2007; Solis, et al, 2012; Basham, et al 2010; Murawski, & Hughes, 2009) and can reduce the difficulty levels and even physical danger in the learning environment. Within this collaboration, the expected roles of both teachers must be better understood for inclusive education to be improved.

One of the teacher's roles in the instructional process, which leads to the success of the instructional process is communication in the form of interaction between general teachers and special education teachers in inclusive classrooms. Interaction is a fundamental objective as it involves fulfilling academic and non-academic achievements of students with special needs. Progress achieved by said students in the instructional process is a collaboration in the planning, implementation, and evaluation process. Good interaction between the two teachers provides an indicator of the effectiveness of instructions in inclusive classrooms. Today's research states that effectiveness in inclusive classroom learning refers to providing learning opportunities, giving sufficient time to interact, increases students' cognitive understanding and involvement through differences in instructional interaction patterns, teacher beliefs, and attitudes toward students (Jordan & Stanovich, 2001). Focusing on the importance of interaction aims to provide meaningful lessons to all students in an inclusive environment (Robinson & Myck-Wayne, 2016). If teachers can collaborate and interact well, then the instructional practice in inclusive classrooms will be effective and bring good results for all students.

Some issues however have been raised concerning the role of instructional interaction of general and special teachers alike (Blanton, et al., 2011). Until now, teachers in inclusive classrooms in Indonesia have not been adequately qualified for their new duties. General teachers are reluctant to learn how to perform continuous learning for children with special needs through collaboration with other teachers (Rudiyati, 2011). The lack of interaction in the instructional process occurred because most general teachers felt that their primary responsibility was to guide public students, leaving the students with disabilities as the sole responsibility of the special assistant teachers. General teachers did not believe they had the knowledge, skills, or adequate experience to work with students with special needs, so they delegated that responsibility to special assistant teachers. The issue of determining the interaction between general teachers and special teachers when guiding students with special needs is explained in Figure 1 below. Figure 1 is a profile of instructional interactions as a description of transactional events occurring between general teachers and special teachers in inclusive instructional classrooms. Interaction is initiated by both teachers, which implies a basic pattern of instructional interactions.

```
┌─────────────────────────────┐
│        Profile              │
│ of instructional interaction│
│    between teachers         │
│ in the inclusive classroom  │
└─────────────────────────────┘
              ↑
      ┌───────┴───────┐
      │               │
┌───────────┐   ┌───────────┐
│ Academic  │   │Non-academic│
│interaction│   │interaction │
└───────────┘   └───────────┘
      ↑               ↑
┌───────────┐   ┌───────────┐
│Delegation │   │ Assistance│
│of task    │   │in help    │
│interaction│   │interaction│
└───────────┘   └───────────┘
      ↑               ↑
┌───────────┐   ┌───────────┐
│ • BPI 1   │   │ • BPI 4   │
│ • BPI 2   │   │ • BPI 5   │
│ • BPI 3   │   │ • BPI 6   │
└───────────┘   └───────────┘
```

NOTES:

**BPI 1:** ET gives statements to SAT and SAT gives a response to ET and ET asks SAT

**BPI 2:** ET asks SAT and SAT gives a response to ET and ET gives an explanation to SAT

**BPI 3:** SAT asks ET and ET gives a response

**BPI 4:** ET asks SAT and SAT gives a response to ET

**BPI 5:** ET gives statements to SAT and SAT gives a response to ET

**BPI 6:** SAT gives a statement to ET and ET gives a response to SAT

Figure 1. **Profile of instructional interaction between teachers in the inclusive classroom**

The purpose of this study was to determine the category of instructional interaction and the basic pattern thereof. Additionally, this study focuses on the functions of the basic model of instructional interaction that occurs between the general teacher and the special assistant teacher in inclusive classrooms. The research question can be formulated as follows:

1. **What is the category of interaction that occurs between English teachers (ET) special assistant teachers (SAT) to help the slow-learning students (SLS) in an English lesson, within the inclusive classroom?**

2. **What are the basic pattern of instructional interaction and the function of the basic model of instructional interaction between ET and SAT in an inclusive English classroom?**

## METHODS

The approach used in this study is qualitative and utilizes a single case study research method. This method was chosen because the number of participants involved in this study amounted to two English teachers and two special assistant teachers. Additionally, this approach and method have been widely used in several disciplines such as the psychology of education, special education, physical therapy, and school psychology to study the effects of previously developed interventions (Moeller, Dattilo & Rusch, 2015). The single case study focuses on the individual with the data obtained from the person's life experiences (Horner et al., 2005). Furthermore, it can be conducted with a relatively small number of participants (Kennedy, 2005), usually between three and ten (Horner et al., 2005; Kazdin 2011; Kennedy, 2005). The study uses the single case research method to illustrate the interaction between the general teacher and the special assistant teacher during the process of teaching English within a period of four months. This study uses observations, interviews, and photos taken during this period. Observation activities are conducted during the interaction between the two teachers and the special needs student. and supplemented by image capturing while learning is taking place. Interviews were conducted with both teachers using a semi-structured format developed from the content of previously held interviews, which helps to customize the context of the interviews in order to support data collection. To increase the credibility of the research results, some triangulation of data sources related to the topic of study (such as expert inclusive classroom, learning specialists, and experts in the English language) has been performed. Additionally, member checks were used with participant teachers to confirm data collection. This analysis was presented in a descriptive form, and the results were expressed in abstracted qualitative terms.

**Participants**

Study participants came from three inclusive elementary schools in West Java, Indonesia. Participants were three fe-

male English teachers with an average teaching experience of five to seven years and three special assistant teachers with three years of experience. The English teacher is a primary general teacher, who teaches English content, while the special assistant teacher helps the English teacher interact with the nine special needs student in the study. The individual needs student displays the characteristics of a slow learner, based on the results of a recent IQ test. The student's IQ is approximately 75-85, and he or she displays low academic motivation, as well as a lack of focus in regards to learning.

### Setting and Materials

The study took place in three inclusive primary schools, in West Java, Indonesia. The schools offer facilities and infrastructure adequate to the requirements of inclusive education. Each class is equipped with a projector, computer, and whiteboard. The study was conducted on the English level, in one class in each of the schools, taught by one English teacher and one assistant teacher. The number of teachers involved in the study amounted to three English teachers and three special assistant teachers. The learning sessions lasted one hour. Lesson activities were conducted individually, classically as well as in small groups or large groups, depending on the plans made by the previous English teacher. The materials used were English textbooks, worksheets created by English teachers, documents downloaded from the internet, and exercise books. The topics taught in class included the topics of Hobby, Calendar, Toys and Games, Shopping, Fruits, Vegetables, and At the Park.

### Data Collection

Research data collection techniques included observations, interviews, and photos. The evaluations were conducted to observe the interactions between the English teachers and special assistant teachers that assisted slow learner students in their English lessons. The face-to-face interviews were conducted with both teachers, the questions concerning the interactions that take place during the learning process. Primary data for this empirical study consisted of video and audio recordings that focused on the interactions between the two teachers during the learning process. Two cameras were employed during the study; one stationary camera, permanently located in the classroom to observe learning activities and another camera that followed the teachers.

Additionally, a portable audio recorder was given to the English teacher to record some of the interactions occurring during the research process. Field notes were used to collect research data illustrating the empirical facts of every instructional interaction between ET and SAT such as statements, conversations, in-depth interviews, and document analysis. By using a data collection model that combined field notes, researcher reflections, and covered terms, the researcher was able to find a common theme of the interaction in learning (Jamaris & Hartati, 2017).

### Data Analysis

The first step of performing data analysis is making transcripts from observation data and interviews. In the interview results, the following steps were taken: (1) reviewing interview records that determined the phrases related to the most commonly mentioned interactions, (2) finding and identifying phrases appropriate to the instructional interaction between English teachers and the special assistant teachers. For field note results, the steps were: (1) generating code from field notes in accordance with research questions (2), research codes recorded to identify any learning interactions that occur (3), finding and identifying interactions occurring between ET with SAT (4), determining the initiator of each instructional interaction pattern and the occurrence percentage.

The next step was performing the data analysis process. The researcher applied qualitative data analysis developed by Spradley (2016) and modified by Jamaris and Hartati (2017) with three-step analysis, that are: (1) thematic analysis of all participants which observes the learning activities related to the instructional interaction between teacher and student, making field notes, coding and interviewing with teachers and both students; (2) within-participant thematic analysis, identifying the general theme of each instructional interaction; (3) cross-participant analysis, determining the general issue of instructional interaction between the participants. The final stage of analyzing the instructional interaction is finding a cultural theme as a profile of instructional interaction in the inclusive classroom, through inductive analysis. The results of the process analysis are presented below:

Table 1.                      **The Qualitative Analysis Data Model**

| INCLUDED TERM | SEMANTIC RELATIONS | COVER TERM |
|---|---|---|
| Delegation of tasks | is a kind of | Academic's interaction |
| Supporting help | is a kind of | Non-academic interaction |

Table 2.                     **Basic Patterns of Instructional Interaction and Average Frequencies for Academic Interaction**

| BASIC PATTERNS OF INTERACTION | Initiator of interaction | Frequency of interaction | Category of interaction |
|---|---|---|---|
| 1. ET gives statements to SAT and SAT gives a response to ET and ET asks SAT (BPI 1) | ET | 36 times (52,94%) | Academic interaction |
| 2. ET asks SAT and SAT gives a response to ET and ET gives an explanation to SAT (BPI 2) | ET | 25 times (36.76%) | |
| 3. SAT asks ET and ET gives a response (BPI 3) | SAT | 7 times (10.3%) | |
| Total of interactions | | 68 times (100%) | |

## FINDINGS

In Table 2, the average frequency in academic interaction with task delegation function, the most common basic pattern of instructional interaction is—ET give statements to SAT- SAT respond- ET asks SAT—as many as 36 times or 52.94% compared to other basic patterns.

In Table 3, the average frequency in academic interaction with supporting help function, the most common basic pattern of instructional interaction is—ET asks SAT-SAT responds—as many as 16 times or 48.49% compared to other basic patterns.

## DISCUSSION

The purpose of this study was to analyze the interaction of learning between the general teacher and the special assistant teacher or in this case, the English teacher (ET) with the special assistant teacher (SAT) to help the slow learner student (SLS) in the English lesson.

### Category of instructional interaction
Based on the analysis of the instructional interaction profile, the interaction between ET and SAT is divided into two categories, namely academic interaction and non-academic interaction. The academic interaction is related to the interaction between ET and SAT in the context of the subject matter being taught by the ET to the students with special needs, such as ET asking SAT to reread the word in the textbook to the SLS, requesting the SAT to accompany the word with an image, asking SAT to teach SLS about the "noun words" and help write the word in the SLS notebook. While non-academic interaction is related to the interaction between ET and SAT personally outside of the context of the subject matter, such as when ET asks SAT for SLS to be able to sit with another schoolmate, asks SAT to check the SLS textbook, and or tells SAT to bring SLS to the library.

Academic interaction is more dominant than non-academic interaction referring to both categories. This condition occurs because ET wants SLS to receive the lessons according to his or her needs and difficulties. For that purpose, ET supports SAT so that the SLS can understand the lessons being delivered, and as such, the academic interaction is mostly concluded. While non-academic interaction is less common than academic interaction because ET assumes that the handling of SLS behavior and motivation is better performed by SAT. SAT is considered more understanding and knowledgeable of the characteri-

Table 3.               **Basic Patterns of Instructional Interaction and Average Frequencies for Non-Academic Interaction**

| BASIC PATTERNS OF INTERACTION | Initiator of interaction | Frequency of interaction | Category of interaction |
|---|---|---|---|
| 1. ET asks SAT and SAT gives a response to ET (BPI 4) | ET | 16 times (48.49%) | Non-academic |
| 2. ET gives statements to SAT and SAT gives a response to ET (BPI 5) | ET | 12 times (36.36%) | |
| 3. SAT gives a statement to ET and ET gives a response to SAT (BPI 6) | SAT | 5 times (15.15%) | |
| Total of interactions | | 33 times (100%) | |

stics of SLS, compared with ET. The opinion of one ET on academic and non-academic interaction is:

> „I communicate and interact with the SAT more to ensure that the SLS understands the content of the subject matter, rather than asking questions outside of the lesson. In addition to the lessons, I sometimes ask SAT for help in handling the students' silent behavior and encouraging them to be active".

Meanwhile, the opinions of SAT relating to interactions with ET are shown in the statement below:

> „I ask more about the subject matter that must be learned by SLS, when in class than when do I have to ask SLS to focus on learning. Because sometimes I don't understand the subject matter that I have to explain to SLS"

Academic instructional interactions that are more dominant than non-academic interactions show that the positions of ET and SAT are not equal. Academic duties are still the most significant responsibility for ET, while non-academic ones are the responsibility of SAT. Although the division of functions is fundamental in the interaction between the two teachers, the two categories of interaction are shared responsibilities. SAT must understand the subject matter, while ET must also understand the characteristics of SLS. Until now, the fact is that in inclusive classrooms public teachers are responsible for curricula and teachers help explicitly students with special needs, especially related to modifications of said curricula (Keef & Moore (2004). This condition will have an impact on the quality of learning for SLS.

Learning interactions affect class quality significantly. Interaction between the general teachers and individual teachers are needed concerning the quality of the class and the description of the relationship between teachers, which will give positive results to students (Rimm-Kaufman, Curby, Grimm, Nathanson & Brock, 2009). For this reason, interaction and collaboration between the two teachers in both academic and non-academic settings are needed equally, with the same position or level in guiding students. Both general teachers and individual teachers have equal professional standards (Cipriano, Barnes, Bertoli, Flynn & Rivers, 2016). This is in line with Harris (2011) reasoning that special teachers do not only work on non-teaching activities, but also that special teachers work not only for students who have learning and behavioral problems (Giangreco, Edelman, Broer, & Doyle, 2001; Mueller, 2002), but also works on more complex

and challenging tasks (Downing, Ryndak, & Clark, 2000, SI12). The impact of special teachers can optimally affect students with special needs (Tobin, 2006). Interaction must start before the learning process itself, and include making learning plans or IEPs for students with special needs or making learning assessments (Education & Culture Ministry of Indonesia, 2011).

### The pattern and the function of instructional interaction between ET and SAT in inclusive English classrooms

Instructional interaction is an active and dynamic process in instructional activities in the classroom both verbally and non-verbally between ET and SAT. Instructional interactions consist of two categories, namely academic interactions derived from the basic patterns of interaction delegating tasks. Non-academic interactions originate from the basic patterns of support interactions.

### The pattern of academic interaction

The model of academic interaction is an interaction formed from ET and SAT which consists of various conversations such as requesting SAT to repeat reading stories to SLS, asking to draw pictures on the board, asking to continue the story to SLS, talking about examples of sentences made with SLS, informing about vocabulary that SLS must learn. The basic pattern of interaction formed in academic interactions consists of three cases of basic models presented below:

**Instructional Basic pattern 1:** ET gives statements to SAT and SAT gives a response to ET, and ET asks SAT. ET initiates this basic pattern by providing a statement to SAT, followed by the SAT statement and questions given by ET to SAT. Examples of the interactions can be seen in the schema below:

> ET : „Mr. Sonny, today Sammy must learn about the market topic „ (Statement)
> SAT : „Okay, I'll open Sammy's textbook on the market chapter" (Response)
> ET : „Have you prepared the vocabulary that will be explained to Sammy? (Question)

Statement sentences used by ET at the beginning of the interaction ensured that SAT was ready to help SLS. The basic pattern of this interaction ensures ET gives information to SAT on the topic. This interaction pattern only shows the provision of information from ET to SAT and from SAT to ET. The basic pattern formed is the basic pattern of IRF (initiation-response-follow-up) (Abd-Kadir & Hardman, 2007; Owocki & Goodman, 2002). All initial

initiation or information is more than an affirmation of information which then ends with a response in the form of a statement or answer from the initiation sentence, without any follow-up activities in the form of evaluation or feedback that is expected to be an evaluation material to determine the progress of SLS.

**Instructional basic pattern 2:** ET asks SAT and SAT gives a response to ET and ET gives an explanation to SAT. This basic pattern was initiated by ET in the form of question sentences to SAT, followed by SAT responses and ET gave statements to SAT. Examples of interactions that occur can be seen in the schema below:

> ET : „What is the task of writing a story and how have you explained it to Sammy? (Question)
>
> SAT : „I have explained a few steps so that Sammy can write a short story" (Response)
>
> ET : „I think you should repeat the questions often to Sammy so that he understands better" (Explanation)

The basic pattern of interaction between ET to SAT has formed the interaction pattern of the IRF pattern (Sinclair & Coulthard, 1975; Lawrence, 2016)—initial-response-follow-up—ET initiates this or sometimes the IRE pattern (Mehan, 1979; (Rolin-Ianziti & Ord, 2016)—initial-response-evaluation. The basic model of interaction formed was launched by ET addressing the question sentence to SAT to ensure that the SAT had directed the task to SLS. The basic pattern of this interaction as a whole from initiation to follow-up ensures that SLS can do the jobs given by ET through SAT.

**Instructional basic pattern 3:** SAT asks ET and ET gives a response. This basic pattern is initiated by SAT in the form of a question sentence to ET and followed by ET to provide a statement. Examples of interactions that occur are presented below:

> SAT: „Miss Jeanny, does Sammy have to make a short story with the same theme? (Question)
>
> ET: „Yes, of course, Mr. Sonny. I hope you can explain it slowly, so Sammy can understand it more easily" (Response)

The basic pattern of interaction formed by initiation from SAT is an interaction that has an IR pattern (Initiation-Response). The basic model of interaction from initiation to response is given to ensure that the tasks that SAT must do to guide SLS are in accordance with the learning activities.

In general, the basic pattern of interaction functions are formed, both IRF and IR are still delegating tasks from ET to SAT. The interaction pattern initiated by ET and SAT is an affirmative interaction of assigning tasks from ET to SAT in almost every learning activity. A delegation of functions given by ET to SAT or from SAT to ET is still limited to the tasks that must be done. Most of the contents of the interactions that occurred indicate that the SAT only explains the functions that must be performed by SLS in learning activities. Whereas related to the explanation of the subject matter to SLS is still dominated by ET.

Interactions that occur during instructional activities between ET and SAT have not given SAT the opportunity to be able to explain the subject matter to SLS. The reason for this is because SAT does not yet understand the subject matter and as such ET's explanation still dominates the subject matter. The impact of this condition causes less than the maximum amount of material to be learned by SLS - with the limitations of SLS - in understanding the subject matter. ET has more duties in explaining the article, not only to SLS but also to all students. Of course, time constraints must be considered by ET, so that all students including SLS receive an adequate education. Meanwhile, the limitations of SLS that need to be covered in the learning and revision of subject matter when compared to other students will be taken into consideration when explaining the material for more extended periods of time.

It can be said that there is no effective interaction between ET and SAT in dealing with SLS, the role of ET is still very dominant compared to SAT, and good collaboration between ET and SAT has not been formed. Interaction is still limited to transferring regular teacher assignments to individual teachers. Whereas to achieve learning objectives especially for students with special needs, interaction, and collaboration between the two teachers are required at the same level. Giangreco et al., (1997) state that general teachers usually prefer to give the responsibility for students with special needs to exceptional teachers, but both teachers should have a similar role in improving the academic and social achievements of students with special needs. Special teachers should not only carry out the required tasks but also understand the material and changes to be taught to students with special needs. Teacher's ignorance especially in the field of content or subject matter is an impediment to improving the academic achievement of students with special needs which in turn lessens the role of special teachers and has an adverse impact on students. Most specialized teachers feel their role in the classroom is only additional because of their lack of knowledge of the content or subject mat-

ter being studied (Keefe & Moore, 2004), ignorance of prior experience, and the reluctance of general teachers to explain the material to special teachers which will have an impact on teachers and students (Howard & Ford, 2007). For this reason, collaboration is needed in implementing learning in inclusive classes.

**The basic pattern of non-academic interactions**

The basic pattern of non-academic interaction is the interaction that occurs between ET and SAT in instructional activities, such as interactions when ET asks SAT to focus, asks SAT to bring SLS to the library, and asks SAT to remind SLS to carry an English dictionary. Some patterns that are formed from non-academic interactions include:

**Instructional basic pattern 4:** ET asks SAT and SAT gives a response to ET. This basic pattern was initiated by ET who asked SAT and SAT responded to the questions given. Below is an example of the interactions that occurred:

> ET: „Mr. Sonny, why Sammy can't focus on
> studying today? (Question)
> SAT: „I will ask Sammy" (Response)

The basic pattern that is formed is an IR (initiate-response) pattern, which begins with questions and ends with answers by SAT. This pattern of interaction shows that ET wants to ensure that SAT has carried out his or her duties to SLS.

**Instructional basic pattern 5:** ET gives statements to SAT and SAT gives a response to ET. This basic pattern was initiated by ET in the form of a statement to SAT, which SAT responded to. The illustration below is one example of interaction:

> ET: „Mr. Sonny, I hope you can remind
> Sammy not to disturb his friend"
> (Statement)
> SAT: „Ok, Miss" (Response)

The basic pattern formed is an initiate-response IR pattern, which begins with a statement by ET to SAT. This interaction shows the request for assistance requested by ET to SAT.

**Instructional basic pattern 6:** SAT gives a statement to ET and ET gives a response to SAT. This basic pattern was initiated by SAT in the form of a statement to ET, which ET responded to. Examples of interactions can be seen below:

> SAT: „Miss Jeanny, in fifteen minutes I'll
> take the SLS to the computer room"
> (Statement)
> ET: „Okay then" (Response)

The basic pattern of learning interactions between ET and SAT is an initiate-response IR pattern. Interaction initiated by SAT aims to provide information to ET about activity outside of academic assignments carried out to SLS. The response was given by ET to SAT as a form of confirmation of activities that will be carried out by SAT.

In general, the basic pattern of learning interactions that occur between ET and SAT functions as information in order to help ET to guide SLS in a learning activity. Unlike academic interactions, non-academic interactions are still dominated by ET, although there are still many interactions initiated by SAT. This renders the task of guiding SLS responsibilities not yet on the same level when compared between general teachers and special teachers. For a special teacher who helps general teachers, effective collaboration is needed including collaboration in helping students with special needs not only in academics but also in non-academics (socials). Students with special needs need social skills in learning activities and require the guidance of both teachers so that student needs can be met. For this reason, responsibilities and obligations in achieving the social skills of students with special needs are the responsibility of the two teachers. Interaction and collaboration between the two are significant, not only in the learning process but before learning and until the evaluation of learning to measure the progress students with special needs have made.

The interaction between the two teachers can improve class quality not only for teachers but also for students by enhancing their academic, behavioral, and emotional attitudes (Cipriano et al., 2016). Through collaboration, all students will get mutual benefits (Mackey, 2014) enhancing the effectiveness of inclusive classes (Hehir & Katzman, 2012; McLeskey et al, 2012). This is in accordance with the rules for the implementation of the inclusive education of the Ministry of Education and Culture of the Republic of Indonesia (2011) that the duties and roles of teachers in inclusive classes, both regular and individual teachers, must cooperate with each other, collaborating specifically in helping students with special needs, starting from determining assessment, creating learning plans, compiling and providing services that are suitable for students with special needs, evaluating the student progress together. By continuing to understand the duties of each teacher, it is expected that the roles of the two teachers can be maximized, both teachers have the same value in carrying out these tasks, without undermining the position of SAT as the teacher who assists ET in handling SLS.

## CONCLUSION

From the results of this research, it can be concluded that the type of instructional interaction between ET as the primary teacher and SAT as an exceptional teacher, is divided into two categories of interactions, namely academic and non-academic interactions. Academic interaction is more frequently carried out by ET to SAT compared to non-academic interactions. The primary interaction pattern that is formed between ET and SAT in academic interactions is initiate-response-follow-up (IRF) and initiate-response (IR). The function of the basic model of academic interaction is to inform of the delegation of academic tasks from ET to SAT to help SLS complete academic assignments. The basic pattern of non-academic interaction is initiate-response (IR). The primary function of non-academic interactions is initiate-response (IR). The purpose of the basic model of non-academic interaction is to inform of the provision of non-academic assistance from SAT to SLS, such as motivating, helping them stay focused on learning. Instructional interactions between ET and SAT have not been carried out optimally; collaboration has not been well planned and the role of the two teachers is not at the same value in carrying out the task.

## REFERENCES

Abd-Kadir, J., & Hardman, F. (2007). The Discourse of Whole Class Teaching: A Comparative Study of Kenyan and Nigerian Primary English Lessons. *Language and Education*, 21(1), 1–15. https://doi.org/10.2167/le684.0

Basham, J. D., Israel, M., Graden, J., Poth, R., & Winston, M. (2010). A comprehensive approach to RTI: Embedding universal design for learning and technology. *Learning Disability Quarterly*, 33 (4), 243-255.

Blanton, L.P., Pugach, M.C., 6c Florian, L. (2011). *Preparing general education teachers to improve outcomes for students with disabilities*. AACTE/NCLD policy brief retrieved from www.aacte.org.

Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.

Cipriano, C., Barnes, T. N., Bertoli, M. C., Flynn, L. M., & Rivers, S. E. (2016). There's No "I" in Team: Building a Framework for Teacher-Paraeducator Interactions in Self- Contained Special Education Classrooms. *Journal of Classroom Interaction*, 51(2), 4-19.

Devecchia, C., Dettori, F., Dovestona, M., Sedgwicka, P., &Jamenta, J. (2012). Inclusive classrooms in Italy and England: The role of support teachers and teaching assistants. *European Journal of Special Needs Education*, 27(2), 171-184.doi:10.1080/08856257.2011.645587.

Downing, J. E., Ryndak, D. L., & Clark, D. (2000). Para educators in inclusive classrooms: Their own perceptions. *Remedial and Special Education*, 21, 171–181.

Education & Culture Ministry of Indonesia (2011). *Guide to General Implementation of Inclusive Education:* Jakarta.

Empowerment Women and Child Protection Ministry of Indonesia (2013). *Guidelines for Management of Children Needs Especially For Mentors (Parents, Families, and Communities).* Jakarta.

Evans, C., Weiss, S. L. (2014).Teachers working together: how to communicate, collaborate, and facilitate positive behavior in inclusive classrooms. *The Journal of the International Association of Special Education*, 15, 142-146.

Friend, L. (2017). IRE and content area literacies: A critical analysis of classroom discourse. *Australian Journal of Language and Literacy*, The, 40(2), 124.

Giangreco, M. F., Edelman, S. W., Broer, S. M., & Doyle, M. B. (2001). Paraprofessional support of students with disabilities: Literature from past decade. *Exceptional Children*, 68(1), 45–63.

Giangreco, M. F., Edelman, S. W., Luiselli, T. E., & Mac Farland, S. Z. (1997). Helping or hovering? Effects of instructional assistant proximity on students with disabilities. *Exceptional Children*, 64(1), 7–18.

Hang, Q., & Rabren, K. (2009). An examination of co-teaching perspectives and efficacy indicators. *Remedial and Special Education*, 30 (5), 259-268.

Harris, B. (2011). Effects of the Proximity of Para educators on the Interactions of Braille Readers in Inclusive Settings. *Journal of Visual Impairment & Blindness*, 105(8), 467-478.

Harrison, C., & Killon, J. (2007). Teachers as leaders: Ten roles for teacher leaders. *Educational Leadership*, 65 (1),74-77.

Hehir, T., & Katzman, L. (2012). *Effective inclusive schools: Designing successful school wide programs.* Hoboken: John Wiley.

Hines, R. A. (2001). *Inclusion in middle schools* (ERIC Number: ED459000). ERIC Clearinghouse: Champaign, IL. Retrieved from http://files.eric.ed.gov/fulltext/ED459000.pdf.

Hoover, J. J., & Patton, J. R. (2008). The role of the special educators in a multitiered instructional system. *Intervention in School and Clinic*, 43(4), 195–202.

Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children*, 71(2), 165–179.

Howard, R., & Ford, J. (2007). The Roles and Responsibilities of Teacher Aides Supporting Students with Special Needs in Secondary School Settings. *Australasian Journal of Special Education*, 31(1), 25-43.

Jordan, A., &Stanovich, P. (2001). Patterns of Teacher–Student Interaction in Inclusive Elementary Classrooms and Correlates with Student Self-Concept.International Journal of Disability, Development and Education, 48 (1), 33-52.

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings.* New York, NY: Oxford University Press.

Keefe, E. B., & Moore, V. (2004). The Challenge Of Co-Teaching In Inclusive Classrooms At The High School Level: What The Teachers Told Us, *American Secondary Education*, 32(3), 77-88.

Kennedy, C. H. (2005). *Single-case designs for educational research*. Boston, MA: Allyn & Bacon.

Kugelmass, J.W. (2004). *The Inclusive School*. New York: Columbia University. (Chapter 1).

Lindstrom, P.H. & Speck, M. (2004). *The principal as professional development leader*. Thousand Oaks, CA: Corwin.

Mackey, M. (2014). Inclusive Education in the United States: Middle School General Education Teachers' Approaches to Inclusion. *International Journal of Instruction*. 7(2), 5-20.

Mangope, B., & Mukhopadhyay, S. (2015). Preparing Teachers for Inclusive Education in Botswana: The Role of Professional Development. *Journal of International Special Needs Education*.18(2), 60-72.

McLeskey, J., Landers, E., Williamson, P., & Hoppey, D., (2012). The least restrictive environment mandate of IDEA: Are we moving toward educating students with disabilities in less restrictive settings? *Journal of Special Education*, 36, 131-140.

Mehan, H. (1979). *Learning lessons*. Harvard University Press Cambridge, MA.

Melekoglu, M.A. (2014). Characteristics of Inclusive Classrooms in Turkey. *The Journal of The International Association of Special Education*, 15 (2), 24-30.

Moeller, J. D., Datilo, J., & Rusch, F. (2015). Applying Quality Indicators To Single-Case Research Designs Used In Special Education: A Systematic Review. *Psychology in the Schools*, 52(2), 139-153.

Mueller, P. (2002). Education 2002: The paraeducator paradox. *The Exceptional Parent*, 32(9), 64–67.

Murawski, W. W., & Hughes, C. E. (2009). Response to intervention, collaboration, and co-teaching: A logical combination for successful systemic change. Preventing School Failure. *Alternative Education for Children and Youth*, 53 (4), 267-277.

Murawski, W. W., &Lochner, W. W. (2011). Observing co-teaching: What to ask for, look for, and listen for. *Intervention in School and Clinic*, 46 (3), 174-183.

Niesyn, M. E. (2009). Strategies for success: Evidence-based instructional practices for students with emotional and behavioral disorders. *Preventing School Failure*, 53(4), 227-233.

Owocki, G., & Goodman, Y. (2002). *Kidwatching: Documenting children's literacy development*. ERIC.

Rimm-Kaufman, S. E., Curby, T. W., Grimm, K. J., Nathanson, L., & Brock, L. L. (2009).The contribution of children's self-regulation and classroom quality to children's adaptive behaviors in the kindergarten classroom. *Developmental Psychology*, 45, 958.

Robinson, S., & Myck-Wayne, J. (2016). A teacher training model for improving social facilitation in the inclusive program. *Young Exceptional Children*, 19(1), 16–26.

Rolin-Ianziti, J. C., &Ord, C. (2016). Variations on the IRE pattern in a French beginner task-based classroom. *The Language Learning Journal*, 1–16.

Rudiyati, S. (2011). *Inclusive School Portrait di Indonesia.* Paper presented in the Public Seminar: Choosing the Right School for Children with Special Needs at the National Meeting and Adolescent Mental Health Association (AKESWARI). May 5, 2011. (Retrieved from http://staff.uny.ac.id/sites/default/files/130543600/Potret Inclusive Schools in Indonesia. Accessed 19:02:16).

Rymes, B. (2008). *Classroom Discourse Analysis: A Tool for Critical Reflection.* Cresskill, NJ : Hampton Press.

Sadowski, P. (2009). *From Interaction to Symbol.* Philadelphia: John Benjamins Publishing Company. http://files.eric.ed.gov/fulltext/EJ854544.pdf

Sapon, M. & Shevin. (2007). *Widening the Circle, The Power of Inclusive Classrooms.* Massachusetts: Beacon Press (Part 2).

Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children*, 73 (4), 392-416.

Sileo, J. M. (2011). Co-teaching: Getting to know your partner. *Teaching Exceptional Children*, 43 (5), 32 -38.

Simonsen, B., Shaw, S. F., Faggella-Luby, M., Sugai, G., Coyne, M. D., Rhein, B., Alfano, M. (2010).A schoolwide model for service delivery: Redefining special educators as interventionists. *Remedial and Special Education*, 31, 17–23.

Sinclair, J. M., & Coulthard, M. (1975). *Towards an analysis of discourse: The English used by teachers and pupils*. Oxford Univ Pr.

Solis, M., Vaughn, S., Swanson, E., & Mcculley, L. (2012). Collaborative models of instruction: The empirical foundations of inclusion and co-teaching. *Psychology in the Schools*, 49 (5), 498-510.

Sunaryo. (2009). *Inclusive Education Management (Concepts, Policies, and Their Implementation in the Perspective of Education Outside the Ordinary).* (Paper retrieved from file.upi.edu/Direktori/FIP/JUR._PEND._LUAR_BIASA/1956072219. Accessed, 27/02/2016).

Tobin, R. (2006). Five Ways to Facilitate the Teacher Assistant's Work in the Classroom. *Exceptional Children Plus*, 2(6).

# Child Care Workers' Perspectives on Transition Services for Pre-school Children with Special Needs in Hong Kong

Selena K. W. Lo[1], Mantak Yuen[1] and Ryder T. H. Chan[1]

[1]Centre for Advancement in Inclusive and Special Education Faculty of Education University of Hong Kong, China

**ABSTRACT**

Transitions that all young children have to make (including children with special needs) involve: starting school, moving from kindergarten to primary school, and sometimes moving from one school to another. With increasing awareness of the importance of early childhood education and intervention, transition planning for young children is attracting much more attention and action. Research suggests that there is a relationship between children's successful transitions and the outcomes of their development in cognition, literacy, social adjustment, and adaptive skills. However, the perspectives of teachers in transition planning were not sufficiently explored in the literature in the Chinese context. This paper focuses on the experiences, ideas, and perspectives of pre-school child care workers on the vertical transition of children from pre-school special centres to other educational institutions in Hong Kong. Individual face-to-face interviews were conducted with child care workers who work in special child care centres. Importance of transition planning for children with special needs, the role of pre-school special child care workers, challenges in the process, and suggestions for improvement are discussed. In particular, methods for facilitating the parents' choice of appropriate primary schools are shared.

*Keywords:* Child care workers; Children with special needs; Pre-school; Teachers' perspective; Transition services

## INTRODUCTION

Vertical transition planning for pre-school children with special education needs from pre-school settings to primary schools is a critical process for children (Kemp, 2003). Children with disabilities or special needs include those with intellectual disability, specific learning disabilities, visual impairment, hearing impairment, deafblindness, multiple disabilities, autism, traumatic brain injury, speech or language disorders, serious emotional disturbance, orthopaedic impairments, and health impairments (Snyder & Hoffman, 2001). Some countries are developing guidelines for teachers to facilitate vertical transition planning (e.g., Victoria State Government, The Department of Education and Training, 2019). Research has suggested that a positive relationship exists between children's successful vertical transitions and outcomes of their ongoing development in cognition, literacy, social adjustment and adaptive skills (Griebel & Niesel, 2003; Rimm-Kaufman & Pianta, 2000).

In addition to the necessary emphasis on academic development in the transition for normal children, the process for children with special needs often requires particular attention to the continuity of health care, training, and therapy. For example, some children with special needs require ongoing social skills training, physiotherapy, speech therapy, behaviour modification, and counselling. Therefore, facilitating smooth transitions for these special learners can be particularly challenging, compared with that of ordinary children in the following areas:

- children with special educational needs are more likely to be well below average in their academic performance due to their cognitive, sensory, or other limitations (Westwood, 2006)
- children with special educational needs are less likely to have developed secure attachments to significant others due to having more than one set of carers (Dent & Cameron, 2003)
- the risk of experiencing problems increases at times of change, resulting in stress (Dent & Cameron, 2003)
- children with special educational needs are at higher risk of having psycho-social and emotional difficulties and this increases their problems in adjusting to transitions (Reyes et al., 2000)
- children with special needs are twice as likely than their peers to experience bul-

lying (Daly & Gilligan, 2005); and being a victim of bullying is known to be a key inhibitor for successful transition (Evangelou et al., 2008)
- challenging behaviours are more prevalent among children with special needs, and this can hinder successful transition (Dent & Cameron, 2003)
- the transition process often results in extra stress for the whole family (Dent & Cameron, 2003)

### Factors promoting a successful transition

According to Marcon (2002), the use of developmentally appropriate practices and the provision of high-quality learning environments promote successful transition and enhance the academic and social performance of children. Better cognitive outcomes are also said to result from positive and close teacher-children relationships (Mantzicopoulos, 2005). It is suggested that attempting a close match between the two environments across which a child is transitioning promotes a successful transition – for example, similar class size, curriculum, teaching approach, and management strategies (Chun, 2003). A smooth transition can be facilitated if a child and the teacher visit the new placement in advance before the transition occurs.

### Role of teachers in transition planning

Teachers play an essential role in transition planning for children with special needs. They are responsible for helping identify and implement instructional techniques to promote a successful transition for these children, based on a detailed knowledge of each child's characteristics. Instead of a standard transition package, planning for each child is tailored and specific to each individual. Teachers are required to be sensitive to the time and context of the transition process, the special needs of the children and their families, and the specificity of the various programmes they will require (Blanchett, 2001). In this respect, teachers are essential in the process of identifying and linking children with various transition-related services (Kohler & Greene, 2004).

To promote a successful transition, special education teachers play an important role in facilitating the effective involvement of parents and children in the necessary planning. They help by sharing information, listening, and assisting children and their families to make informed decisions according to the goals for children in transition (Blanchett, 2001).

According to Daley et al. (2011), transition practices offered by educators can be divided into two categories, high-intensity and low-intensity. High-intensity practices refer to the individualized transition planning for each child. It is an essential component of the individual educational plan (IEP) of each child with special needs. Low-intensity practices refer to whole-class or group practices, for example, group training and class activities in transition planning supported by teachers or other educators. Teachers need to be fully involved in both high-intensity and low-intensity transition planning practices. All these practices are to be conducted by a closely collaborating multi-disciplinary team, composed of child care workers, social workers, therapists, clinical psychologists, etc. (Harbin et al., 2005).

**Challenges and difficulties in transition planning**

Although teachers play an essential role in the transition process for children with special educational needs, many are still lacking the understanding of the significance of transition planning (Kohler, 1997). For example, according to Kohler & Greene (2004), special education teachers have revealed little knowledge about the roles of various transition services and support agencies; nor do they know how best to achieve inter-agency collaboration. In particular, they were unsure how to choose curricula to assist with the transition.

Morningstar et al. (2008) suggested that special education teachers felt unprepared for providing effective transition planning services. There appeared to be limited training courses related to the topic of transition offered within teacher pre-service education programmes. Where courses do exist, the transition content does not contain an adequate emphasis on important practicalities and issues (Severson et al., 1994). Kochhar-Bryant (2003) identified that most transition training for teachers occurs 'on-the-job', with limited systems for supporting and evaluating outcomes. Some teachers have received no training at all on this topic, which makes the skills and knowledge about transition vary markedly from person to person. This tends to limit the potential for teachers to collaborate and improve existing provisions. In Hong Kong, there is only limited endorsement of training in transition for special needs children, so there is extreme variation in both transition standards and course content.

According to Blanchett (2001), training related to writing IEPs, conducting IEP meetings, participating as part of a multidisciplinary team, assessing and teaching social skills, and teaching daily living skills is an essential element in the pre-service transition training programme of special education teachers. However, these essential elements are integrated insufficiently or not included in the current transition training of special education teachers.

**Suggestions for increasing transition planning competencies**

To equip special education teachers with skills in transition planning for children with special needs, Kohler and Greene (2004) suggested different approaches in teaching transition-related content for teachers. They recommended (1) the infusion of transition-related content across the teacher education curriculum, (2) specialied transition courses, and (3) a combination of both. With the infusion of transition-related content across the curriculum, all graduates are equipped with equal knowledge and exposure to transition-related skills. However, the ability of university instructors to teach transition-related knowledge varies greatly, and some of them are not knowledgeable in teaching the area of transition services. Transition-related knowledge may therefore be taught at a superficial level since it is considered a second priority compared with other education topics. With the specialised transition courses, transition-related content is taught more thoroughly and in-depth. Specialised courses equip trainee teachers with more specialised skills in transition planning for children, including those with special needs. However, there is often pressure to limit the time devoted to this topic due to the tight programme for pre-service special education teachers. A common sense viewpoint would suggest that the topics of transition and transition planning should ideally be taught to trainee teachers through a combination of specialised courses and infusion across the curriculum.

**Purpose of the study**

The perspectives of teachers in transition planning for pre-school children were not sufficiently explored in the literature in the Chinese context. In this qualitative study, the researchers investigate the importance of transition planning services by child care workers for pre-school children with special needs, the role of child care workers in the process, challenges faced, and suggestions for enhancing pre-school special child care workers' competencies in providing transition planning services from the perspective of child care workers. The study focuses on the pre-school special education sector in Hong Kong.

**METHODS**

The use of an interview approach is described as one of the most powerful ways to understand the perspective of

a person (Fontana & Frey, 2000). In this study, an interview was used to collect data concerning the perspectives of child care workers. A qualitative study enables the investigator to gather rich descriptive information on the importance of transition planning services as seen by child care workers in a pre-school special centre. In particular, the intention was to investigate their role in the transition planning process, identify the challenges they face in transition planning, and suggest strategies for enhancing special child care workers' competencies in providing transition planning services.

## Participants

All 4 special child care workers (SCCW) of a special child care centre (SCCC) service were invited to participate in the study. SCCCs in Hong Kong provide special training and care for pre-school children with moderate to severe disabilities to facilitate their growth and development, and prepare them as far as possible for primary education in an inclusive school or special school. Pre-school children receive pre-school education at the centres instead of attending a typical kindergarten. These children with special needs may later go to mainstream primary schools, special schools with different grades of severity, with or without residential services, or may repeat pre-school education in typical kindergartens after leaving the SCCC. Children in SCCCs can also transfer horizontally to other types of special education services before graduation – for example, an integrated programme (IP) in kindergarten-cum-child care centre, early education and training centre (EETC), or private special pre-schools. In Hong Kong, SCCWs have extra knowledge regarding special education and special care in addition to typical pre-school teacher training. They take the role of teachers in the SCCC.

## Procedure

Individual face-to-face interviews were conducted by the first author since this can offer extra information which written responses cannot provide – for example, the interviewer can interpret non-verbal cues such as facial expressions, and verbal cues such as intonation and confidence. Additionally, face-to-face interview enables immediate clarification of interview questions and responses (to avoid any misunderstanding and incorrect interpretation).

Participants were interviewed individually to minimize the potential problem of group influence on responses. All interviews were conducted by the first-named author. Cantonese was used in the interview because this is the mother tongue of both participants and researchers. A semi-structured interview guide was created to ensure interview consistency while still allowing a certain degree of flexibility in follow-up questioning. The questions were as follows:

1. What are your thoughts on transition planning by SCCWs for children with special needs in SCCC?
2. What is the role of SCCWs in the transition planning process for children with special needs in SCCC?
3. What challenges or difficulties do you face during the process of transition planning for children with special needs in SCCC?
4. How can the transition planning competencies of SCCWs in SCCC be enhanced? How can the challenges or difficulties mentioned above best be addressed?

The questions are considered as valid measures, as it is the daily work of the participants; therefore, all participants were capable of answering them.

## Procedures of data collection

Informed consent was obtained from participants before the interview. The purpose of the study and the principle of confidentiality were explained at the beginning of the interview. It was emphasized that the responses were entirely independent of the work of the participants and would not be conveyed to their employers. Participants were also assured that they could withdraw from the interview at any time without any negative consequences. During the interview, verbal responses were audio-taped as an immediate record of the key points. This helped to promote the accuracy of the data collected. Approval of audio-taping was obtained at the informed consent stage before the interview. The interview was conducted by the first-named author who knew the participants before the study. This helped to reduce any anxiety that might have resulted from being questioned by a stranger. Each interview was kept to fifteen minutes – and this also helped to minimize the inconvenience for the SCCWs.

Individual interviews were conducted in the classroom of each SCCW after front line duty. Familiarity with the environment helped to reduce any anxiety in the participants, which could have otherwise affected the reliability of responses.

## Data Analysis

The audiotaped interview was listened to and checked by the researcher and each participant. Key points were then transcribed to a handwritten record by the researcher and

confirmed by the participants. This process helps to increase the accuracy of findings from interviews and avoid any misinterpretation (Janesick, 2000).

The data (key points and additional notes taken during interviews) was analysed by general qualitative analysis techniques (Miles & Huberman, 1994). It was summarised, and then first-level coding was conducted using an inductively-derived list of key points and codes, generated after reviewing the data line by line. Pattern coding was followed according to the separate points identified at the first-level coding to reveal broader themes.

## RESULTS

Themes that emerged from the analysis of responses to each question are summarized below. As all participants followed the interview questions closely, no other themes were identified in the participants' sharing through inductive coding.

### Importance of transition planning services: choosing appropriate primary schools

All four participants agreed that the transition planning services by teachers are essential for pre-school children with special needs when they transit to other educational settings. All participants suggested that transition planning would facilitate pre-schoolers with special needs to move to a suitable school for their further development and then receive appropriate continuing support for their learning. The process also helps parents make appropriate decisions. For example, one of the participants described the importance of transition planning by teachers:

> "Transition planning helps parents choose a suitable school for children with special needs."

Another participant expressed the same view:

> "Transition planning helps to choose a suitable school for children with special needs, no matter if they go to mainstream primary schools or special schools, so that appropriate support can be provided for them."

### Importance of transition planning services: better adaptation to primary school

Three of the participants commented that transition planning services help pre-schoolers with special needs to adapt more easily and faster to the new educational setting, and thus have a happy learning experience. One participant stated that proper transition planning can help to promote an easy transition:

> "As pre-schoolers transit from a familiar environment to an unfamiliar environment, a well-planned transition can help them to adapt faster."

Another participant expressed:

> "The difference between pre-school and primary school is very large, and the study in primary school is much more difficult. If there is a well-planned transition, it helps parents choose a school with a suitable learning syllabus for children. Therefore, children can have an easier adaptation and a happy time in primary schools."

### Role of special education teachers: facilitating the parents' choice of appropriate schools

Participants stated that they had different roles in the transition planning process. All participants stated that they had the responsibility to help parents understand the abilities of their children and the differences among choices of schools. Besides, teachers agreed that they had to understand and appreciate the expectations of the parents. For example, one of the participants said:

> "As a SCCW, I should understand the abilities of the children to let parents understand their children's needs. Also, this helps parents choose an educational setting which suits the abilities and needs of their children. Also, SCCW should help parents understand the choices of different schools and know more about the resources in different educational settings."

One participant mentioned that:

> "As SCCWs, we need to understand the desires of parents."

### Role of special education teachers: giving updated information on schools and the transition system to parents

Three of the participants suggested arranging parents to visit mainstream primary schools and special schools so that they could better understand the resources available. For example, one participant said:

> "I think that more visits to different types of schools, including special schools and mainstream primary schools, can offer chances for parents to understand the resources and syllabus of different schools. Therefore, they can choose a suitable school for their children."

The other means suggested to convey updated information of schools and the transition system was giving talks to parents. One participant shared:

> "Different talks are suggested for parents to help them to choose a suitable school for their children."

### Role of special education teachers: designing suitable preparation activities for children

Participants recognized that they had the responsibility to design suitable preparation activities to promote the child's future adaptation in other educational settings after children leave the SCCC. One participant stated that:

> "We need to design some primary school preparation syllabus for children to experience the learning method in primary schools so that they can adapt more easily after the transition."

### Challenges and difficulties: managing the expectations of parents

All participants stated that the greatest challenge in the transition planning process was achieving a balance between the difference of parents' expectations (sometimes unrealistic) and the abilities of their children. One mentioned:

> "The most difficult thing is how to make parents accept the fact that when their expectation is too high, it does not match the abilities of their children."

Another participant said:

> "The most difficult thing is communication with parents when parents think that the children's abilities are high enough to be promoted to mainstream schools or IP service in the nursery – but our assessments show that the child's abilities are not strong enough."

### Challenges and difficulties: lack of updated information on special needs resources in primary schools

One participant also mentioned the lack of updated information to provide for parents, and how this affects advice to parents and the designing of suitable preparation programmes for children:

> "If we do not understand about different schools, it is difficult to explain to parents about the educational level, the programmes, and the teaching in different schools. Also, it is difficult to design suitable programmes or syllabi for children to have an easier transition."

Suggestions for enhancing pre-school special education teachers' competencies: getting up-to-date information about the transition system and the resources of different schools through visits and talks

Special child care workers interviewed in this study all suggested that more up-to-date information about the transition system and the resources of different schools can better equip them to communicate with parents and enable them to participate in the transition planning process. Three of them suggested visits to mainstream primary schools and special schools for teachers to promote a better understanding of the resources available. For example, one participant said:

> „Teachers can know more about the updated information through visits so that they can share it with parents."

One participant also suggested the visits to other pre-school settings to share ideas about the design of different preparation programmes for children in the transition planning process:

> "Visits to other pre-school settings help us to understand how others design primary school preparation syllabi and programmes so that we can design programmes and preparation syllabi to help children with faster adaptation in primary schools."

Other than school visits, one participant suggested that they could also get updated information through talks. For instance, that participant said:

> „Teachers can know about the updated information from the talks."

## DISCUSSION

Consistent with previous findings, transition planning for pre-schoolers with SEN was found to be important in the current study. Similar to the suggestions of Harper (2016), participants in the study expressed that transition planning could facilitate faster adaptation to primary school and lead to better emotional wellness.

This study also found that, in the context of Hong Kong, choosing an appropriate primary school was important in transition planning. Hong Kong is a densely populated city, with 587 primary schools (Hong Kong Education Bureau, 2020) in 1,106 km2, i.e., on average around 2 schools within 1 km2. Therefore, after considering the geographical location of the schools, there are often several schools for parents to choose from. Furthermore, resources for children with special education needs vary among schools. Therefore, good transition planning included informing the parents of such resources in various schools so that they could choose a suitable school for

their children that could provide appropriate support in new educational settings after the transition.

About the role of SCCWs in working with the parents, the findings revealed that the SCCWs saw it as their role to facilitate the parents to better understand the abilities of their children and how these should determine the choice of the next school. Literature also found that parents desired more information to prepare for the transition (McIntyre et al., 2007). At times, this process can help parents modify their expectations for their child's future. Meanwhile, for children, the SCCWs' support role is to design and implement adaptive programmes to promote a smooth transition. This is consistent with the suggestions by Chun (2003), that the transition would be smoother if the syllabus in SCCC matched that of the primary school. Good understanding of the needs, characteristics, and abilities of each child is therefore crucial. About the challenge of enacting the roles mentioned above, this study revealed that at times it would be difficult for the parents to have realistic and practical expectations towards children's actual abilities. SCCWs mentioned that parents' expectations for their children are usually higher than the actual abilities possessed by said children, based on SCCWs' perspectives and assessments. Transition planning may therefore often involve helping parents accept a realistic long-term goal for the child with special needs.

Rapid innovations and frequent changes within educational systems and in policies in different schools presented a challenge for some participants. They found it difficult to share up-to-date information with parents due to the lack of recent information about different schools and the transition system. Participants of the study suggested that to keep teachers, as well as parents, informed, more visits to different schools would help them obtain a better understanding of the education standards, available support and resources, and teaching methods in each choice of school. To supplement this, informative talks could be provided by schools and the Education Bureau and Child Assessment Centres. Some participants also suggested that better sharing among pre-school settings could improve the design and implementation of transition preparation for pre-schoolers. Significance of the study

One of the aims of the study was to understand the importance of transition planning for children with special needs from the perspective of pre-school special education teachers. Although this study was small-scale and exploratory, the findings will help to enhance special education teachers' awareness of the importance of transition planning. This may also further help to enhance parents' and public's awareness of the importance of transition for children with special needs. Resources allocation under the education system may need to be developed to improve current provisions. Much better coverage of transition issues also needs to be provided in pre-service and in-service professional development programmes. The study has also highlighted the difficulties that teachers often encounter in attempting to facilitate children's transitions within the system. This has implications for the content of what is taught in pre-service and in-service courses.

## LIMITATIONS OF THE STUDY

The study is small-scale and exploratory, so the findings may not generalise across other centres in Hong Kong. SCCCs also differ in administration and policy, so the opinions solicited here from one centre may not apply to other special education sectors or other SCCCs. Research with a much larger sample across different centres would help to confirm the results reported here and may well identify other difficulties and challenges.

The four SCCWs all had different educational backgrounds and working experiences, so they tended to reflect upon current practices from different starting points. Previous education, training, and experience may increase variation in responses obtained – but in practice, it is impossible to control for this influence.

In this study, coding of the transcribed data was performed by the researcher only; and for practical reasons, it was not possible to evaluate inter-coder reliability. Ideally, any future studies should incorporate the evaluation of inter-coder agreement and reliability of the coding process.

## CONCLUSION

Although the generalisability of findings is limited due to sample size and location, the study begins the investigation of pre-school transition services for children with special needs in Hong Kong. The study pointed out the role of special child care workers. The challenges they encounter in the process of transition planning highlight areas needing improvement, which would eventually improve interdisciplinary work on transition planning.

## REFERENCES

Blanchett, W. J. (2001). Importance of teacher transition competencies as rated by special educators.
    *Teacher Education and Special Education*, 24(1), 3-12. https://doi.org/10.1177/088840640102400103

Chun, W. N. (2003). A study of children's difficulties in transition to school in Hong Kong. *Early Child Development and Care*, 173(1), 83-96.
    https://doi.org/10.1080/0300443022000022440

Daley, T. C., Munk, T., & Carlson, E. (2011). A national study of kindergarten transition practices for children with disabilities.
    *Early Childhood Research Quarterly*, 26(4), 409-419. https://doi.org/https://doi.org/10.1016/j.ecresq.2010.11.001

Daly, F., & Gilligan, R. (2005). Lives in foster care: The educational and social support experiences of young people aged 13 to 14 years
    *in long term foster care.* https://www.researchgate.net/publication/266494278_Lives_in_Foster_Care_The_educational_and_social_support_
    experiences_of_young_people_aged_13_to_14_years_in_long_term_foster_care

Dent, R. J., & Cameron, R. J. S. (2003). Developing resilience in children who are in public care: The educational psychology perspective.
    *Educational Psychology in Practice*, 19(1), 3-19.https://doi.org/10.1080/0266736032000061170

Evangelou, M., Taggart, B., Sylva, K., Melhuish, E., Sammons, P., & Siraj-Blatchford, I. (2008).
    *What makes a successful transition from primary to secondary school?* https://ro.uow.edu.au/sspapers/2430/

Fontana, A., & Frey, J. (2000). The interview: From structured questions to negotiated text. In N. K. Denzin & Y. S. Lincoln (Eds.),
    *The handbook of qualitative research* (2nd ed.). Sage Publications.

Griebel, W., & Niesel, R. (2003). Successful transitions: Social competencies help pave the way into kindergarten and school.
    *European Early Childhood Education Research Journal*, 11(sup1), 25-33. https://doi.org/10.1080/1350293X.2003.12016703

Harbin, G., Rous, B., & Mclean, M. (2005). Issues in designing state accountability systems. *Journal of Early Intervention,* 27(3), 137-164.
    https://doi.org/10.1177/105381510502700301

Harper, L. (2016). Supporting young children's transitions to school: Recommendations for families.
    *Early Childhood Education Journal,* 44. https://doi.org/10.1007/s10643-015-0752-z Hong Kong Education Bureau. (2020).
    Primary education: Figures and statistics. https://www.edb.gov.hk/en/about-edb/publications-stat/figures/index.html

Janesick, V. J. (2000). The choreography of qualitative design: Minuets, improvisations and crystallization.
    In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (2nd ed., pp. 393-394). Sage.

Kemp, C. (2003). Investigating the transition of young children with intellectual disabilities to mainstream classes: an
    Australian perspective. *International Journal of Disability*, Development and Education, 50(4), 403-433.
    https://doi.org/10.1080/1034912032000155194

Kochhar-Bryant, C. (2003). Building transition capacity through personnel development: Analysis of 35 state improvement grants.
    *Career Development for Exceptional Individuals*, 26, 161-184. https://doi.org/10.1177/088572880302600205

Kohler, P. D. (1997). Implementing a transition perspective of education: A comprehensive approach to planning and delivering secondary
    education and transition services. In F. R. Rusch & J. Chadsey (Eds.), Beyond high school: Transition from school to work
    (1st ed., pp. 179-205). Wadsworth Publishing.

Kohler, P. D., & Greene, G. (2004). Strategies for integrating transition-related competencies into teacher education.
    *Teacher Education and Special Education*, 27(2), 146-162. https://doi.org/10.1177/088840640402700206

Mantzicopoulos, P. (2005). Conflictual relationships between kindergarten children and their teachers: Associations with child
    and classroom context variables. *Journal of School Psychology*, 43(5), 425-442. https://doi.org/10.1016/j.jsp.2005.09.004

Marcon, R. (2002). Moving up the grades: Relationship between preschool model and later school success.
    *Early Childhood Research & Practice*, 4.

McIntyre, L. L., Eckert, T. L., Fiese, B. H., DiGennaro, F. D., & Wildenger, L. K. (2007). Transition to kindergarten: Family
    experiences and involvement. *Early Childhood Education Journal*, 35(1), 83-88. https://doi.org/10.1007/s10643-007-0175-6

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). SAGE Publications.

Morningstar, M. E., Kim, K.-H., & Clark, G. M. (2008). Evaluating a transition personnel preparation program:
    Identifying transition competencies of practitioners. *Teacher Education and Special Education*, 31(1), 47-58.
    https://doi.org/10.1177/088840640803100105

Reyes, O., Gillock, K. L., Kobus, K., & Sanchez, B. (2000). A longitudinal examination of the transition into senior high school for adolescents
    from urban, low-income status, and predominantly minority backgrounds. *American Journal of Community Psychology*, 28(4), 519-544.
    https://doi.org/10.1023/A:1005140631988

Rimm-Kaufman, S. E., & Pianta, R. C. (2000). An ecological perspective on the transition to kindergarten: A theoretical framework to guide
    empirical research. *Journal of Applied Developmental Psychology*, 21(5), 491-511.
    https://doi.org/10.1016/S0193-3973(00)00051-4

Severson, S. J., Hoover, J. H., & Wheeler, J. J. (1994). Transition: An integrated model for the pre- and in-service training of special education
    teachers. *Career Development for Exceptional Individuals*, 17(2), 145-157.
    https://doi.org/10.1177/088572889401700204

Snyder, T., & Hoffman, C. (2001, 01/03). *Digest of education statistics, 2000*.
    https://nces.ed.gov/pubs2001/2001034a.pdf

Victoria State Government The Department of Education and Training. (2019). *Transition to primary school for children with a disability.*
    https://www.education.vic.gov.au/childhood/professionals/learning/Pages/transsupport.aspx

Westwood, P. (2006). Teaching and learning difficulties: *Cross-curricular perspectives* (2nd ed.). Australian Council for Educational Research.

# Close Intimate Relations between People with Intellectual Disabilities Constructivist Research: The Polish Perspective

Remigiusz Kijak[1]

[1]Faculty of Education, University of Warsaw, **Poland**

**ABSTRACT**

The issues raised in this article are not often mentioned in the source literature. Available studies demonstrate that partnership issues for people with intellectual disabilities appear to be among the ignored problems. Empirical evidence indicates the participation of people with disabilities in the realization of these roles, but their realization is burdened with difficulties resulting from individual predispositions and social conditions. I am directing my research on partner relationships towards a constructivist–interpretative paradigm based on ontological relativism (the multiplicity of meanings given to the category of relationship can be observed at this point, arising in subjective reconstructions—statements—of the people surveyed), subjective epistemology (arising in the course of the research, which is co-created by the cognitor and the subject), and the naturalism of methodological procedures, which means the rejection of advanced statistics in favor of cognition of the true experiences of the subjects. I have assumed a qualitative nature for the research and the biographical method was used. The research aimed to answer the questions: How are the relationships of people with intellectual disabilities understood? What meaning do people with intellectual disabilities assign to love and relationships and their own intimate relations (sexuality)? A literal linguistic analysis of the statements of those tested with the Atlas.ti software is presented in the results. The article depicts the way people with intellectual disabilities describe their relationships, how they feel in the relationships they create, and thus, what linguistic means of expression they use to communicate their intentions and expectations with respect to their partner.

*Keywords:* intellectual disability; parenting; relationship; sexuality

## BACKGROUND

The constructivist–interpretative approach adopted in this work is connected with subjective understanding and discovering as well as describing the everyday life of the subjects. The main axis of integration of the presented paradigm, as well as the subject and aim of the research, is the adoption of the research concept from the point of view of Wolf Wolfensberger's theory of valorization of the social role.

With a limited quantity of empirical evidence of partnership in the case of people with intellectual disabilities, it is inappropriate to make any kind of generalizations. However, presenting some of the available studies on this subject, which try to present, at least in general, this taboo area of life of people with disabilities, is worthwhile. Considering the international nature of the International Journal of Special Education readers and the fact that the research was done in Poland, it is worth elucidating the Polish research perspective in this respect. I will therefore start my theoretical analyses with Polish research.

According to a study conducted by Zawiślak (2003a; 2003b), who researched a group of people with mild intellectual disabilities, these people usually achieve a certain degree of autonomy and independence with regard to life tasks. They often assume parental and marital roles, although obviously to a lesser extent than their peers without disabilities and with considerable delay. Among the people surveyed by Zawiślak, 118 people aged between twenty and thirty, almost 27% had their own families. For comparison, 47% of people of the same age without disabilities functioned in their own families (Zawiślak, 2003a). Notably, women with mild intellectual disabilities were three times more likely to form partnerships than men and were also more likely to have children (Zawiślak, 2003a: 165–171). Most of the respondents expressed positive feelings about their life within their own families. The women surveyed were satisfied with their motherhood, despite, in most cases, the unfavorable living and family conditions. At the same time, the female respondents were convinced that they fulfill these roles correctly, which does not always correspond to objective reality (Zawiślak, 2003a). The average age of marriage for people with intellectual disabilities and non–disabled people is similar.

The comparison of results obtained by Zawiślak with data from the literature indicates that a higher percentage of marriages among this group of people with disabilities was recorded in the past: 50% of married women (Felhorska, Urbańska, and Wojtaszek, 1964), among graduates of vocational schools there were as many as 33% married men and 55% married women (Urbańska, 1974). In light

of these comparisons (Minczakiewicz, 1996), an increase in the age of couples starting a family can be considered a tendency. This is probably due to the general demographic changes in Poland. They involve the observable phenomenon of delayed marriages, especially among the male population, and the rising median age of newlyweds (Zawiślak, 2003b). The differences in marital roles between women and men with mild intellectual disabilities, as obtained by researchers, indicate that it is easier for women to get married than for men. This is due to the different attitudes of girls, who demonstrate higher self–esteem, higher social and personal skills, and plan and strive to start a family, while at the same time violating social norms to a lesser extent (Zawiślak, 2003b).

Noteworthy results were presented by Gajdzica (2004). He conducted surveys among 86 graduates of special vocational schools. According to analyses, about 33% of the respondents were married, most were under thirty years of age, had no income, and lived with their parents. Most of the couples surveyed had a similar level of education: in a group of 47 women with intellectual disabilities, the total number of children was 54, where 18 had certificates of intellectual disability while the rest were deemed disability-free.

At the same time, social consent for these types of relationships is rather low. Such marriages, in public opinion, are considered as a possible burden not only on the immediate family but also on the social environment. In this regard, it is worth recalling a study by Parchomiuk (2007). While collecting the opinions of special educators on the satisfaction of sexual needs by adults with intellectual disabilities, she also asked about the possibility of marriage. A total of 80% of respondents favored an unconditional ban. Among those who allowed for the possibility of marriages by people with intellectual disabilities, 65% believed that such marriages could only be pursued when subject to monitoring—e.g., in a social welfare center.

Kościelska (2007) presented a study of ten married couples with intellectual disabilities. The couples surveyed were people with mild disabilities, although several were certified as having a moderate disability. In one case a relationship between a person without disabilities and one with an intellectual disability was described. As the author rightly pointed out, reaching these couples presented considerable difficulties, as no records of marriages between people with disabilities exist. The search for such couples was usually carried out through the sheltered support enterprises, associations, etc. These marriages functioned in diametrically diverse ways: some functioned very poorly, others demonstrated a high level of resourcefulness in so-

cial interactions as well as everyday life. These couples also had offspring. As in the case of their general functioning, they also dealt with their roles as parents very differently. A characteristic feature of all these marriages was material poverty—the result of very low wages, low disability pensions, and low professional qualifications.

Nowak–Lipińska (2003) presented the intramarital relationships of couples consisting of people with severe intellectual disabilities and people without any intellectual disabilities. The author conducted a biographical overview of five couples in late adulthood. In each of these couples, it was the woman (aged 51–57) who had an intellectual disability while her partner (twenty years older, aged 71–76) had no intellectual disability. The marital life of the surveyed couples was rather harmonious and free of conflicts. The husbands did not treat their wives as people with disabilities. Irregularities were explained away by various random events, completely unrelated, in their opinion, to the disability (Nowak–Lipińska, 2003).

Further research was conducted in 2004–2008 by Grütz (2011). She performed an empirical analysis of six couples with intellectual disabilities using a qualitative research procedure. Those surveyed came from various Polish cities. Respondents were brought up in environments that functioned improperly for reasons of alcoholism, violence, and poverty. Of significance is the fact that all the subjects had bad experiences with their fathers, who were most often absent from the family or, if physically present, the emotional relationships were dysfunctional. As the author writes, in adult life these situations were linked to the respondents' difficulties in relations with partners—incorrect notions of roles, interactions, and bonds within the family. Grütz, in comparing the examined pairs, stated that in all cases one of the partners always operated at a higher level, which was a guarantee of stability for the other party. In the surveyed couples it was the men who exhibited a higher level of social skills. Their ages varied. They were older than their partners except for one case. The level of development of self–maintenance skills was good in all the examined persons. Additionally, in each relationship, one of the partners understood the value of money. Three of the surveyed couples had parental experience. The couples surveyed had total of five children among them; in one case severe intellectual disability was diagnosed in the child.

* * *

After surveying a group of young adult women and men with intellectual disabilities in care facilities, Norwegian researchers (Holm et al., 1997) state that leisure time for most people with intellectual disabilities is often limited. This is because of the allembracing organization and planning of activities in care facilities. The result is that personal life becomes completely predictable and permanently restricted in terms of love and partner relationships. Young adults are rarely allowed to be alone. Spontaneous meetings, which are an important part of an individual's social development and strengthen mutual relations, are very rare. Further observations of the lives of people with intellectual disabilities in care facilities resulted in additional conclusions. Many of the young adult respondents with intellectual disabilities take part in dances organized in the centers with the purpose of finding a partner. Some decidedly master the "art of flirting" and encourage the "potential partner" in a polite manner that is full of style and sophistication. Others are less subtle, vulgar, and sometimes completely misread the signals sent by the opposite sex. Some direct their feelings towards the staff and are thus exposed, by definition, to failure when it comes to seduction. Researchers conclude that many disabled people live in a sheltered, highly supervised world. The staff mainly encourages friendships among people under their care.

Koller, Richardson, and Katz (1988) examined randomly selected couples consisting of adults with mild intellectual disabilities. In each case, the couple had been married for five years. Their level of social functioning was high. The spouses were graduates of special schools and in some cases even finished regular schools. All had completed primary or vocational education. Most of the people forming the married couple had employment. Research shows that people with intellectual disabilities, despite being in long–term relationships, were much less likely to be married than their peers without disabilities. The researchers found that marriages among people with more severe intellectual disabilities are practically non–existent and that people who formed such relationships had either a much higher quotient of intelligence and well–developed social skills or had a partner without disabilities. The surveyed spouses with mild intellectual disabilities reported significantly more personal problems, including marital ones, as well as social issues, mainly in relation to their neighbors, when compared with spouses without any disabilities.

Brown (1996) conducted qualitative research on the partnerships and marriages of people with Down syndrome in the context of the quality of life model. On the basis of empirical analysis, he concluded that people with Down syndrome who had a partner were much calmer, bolder, and more cheerful in contacts than those that did not have a partner. Being in a relationship changed their

sense of social status, which they described as higher, similar to other people. Additionally, attending occupational therapy workshops or working at sheltered support enterprises gave them a sense of normalcy. Most of the people surveyed met their future partners at work. It was of great importance for the respondents to collect mementos concerning their life together. Their collections included photos of both partners, wedding rings, and wedding gifts. The respondents were proud of their marriages because it was due to them that they had joined the community of adults. Some relationships benefited from external support systems, including social workers helping them with their shopping or daily activities as well as with official matters. Many couples lived together with their parents, who also supported them. The partners shared responsibilities. The more capable partner was the pillar of the relationship, assigned responsibilities, and enforced them. On the basis of comparative studies, Denholm (1992) claims that people with intellectual disabilities have the same goals as their peers without disabilities—i.e., striving for friendship, a relationship with another person, closeness, intimacy, having offspring, owning a house, and working—although their ability to achieve them is more limited.

## METHODS, DATA COLLECTION, AND PROCEDURES: RESEARCH TOOLS

The aim of this work was to understand the relationships and/or married and parental life of people with severe intellectual disabilities through narration. The main research problem was formulated as follows: How do people with intellectual disabilities understand a relationship and what meaning do people with intellectual disabilities assign to love and relationships, and their own intimate relations (sexuality)?

Due to the limitations constraining this article, only a literal linguistic analysis of the statements of the surveyed people is presented to the reader. It presents how respondents with intellectual disabilities describe what a relationship is for them, how they feel in the relationships they have created, and thus, what linguistic means of expression they use to communicate their intentions and expectations to their partners.

My research is based on the biographical method, in which biography is understood as a topic. (An element of the biography is described as depicting established, practiced patterns of behavior towards partner relationships as currently experienced and created among people with severe intellectual disabilities that are projected by them through

the period of adulthood). The research was carried out in several parts of Poland—the Lesser Poland, Kuyavian–Pomeranian, Pomeranian, and Greater Poland voivodeships. Specifying the locations where the interviews were conducted could make it possible to discover the identity of the respondents. For this reason, only the names of major cities shall be disclosed, listed in the chronological order of visits during the several months of my research tour. The journey started with Cracow. Successive stops were made in Gniezno, Leszno, Ostrowiec Świętokrzyski, Pakówka, Bojanowo, Bydgoszcz, Koronowo, Chojnice, Charzykowy, Malbork, Sztum, Toruń, Grudziądz, and a return to Cracow. The research was conducted daily, with breaks for the weekend due to the unavailability of the respondents during those periods. At the same time, I also needed time to complete and organize the collected material. The material was amassed on an ongoing basis (recorded with the consent of the respondents). It required copying to a hard disk as well as grouping, annotation, and recording of observations as well as spontaneous comments, etc. The narrations presented in the work include nearly 400 hours of recordings in electronic form that were subsequently transcribed onto a computer without any alterations. Atlas.ti software was used for transcription and descriptions of the textual data and subsequently in the qualitative study. The Atlas.ti software proved to be helpful mainly in cataloging recordings and grouping them into specific categories in this research. I used its ability to search for specific information in the source material, to return to specific places in time, and to search for common topics, creating subtypes of the analyzed issues. I most probably did not use all the capabilities of the software but focused on features that proved helpful in managing qualitative data. Many years of observation of the reality of life of adult Poles with intellectual disabilities (I conducted research in Poland on the sexuality, sexual experiences, and the quality of sexual life of adult Poles with intellectual disabilities) as well as direct contacts with people with disabilities facilitated the selection of research participants so as to present the widest possible perspective on the partnership among people with intellectual disabilities. The basic and first criterion for selecting study participants was the existence of a deeper (moderate or significant) intellectual disability in at least one of the partners. I deliberately did not restrict the selection of couples to those with intellectual disabilities only but opened up the possibility of conducting research among couples where one of the partners had no disabilities or a disability that was not intellectual in nature. This introduction of "counter–horizons" (diverse perspectives) and comparing contrasting research subjects opens up

new vistas for analysis. The study group consisted of 142 persons forming 71 heterosexual couples described in this paper on the basis of several hundred hours of recorded conversations and interviews conducted in their places of residence and the environments in which they lived.

## RESULTS

The linguistic analysis of the collected material made it possible to determine semantic fields contained in statements of the examined subjects with regards to the subject of being in a relationship. In a sense, being in a relationship expresses purposeful and rational intentions and expectations on the part of the partner and becomes a life goal for many people with intellectual disabilities. The final list includes seven different categories. The dominant figure in the narrative turned out to be the concept of love. Respondents most often talked about the relationship in the category of love. In their statements, the word love was used a total of 759 times, with a variety of meanings applied to it. It was the assessment of the context of the appearance of the given concept that allowed it to be categorized for analysis or rejected. For 66% of the respondents (the percentage of occurrences of the word love in the context of the relationship), love is a necessary condition for the continuation of the relationship. Love is understood as a close, intimate relationship. Interestingly, this type of narration—love as an element necessary for the continuation of the relationship—is observed more often among the women surveyed (72%) rather than men (60%). For 13%, love is understood in the context of a calculation and the relationship is seen as a kind of business or agreement. On the other hand, 4% of the surveyed men and 1% of the surveyed women directly said that they are in a relationship because the partner holds certain material possessions that are the basis of their security and ensure the stability of the relationship. They see love as a business relationship. For 66%, love is a prerequisite to having a child. The majority of women with no children put love in the category of romantic love. Of these, 54% had a romantic idea of their partner and the relationship. For 45%, love was a guarantee of not being alone. This group of respondents sought love to free themselves from loneliness. For 32%, love was also synonymous with sex and the satisfaction of erotic or intimate needs. This was followed by a category that spoke of respect (20%). However, three different terms were used in the statements: "he respects me and I respect him" (25%), "good to me" (21%), and "selfless" (9%). The "selfless" category was surprising. It should be understood as "willing

to sacrifice." This is derived not from the coding analysis itself, but from the context of whole sentences uttered by the subjects. Statements relating to material property were formulated much less frequently (25%). Nearly 31% of respondents said that work is important in the relationship, 22% stressed the importance of the dwelling and its furnishings. In the statements of 9% of the respondents, the category of physical intimacy appears, although the respondents spoke about it in different ways: "sex" (6%), "hugging and emotion" (13%), and "we go through life together" (9%). In addition to these predominant elements relating to how the relationship is understood, a number of other "collateral" categories emerged in the narrative. Their collateral nature is linked to the small percentage of these descriptions in relation to the whole group of respondents, but dominating within a particular individual narrative. For example: "a relationship is something difficult" (6%) and "I'm constantly crying, and I don't know what the future holds" (2%).

I have also attempted a semantic analysis of the respondents' statements about their partner's characteristics. Two broader aggregate categories emerged from the analysis of the collected empirical material. The respondents spoke of their partners in two ways. I termed the first category the "dream partner." The respondents used terms such as, I dreamed of, I thought of a guy who, I always wanted to have a girl who, or my ideal. The second category is the "real partner," which encompasses terms that apply to the partner proper.

I have defined the above two categories as aggregate ones, but within each of them, it is possible to identify more detailed categories. Four specific categories, differentiated by gender can be distinguished on the basis of the analysis of the respondents' statements with regard to the dream partner category. I will start with a semantic analysis of the men's statements. Categories were established on the basis of frequency of indications (the percentages of occurrence of particular subcategories do not add up, as the respondents mentioned more than one feature of their dream partner).

The first is physical attractiveness (31% of all statements). Statements such as, "pretty," "pretty and nice girl," "she must be pretty," "pretty through and through," and "a trophy, pretty" (84%), "beautiful goddess" (2%), "stunning brunette," or "blonde beauty" (3%) are repeated within this category. Additionally, the terms descriptive of individual body parts were used: "I imagine a sexy girl with pretty legs," "she must have pretty legs," "chiseled legs," "legs to die for," "legs from here to Venus," and "great legs" (32%). The smile is also appreciated: "nice

smile," "laugh and smile," and "smile" (6%). Male respondents also paid attention to other female features—breasts (54%) and buttocks (48%). For some, the smell was important as well (12%).

The second distinguishing category of the dream partner is "resourcefulness and industriousness" (21%). This was evidenced by statements by the persons surveyed such as, "a wife has to be hardworking," "hardworking housekeeper," "works at home every day," "she has to take care of the house, clean and vacuum," "industrious," "resourceful and hardworking," and "she has to make breakfast in the morning, get the children ready, and take care of me." The analysis of the statements shows that the men surveyed are looking for a wife who is hardworking and resourceful, but not professionally active—someone who will take care of the house and children.

Another category is "caring" (12%). In the case of the men surveyed, this referred to childcare. It should be understood as sensitivity, subtlety, and domestic warmth. Analysis of the narrations of the examined men indicated that men treat "caring" differently than the examined women do. For them, a caring man is one who is resourceful, earns money, takes care of the woman and children, and gives a sense of security.

I termed the last distinguished category "obedience" (6%). It is evidenced by the respondent statements such as, "a woman has to be obedient" (12%), "I appreciate submissiveness" (4%), "the kind of woman who does what I tell her to do" (2%), and "for a relationship to be good someone has to step down, for there to be no quarrel a woman has to be obedient" (one statement).

The women surveyed spoke somewhat differently about their dream partner. In order to distinguish the semantic fields, as in the previous case, I noted all the categories appearing in the narratives of the women examined and then coded them, giving the synonymous statements common expressions. This long and arduous stage of analysis again resulted in the emergence of very interesting categories. Interestingly, comparing the obtained results with those obtained in my previous research in 2013 (Kijak, 2014), in which I used a ready list of features of a dream partner, I observed that thanks to the application of the qualitative research procedure a more in–depth analysis proved possible. From it, I distinguished categories other than those included in the ready list. For example, this applies to the category "obedience" in research on men and their expectations towards their dream partner (there was no such category in the ready list) and the "henpecked husband" category in the group of women (this category was not included in the ready list, either).

Moving on to the analysis of the narratives of the examined women regarding their dream partner, as before, I will start with the categories indicated most often. The first is "caring" (62%): "a husband must be caring," "caring," "looks after me and my children," and "being caring is a quality of my masculine ideal" (62%).

The next category is "strong" (50%). According to the women surveyed, a man must not only be strong physically, although the physical aspect is important to female respondents, but must possess strength of character. He cannot give up. He must find a way out of every situation. He must help in difficult situations. Statements of the surveyed women indicate this— "strong husband" (70%), "one who can find a way out of any situation" (11%), "strong" (60%), "strong character and strong arms" (54%), and others that were less popular.

Another category is "likes children" (52%). In their statements, many of the women surveyed indicated that the ideal man must like children.

The last highlighted category is "giving love" (49%). The analysis of the collected material shows that only women pointed to love, but this does not mean that men do not consider love as important. It fits into the general sense of being together, a certain belonging to each other, taking care of the woman and the children. Yet, for their part, it is women that emphasized love. They gave it a more explicit character, something that is essential in the concept of a perfect relationship and a perfect man.

I would like to mention one more category, not as popular as the previous ones, but worth emphasizing nevertheless—the "henpecked husband" category (9%). The women surveyed would like their husband to be resourceful and strong on the one hand, but on the other, he should be a family man who stays home. This is what the analysis of the narrative shows. Simply put, it is easier to keep a man with you and not expose him to unnecessary temptations and yourself to cheating.

The semantic analysis of the statements of the women and men surveyed about the real partner combines elements of both the dream and real partner categories. Let us start by presenting an analysis of statements made by the women surveyed. The dominant narrative figure regarding the real partner encompasses three content–different subcategories. I termed the first one "husband next door" (42%). It turns out that the women surveyed were looking for a partner in their immediate surroundings, adapting their ideas about the ideal husband to the real characteristics of the next door partners. The search was for available and free partners as well as those interested in entering into a relationship with the girl next door.

Somewhat like in traditional society, it seems to be difficult for the surveyed women to leave their homes and live on their own. Research shows that this goal was easier to achieve for men with intellectual disabilities. Women usually stayed in their parents' homes or moved to their partner's house. The "husband next door" meant a known person you can rely on, usually a schoolmate or a man a few years older. A "husband next door" provides a sense of security and a guarantee of stabilization upon leaving the childhood home. I designated the next category "caring for children" (59%). The women stressed that their partner is hardworking, earns money, and is good with children. The last category to be identified is "plans for the future" (22%). In this category, women emphasized that their partner provides them with stability and that they plan for the future with him. These plans included having a child or next child as well as buying household appliances—a washing machine, a better refrigerator, or a new furnace and improving the heating system.

The men surveyed mostly paid attention to the thriftiness of their female partners (68%). They were satisfied with that thriftiness as well as their partners' ability to take care of the house. They appreciated the fact that their partners can and want to clean as well as do various chores around the house. The next highlighted category is "support in difficult moments" (36%). Many of the men surveyed said that they value peace of mind in their partners, on whose support and understanding they can count. The last category is "sex." A total of 42% of the men surveyed indicated that their sex life is important and good. None of them mentioned physical attractiveness, although most of them had pointed to this aspect when talking about their idea of a dream partner.

At the end of this section, a selected excerpt from the stylistic analysis of the narrative of the respondents regarding parenthood will be presented. As exemplified by Krzychała (2007: 75), I shall assume that "style determines the selection of device appropriate to a given style of communication, selected more or less consciously so as to recognize a specific result of expression and meaning of a text." Based on the syntactic analysis of grammatical forms (Polański and Nowak, 2011; Nagórko, 2010) contained in the statements of the respondents, I have identified several form types. The first is an optative form, which is characterized by a description saturated with verbs expressing a wish, hope, or possibility, an expectation or desire for something. The most often used verbs appear in the conditional mood: chciałbym [I would like"], życzyłbym sobie [I would wish], and pragnę [I desire]. This style characterized 25% of the statements of all respondents. The

respondents wanted their relationships to be good and wished for health: "What I would want is to be happy, for my man to love me, and for us to be healthy" (female, 32 years of age, ID). In the analysis of the empirical material, I also encountered the terms oby [if only], aby [to] that are equivalent to the subjunctive mood, which is used to express wishes, commands, emotions, possibilities, judgments, needs, and statements contrary to current facts. In Polish, the functions of the subjunctive have been divided between the conditional and imperative moods. There is, however, an equivalent of the subjunctive that is created by the use of the particle oby [I hope], żeby and gdyby [if], and an old past participle: Oby on to zrobił [Hopefully he will do this]. A number of statements such as, "I'm very busy with the baby now, and I hope it will not get worse" (female, 32 years of age, ID) and "Teresa, who gave birth last summer, what she says frightens me. She says that childbirth is unbearably painful. I hope that nothing bad will happens to me and that my Janek will not leave me. Teresa's man left her" (female, 28 years of age, ID). Another type—the imperative form—expressed in the indicative mood, points to decisive action. The narrator making the statement expresses a clear direction and hopes for a certain course of events that will take place in the future. The statement expresses a virtually neutral, objective attitude on the part of the speaker as to the facts that he or she is reporting. It also indicates that the user identifies him or herself with the facts he or she is reporting or considers them very probable. It is worth mentioning that this type of style was mostly characteristic of the men surveyed. Partners without children said: "I'll have children and a good job" (male, 32 years of age, ID). "It's only a matter of time and I'll have a house with a garden and children" (male, 24 years of age, ID). "What's there to say, there's no need to harp on it. I'm gonna have kids someday and everyone will see" (male, 29 years of age, ID). Among couples with children, this type of style prevailed in the statements made by the examined men: "This is just to provide a roof over the head of my child and her" (male, 25 years of age, ID). "It's a serious matter. We have a child and I need to provide good conditions. I'll find a job and rent an apartment. You have to rise to the occasion" (male, 32 years of age, ID). The imperative form is given in the imperative mood, which usually expresses an order, wish, or request. To strengthen the power of expression and the message conveyed, the interlocutor often raises his voice or speaks firmly, or when writing uses exclamation marks. There are several forms of passive voice that replace the grammatical mode. Most often it is a construction with the verb musieć [must]. Examples of such statements inc-

lude: "Well, it's no longer a joke. I don't want to live like this anymore. You know how hard it is to keep proving to others that I love her and want to have children with her! Everybody gangs up on me and says that this love doesn't make sense! And I'm telling you, it does make sense and I'm going to fight for her and my baby! I love her and I'm going to do everything I can to make my Madzia and my little girl happy!" (male, 39 years of age, without disabilities, partner of a 26–year–old woman, ID).

## CONCLUSION

This article presents only the linguistic aspects of the conducted research. Noteworthy results were obtained in another study presenting a phenomenological interpretation of the narrative material. There, the linguistic level of analysis was significantly broadened. It aimed to identify the specific way in which the subjects are addressed. The in-depth analysis of the narrative material did not focus on single cases forming a set of many one–dimensional categories. It analyzed numerous cases that were similar to each other. After their saturation, the final category was created by means of reconstruction and comparison. "Generated categories are verified by constant comparison and referencing to other categories. Overlaying a given category atop other categories shows whether its specificity is confirmed or needs further modification and clarification (…) the greater the number of dimensions (categories), the higher the potential for generalization of the whole category" (Krzychała, 2007: 39). In other words, the analysis consisted of identifying significant cases, identifying recurring common threads specific to individual respondents, creating specific categories, and selecting sample quotations to illustrate the topics undertaken.

In this way, five categories have been distinguished: the importance of forming bonds, the warmth of the family home, and the attitude of parents to the possibility of building a partner relationship and having children, the importance of the school and the teacher, strategies for dealing with difficult situations, support of the local community or an unimpaired partner, and social competences. To some extent, the identified categories overlapped with those distinguished using linguistic analysis (Kijak, 2017).

The material presented in this article allows capturing the facts about the partnership of people with disabilities in the language layer. To some extent, the results overlap with the research of Mill, Mayes, and McConnell (2010) who asked six young people with intellectual disabilities between the ages of eighteen and twenty–five what they

thought about becoming independent and starting their own families. The results are hardly surprising. In one case, a person with intellectual disabilities wants to be independent and more self–reliant. However, any attempt to achieve this independence—e.g., by leaving the school building and returning home on their own, having their own money, or having a partner—was treated by parents as a threat to their authority and quickly suppressed. Three persons were satisfied with their independence and did not want to change anything—the prospect of living outside their family home terrified them greatly. Two persons, with the help and support of the family, became more independent in the sense that they lived with their partner with one of the families. The studies presented are also consistent with the results obtained by Hanna Bertilsdotter–Rosqvist and Veronica Lövgren (2013). On the basis of their research on a group of people with moderate intellectual disabilities living in Sweden, they concluded that these people can enter marriages or even play parental roles in a way that guarantees satisfaction and full realization in those roles.

A "marriage that is good enough" is not one that compares to a marriage of people without disabilities. In principle, such a comparison does not make sense. It only points to certain shortcomings and deficits. The existence of shortcomings does not in any way mean that these marriages are worse or less satisfactory for the spouses. This is because satisfaction or fulfillment can be drawn from different aspects of being together.

The study is also consistent with the results obtained by Ćwirynkało and Żyta (2019). Their paper focused on the views and experiences of self–advocates with intellectual disabilities towards love and intimate relationships. It presents research results conducted with self–advocates with intellectual disabilities using a qualitative study based on an interpretative paradigm and focus group technique. The authors tried to answer two main research questions: (1) How do self–advocates with intellectual disabilities perceive love? (2) What contributes to their sphere of intimate relationships and sexuality? Thirty–one self–advocates with moderate and mild intellectual disabilities took part in six focus group interviews. Several themes emerged in the interviews: perceptions of love, personal experiences in the sphere of intimate relationships and sexual behaviors undertaken by the participants, and their needs and environmental constraints on fulfilling their needs. The findings align with the research results obtained by other authors—Frawley and Wilson (2016), Azzopardi–Lane and Callus (2015)—who indicate that although adults with intellectual disabilities are aware of their sexual ri-

ghts, they perceive a number of social and cultural barriers in realizing these rights.

Kijak (2014) points to important elements indicated by people with intellectual disabilities for the sustainability of relationships and other types of relations. With regard to the concept of valorization of social roles, it is important to look far back and point out that until recently, welfare centers created environments of barren and sterile nature. There, the rights of individuals with intellectual disabilities in terms of partnership or sexuality were not respected. The valorization of the social role is "to enable, establish, strengthen, preserve or protect social roles that are respected, especially for people at risk of being undervalued, by using, in so far as possible, socially acceptable measures" (Elks, 1994, p. 266). Making reference to the obtained research results, one can write that, in line with the concept of valorization of the social role, where the support of the closest social environment, support of a peer group, friends, and finally family exists, it is possible for people with disabilities to perform specific social roles—that of a partner or spouse. A positive motivating factor in fulfilling social roles includes positive experiences from the family home, family support, or support of the closest social circle. Undoubtedly, the level of social competencies and their scope is also important.

In conclusion, I would like to add that it is not always possible to change the status of people with disabilities. Restrictive parental attitudes and a malfunctioning social welfare system are just some of the factors causing devaluation. The way to counteract the devaluation process is to change the perception of the person with disabilities by others. To do this it is not necessary to change the person. Sometimes, a change of context is enough. Usually, adults with disabilities are placed in closed institutions, segregated, perceived as clients or patients. They become dependent on the state, charities, and social welfare system. Change forces a natural reorganization in thinking about people with disabilities and enabling them to perform new, socially valued roles: of a partner, spouse, neighbor, and employee. This is the main strategy in the process of valorization of the social role, a fundamental change, thanks to which we can limit the negative consequences of social devaluation.

## REFERENCES

Azzopardi-Lane, C., & Callus, A. -M. (2015). *Constructing sexual identities: people with intellectual disability talking about sexuality.* British Journal of Learning Disabilities, 43(1), 32-37.

Bertilsdotter-Rosqvist, H., & Lövgren, V. (2013). Doing adulthood through parenthood: *Notions of parenthood among people with cognitive disabilities.* European Journal of Disability Research, 7(1), 56-68.

Brown, R. I. (1996). *Partnership and marriage in Down syndrome.* Research and Practice 4(3), 96-99.

Ćwirynkało, K., & Żyta, A. (2019). *Self-advocates with Intellectual Disabilities Talk About Love and Relationships: A Focus-Group Research Report.* International Journal of Special Education, 34(1).

Denholm, C. (1992). *Developmental needs of adolescents: Application to adolescents with Down syndrome.* The 1992 National Conference of the Canadian Down Syndrome Society. Canadian Down Syndrome Society, University of Calgary.

Elks, M. A. (1994). *Valuing the person or valuing the role? Critique of Social Role Valorization theory.* Mental Retardation 32(4), 265-271.

Felhorska, F., Urbańska, B. & Wojtaszek, Z. (1964). *Losy absolwentów szkół specjalnych dla dzieci upośledzonych umysłowo.* Państwowe Zakłady Wydawnictw Szkolnych.

Frawley, P., & Wilson, N. (2016). *Young people with intellectual disability talking about sexuality education and information.* Sexuality & Disability, 34(4), 469-484.

Gajdzica, Z., 2004. *Status rodzinny i zawodowy osób z lekkim upośledzeniem umysłowym na tle zmiany społecznej.* In Z. Janiszewska-Nieścioruk (Ed.), *Człowiek z niepełnosprawnością intelektualną. Wybrane problemy osobowości, rodzin i edukacji osób z niepełnosprawnością intelektualną,* t. 2. Oficyna Wydawnicza Impuls.

Grütz, M. (2011). *Osoby z niepełnosprawnością intelektualną jako partnerzy, małżonkowie i rodzice – dotychczasowe doniesienia badawcze.* In B. Cytowska (Ed.), *Dorośli z niepełnosprawnością intelektualną w labiryntach codzienności.* Analiza badań – krytyka podejść – propozycje rozwiązań. Wydawnictwo Adam Marszałek.

Holm, P., Horst J., Back Olsen, S., Pertl, B. (1997). *After normalization.* In: J. Tøssebro (Ed.), Den vanskelige integreringen. Universitetsforlaget.

Kijak, R. (2011). A desire for love: *Considerations on sexuality and sexual education of people with intellectual disability in Poland.* Sexuality and Disability, 29, 65–74.

Kijak, R. (2013). *The sexuality of adults with intellectual disability in Poland.* Sexuality and Disability, 31, 109–123.

Kijak, R. (2014). *Seksualność człowieka z niepełnosprawnością intelektualną a rodzina.* Wydawnictwo Naukowe PWN.

Kijak, R. (2017). *Dorośli z głębszą niepełnoprawnością intelektualną jako partnerzy, małżonkowie i rodzice.* Oficyna Wydawnicza Impuls.

Koller, H., Richardson, S. A., & Katz M. (1988). *Marriage in a young adult mentally retarded population.*
    ournal of Intellectual Disability Research, 32(2), 93-102.

Kościelska, M. (2007). *Być kobietą, być mężczyzną – co to znaczy w odniesieniu do osób niepełnosprawnych intelektualnie.*
    In: A. Ostrowska (Ed.), *O seksualności osób niepełnosprawnych.* Ex Libris Pracownika Socjalnego. Wydawnictwo IRSS.

Krzychała, S. (2007). *Projekty życia młodzieży w perspektywie badań rekonstrukcyjnych.* Wrocław: Wydawnictwo Naukowe DSW.

Mill, A., Mayes, R., & McConnell, D. (2010). *Negotiating autonomy within the family: the experiences of young adults with intellectual
    disabilities.* British Journal of Learning Disabilities, 38(3), 194-200.

Minczakiewicz, E. M. (1996). *Perspektywy życiowe w wyobrażeniach dorastającej pełno- i niepełnosprawnej umysłowo młodzieży.*
    Roczniki Pedagogiki Specjalnej, 7, 295-307.

Nowak-Lipińska, K. (2003). *Psychospołeczne aspekty małżeństwa osób niepełnosprawnych intelektualnie z pełnosprawnymi.*
    In: K. Rzedzicka, A. Kobylańska (Eds.), *Dorosłość, niepełnosprawność, czas współczesny: na pograniczu pedagogiki specjalnej.*
    Oficyna Wydawnicza Impuls.

Parchomiuk, M. (2007). *Postawy studentów pedagogiki wobec życia erotycznego osób niepełnosprawnych.*
    *Człowiek, Niepełnosprawność, Społeczeństwo*, 1, 93–105.

Polański, E., & Nowak, T. (2011). *Najnowszy podręcznik gramatyki języka polskiego.* Wydawnictwo Petrus.

Urbańska, B. (1974). *Losy absolwentów zasadniczych szkół zawodowych specjalnych.* Warszawa: Wydawnictwa Szkolne i Pedagogiczne.

Zawiślak, A. (2003a). *Sytuacja materialna i mieszkaniowa absolwentów zasadniczych szkół zawodowych specjalnych
    (dla młodzieży z niepełnosprawnością intelektualną w stopniu lekkim).* In: E. M. Minczakiewicz (Ed.), *Dziecko niepełnosprawne.
    Rozwój i wychowanie.* Oficyna Wydawnicza Impuls.

Zawiślak, A. (2003b). *Zawieranie związków małżeńskich przez osoby z lekkim upośledzeniem umysłowym na przykładzie absolwentów szkół
    zawodowych specjalnych.* In: Z. Janiszewska-Nieścioruk (Ed.), *Człowiek z niepełnosprawnością intelektualną*, t. I. *Wybrane problemy
    osobowości rodzin i edukacji osób z niepełnosprawnością intelektualną.* Oficyna Wydawnicza Impuls.

# Expressive Suppression in Parents of Children with Disabilities

Karolina Juszko[1] and Joanna Szczepańska-Gieracha[1]

[1]Department of Physiotherapy, University School of Physical Education, Wroclaw, Poland

**ABSTRACT**

Raising and caring for children with disabilities involves a number of challenges that most parents/caregivers are unprepared for. Dealing with negative emotions such as guilt, lack of fulfillment, disappointed hopes, fear, shame and even despair can adversely affect the life of the entire family. Expressive suppression protects the ward and other family members from an outward expression of the caregiver's emotions and prevents conflicts, but it does nothing to alleviate the caregiver's internal emotional state. This study diagnoses the problem of expressive suppression in parents/caregivers of children with disabilities and assesses the connection between suppressed emotions and anxiety/depressive symptoms based on the Courtauld Emotional Control Scale (CECS) and the shortened Hamilton Depression Rating Scale (HAMD-7). The study involved 60 parents of children with disabilities living in metropolitan, urban, and rural areas. An elevated level of expressive suppression and the occurrence of anxiety-depressive disorders occurred in over half of the parents. Using non-parametric methods, a significant weak positive correlation ($p = 0.398$) is observed between the sum of the points obtained on the CECS scale and the sum of the points on the HAMD-7 scale. In the group with the elevated levels of expressive suppression, a significant strong positive correlation ($p = 0.612$) is observed between the sum of the points obtained on the CECS scale and the place of residence (with a higher degree of expressive suppression in parents from rural areas). There is also a significant correlation between the sum of points scored on the HAMD-7 scale and the financial standing of the families ($p = 0.667$), which reflects the impact of low social status on the occurrence of anxiety and depressive disorders.

*Keywords:* emotion regulation; expressive suppression; disability; parenting

## INTRODUCTION

Disability in a child can force the whole family to change their daily routine and lifestyle. It may affect marital relationships, alter distribution of household chores as well as free-time and social activities of each member of the family (Yilmaz, 2019). Good organization of all aspects of family life is certainly easier if there is acceptance of the child's disability. This is an extremely difficult process and may take several years, but its course is always similar. Acceptance of a child's disability develops in stages, starting from a period of shock through emotional crisis and then apparent adaptation, to constructive adaptation which indicates reconciliation with the loss of a healthy child (Marmola, 2017; Doroszuk, 2017). The birth of a child with disability awakens the parents'/caregivers' consciousness to the reality of nursing a child who is not fully fit but fully fledged.

Regardless of the current stage in the acceptance process, all families with seriously and chronically ill children are faced daily with a number of problems and challenges. These may be divided into several groups, which usually include psychological, economic and social problems and physical strains. Psychological problems include the need to deal with negative emotions such as guilt, lack of fulfillment, disappointed hopes, but also fear, shame and even despair, as well as any other adverse changes which result in deterioration of family life (Alon, 2019). Social problems involve social isolation of the family, stemming from limited participation in social and cultural activities to the need to resign from work (this mainly concerns mothers, although some fathers also sacrifice their careers to raise and care for their children) (Derguy et al., 2016; Hutchision et al., 2016). Economic and living problems stem from deterioration of the family's financial standing due to the high costs of medicine and treatment for the child (Bujak, 2013; Żyta, 2018). Physical strains are related to the constant need to perform caretaking activities for the child (Rosińczuk et al., 2013).

There are various ways to deal with these problems, including the problems of parenthood. Raising and caring for a child with disabilities is often accompanied by negative emotions or lack of positive emotions, which has a detrimental effect on the health of the caregivers. Expressive suppression is an emotion regulation strategy that involves silencing the external expression of unpleasant experiences and intentionally keeping them out of consciousness (Măirean, 2016). It has an adaptative function, as it allows an individual to quickly adapt to the surrounding conditions (Cichoń, Szczepanowski, 2015). However, regular and repeated suppression requires mental effort and, therefore, it can progressively become automatic and take the form of repression, thus reducing the consumption of mental resources. This strategy enables the avoidance or reduced expression of unpleasant emotions, thoughts and memories (Szentagotai, Onea, 2007). However, suppression does nothing to alleviate the internal experience of negative emotions and, in addition, it has a negative impact on relationships between people, e.g. by shutting them off from social support and impairing closeness. Suppression, if used for a long period of time without becoming automatic, may lead to anxiety and depressive symptoms (Langer et al., 2012).

This study analyzes the level of expressive suppression in parents/caregivers of children with disabilities and assesses the link between expressive suppression and the occurrence of anxiety and depressive symptoms. Also, the study attempts to find whether expressive suppression is related to child or caregiver age, caregiver gender, place of residence, child disability type, number of children in the family, family financial status and the level of social support.

## METHODS

### Participants and Procedure

The study involved 60 parents of children with disabilities; 85% of them were mothers. It was carried out at three educational and pedagogical facilities for children with disabilities: Zmigrod Special Needs School Complex (n = 20), occupational therapy workshops at a Children's Association in Trzebnica (n = 20), and Integrated Kindergarten at a Children's Foundation in Wroclaw (n = 20). Mean age of the caregivers was 38 years (± 11.4 years) and mean age of the children was 13 years (± 9.1 years). Cerebral palsy (CP) was the highest occurring disability among the children. The prevailing model was a family with two children. Over half of the caregivers defined their financial situation as satisfactory (Table 1).

As the authors of the scale do not provide norms, the parents participating in the study (n=60) were divided on the basis of the mean (57.72 points ± 11.548). Group 1 consisted of parents who obtained a result above the mean value (minimum 58 points), and it was called the high expressive suppression level. Group 2 included participants whose CECS score was 57 points or lower, and it was called the low expressive suppression level.

The results were processed using descriptive statistics and the Spearman's rank correlation coefficient, where the probability value was set at $p < 0.05$.

Table 1.                    **Description of the study group**

| | | n | % |
|---|---|---|---|
| CAREGIVER GENDER | Female | 51 | 85 |
| | Male | 9 | 15 |
| PLACE OF RESIDENCE | City | 20 | 33 |
| | Town | 20 | 33 |
| | rural area | 20 | 33 |
| CHILD DISABILITY TYPE | intellectual disability | 12 | 20 |
| | combined intellectual and motor disability | 13 | 22 |
| | cerebral palsy (CP) | 19 | 32 |
| | Down syndrome (DS) | 12 | 20 |
| | autism spectrum disorders | 1 | 2 |
| | Other | 3 | 5 |
| CHILDREN IN FAMILY | One | 9 | 15 |
| | Two | 33 | 55 |
| | Three | 13 | 22 |
| | More | 5 | 8 |
| FAMILY FINANCIAL GENDER | very good | 3 | 5 |
| | satisfactory | 39 | 65 |
| | Bad | 15 | 25 |
| | very bad | 3 | 5 |

**Materials**

This study is based on the Polish adaptation (Z. Juczyński) of the Courtauld Emotional Control Scale (CECS) (M. Watson, S. Greer). The CECS scale consists of three sub-scales, each with seven statements regarding the manner of expressing anger, depression and anxiety. Most phrases reflect certain forms of expressive suppression. The scale is used to assess the subjective control of anger, anxiety and depression in difficult situations and is intended to examine adult subjects, both healthy and ill. The respondent determines the frequency of occurrence of a given way of expressing his or her emotions on a four-point scale, ranging from "almost never" (1 point) to "almost always" (4 points). The score is calculated separately for each sub-scale. After summing up the scores obtained on the subscales, the final score indicates the overall level of emotion control, reflecting the subjective perception of the individual regarding the ability to control his or her reactions when experiencing given negative emotions.

Additionally, the shortened version of the Hamilton Depression Rating Scale (HAMD), the HAMD-7, was used. The scale examines seven areas: depressed mood (sadness), feelings of guilt and self-criticism, level of social activities (ability to experience pleasure), mental symptoms of anxiety, physical symptoms of anxiety, energy levels and satisfaction with life so far. In each of the above areas points were awarded from 0 to 1 ("yes" = 1 point, "no" = 0 points). After summing up the scores for individual questions, according to the authors of the scale, a final result of 4 or more points indicates the presence of anxiety-depressive disorders, while a result below 4 means lack of anxiety and depression symptoms. Survey questionnaires were used to obtain general information regarding the participants, such as: the child's age, the caregiver's age, place of residence, child's disability type, number of children in the family, health history of the family (other chronic conditions), financial situation, affiliation with associations for children with disabilities etc.

Table 2                    **Collation of results obtained using the Courtauld Emotional Control Scale (CECS) and the Hamilton Depression Rating Scale (HAMD-7) in relation to gender.**

| | | TOTAL | | MALE | | FEMALE | |
|---|---|---|---|---|---|---|---|
| | | n | % | n | % | n | % |
| CECS | High expressive suppression level | 35 | 58 | 5 1 | 4 | 30 | 86 |
| | Low expressive suppression level | 25 | 42 | 4 | 16 | 21 | 84 |
| HAMD-7 | Anxiety-depressive disorders | 38 | 63 | 6 | 16 | 32 | 84 |
| | Lack of anxiety and depression symptoms | 22 | 37 | 3 | 14 | 19 | 86 |

## RESULTS

Over half of the parents in the study group exhibited an elevated level of expressive suppression as well as anxiety-depressive disorders (Table 2). Using non-parametric methods, a significant weak positive correlation (p = 0.398) was observed between the CECS scale score and the HAMD-7 scale score. This correlation cannot be considered in relation to the gender of the parents, as there were far more mothers than fathers.

In the group of participants with an elevated level of expressive suppression (n = 35), 40% were families living in a big city (Wroclaw). An equally large group were caregivers of children with CP. Families with two children constituted almost a half of this group. More than half of the participants described the family's financial situation as satisfactory, and a total of 40% described it as bad or very bad. A vast majority of the caregivers gave a negative answer to questions related to the presence of chronic illnesses in other family members, their second child, or themselves. Of the participants exhibiting an elevated expressive suppression level, more than 70% benefited from additional financial support on account of caring for a children with disabilities. A clear majority of parents reported that they received help from other family members and could discuss their problems with a loved one. About 70% of this group were also two-parent families. Noteworthy is the fact that more than 60% of parents did not take up paid employment and the same percentage benefited from support provided by various associations. In contrast to parents in group 1 (n = 35), nearly half of the parents exhibiting a low level of expressive suppression according to the CECS scale (group 2: n = 25) were people living in a small town (Trzebnica), raising children with intellectual disability (approx. 30%) or combined intellectual and motor disability (approx. 30%). In addition, this group comprised over 60% of parents caring for two children and nearly

**Table 3.** Comparison of groups of parents with high and low CECS scores

| | | ↑ LEVEL of expressive suppression | | ↓ LEVEL of expressive suppression | |
|---|---|---|---|---|---|
| | | n | % | n | % |
| PLACE OF RESIDENCE | city | 14 | 40 | 6 | 24 |
| | town | 9 | 26 | 11 | 44 |
| | rural area | 12 | 34 | 8 | 32 |
| CHILD'S DISABILITY TYPE | intellectual disability | 4 | 11 | 7 | 28 |
| | combined intellectual and motor disability | 6 | 17 | 7 | 28 |
| | CP | 14 | 40 | 5 | 20 |
| | DS | 8 | 23 | 5 | 20 |
| | autism spectrum disorders | 1 | 3 | 0 | 0 |
| | other | 2 | 6 | 1 | 4 |
| NUMBER OF CHILDREN IN THE FAMILY | 1 | 7 | 20 | 2 | 8 |
| | 2 | 17 | 49 | 16 | 64 |
| | 3 | 8 | 23 | 5 | 20 |
| | >3 | 3 | 9 | 2 | 8 |
| CHRONIC CONDITIONS in other children | yes | 2 | 6 | 2 | 8 |
| | no | 33 | 94 | 23 | 92 |
| CHRONIC CONDITIONS in other family members | yes | 8 | 23 | 4 | 16 |
| | no | 27 | 77 | 21 | 84 |
| CHRONIC CONDITIONS in the caregiver | yes | 4 | 11 | 2 | 8 |
| | no | 31 | 89 | 23 | 92 |
| FINANCIAL SITUATION OF THE FAMILY | very good | 1 | 3 | 2 | 8 |
| | satisfactory | 20 | 57 | 19 | 76 |
| | bad | 11 | 31 | 4 | 16 |
| | very bad | 3 | 9 | 0 | 0 |
| ADDITIONAL FINANCIAL SUPPORT | yes | 26 | 74 | 14 | 56 |
| | no | 9 | 26 | 11 | 44 |
| CAREGIVER MARRIED OR PARTNERED | yes | 25 | 71 | 23 | 92 |
| | no | 10 | 29 | 2 | 8 |
| SUPPORT FROM OTHER FAMILY MEMBERS | yes | 25 | 71 | 21 | 84 |
| | no | 10 | 29 | 4 | 16 |
| MENTAL SUPPORT FROM OTHER FAMILY MEMBERS | yes | 30 | 86 | 20 | 80 |
| | no | 5 | 14 | 5 | 20 |
| AFFILIATION WITH ASSOCIATIONS | yes | 22 | 63 | 18 | 72 |
| | no | 13 | 37 | 7 | 28 |
| PAID EMPLOYMENT | yes | 13 | 37 | 9 | 36 |
| | no | 22 | 63 | 16 | 64 |
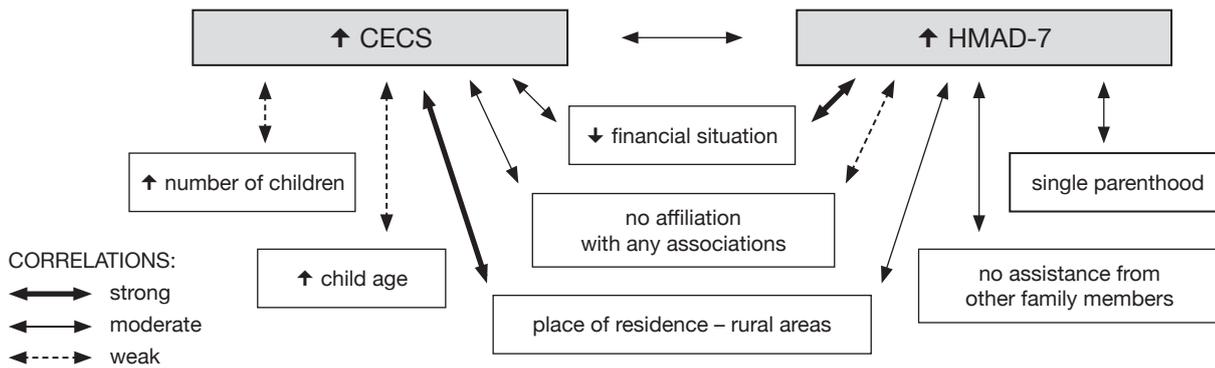
Fig. 1. **Statistically significant correlations between the studied variables**

80% of parents reporting a satisfactory financial situation. Almost all the parents were married or lived with a partner. The groups differed by approximately 10 percentage points in terms of affiliation with associations for families of children with disabilities, in favour of the group with a low level of expressive suppression. The rest of the responses were similar for both groups (Table 3).

Using non-parametric methods, a significant weak positive correlation (p = 0.394) was noted between the financial situation of the family and the CECS score. The lower the financial status, the higher the level of expressive suppression. In addition, a significant strong positive correlation (p = 0.605) was observed in relation to the sum of points obtained on the HAMD-7 scale. A bad financial situation is related to the occurrence of anxiety-depressive disorders. In the group with an elevated level of expressive suppression (n = 35), a significant strong positive correlation (p= 0.613) was observed between the CECS scores and the place of residence (with a higher level of expressive suppression in families living in rural areas). There was also a significant weak positive correlation between the CECS scores and: child age (p = 0.339, higher level in parents of older children) and number of children in the family (p = 0.357, higher level in families with two or more children). A significant moderate correlation was observed between the CECS score and financial situation (p = 0.447), as well as affiliation with associations (p = - 0.496), which means that a higher level of suppression occurred in families with lower social status and those unaffiliated with any associations. In group 1 (n = 35), a significant correlation was also observed between the HAMD-7 score and: the CECS score (p = 0.468, moderate positive – the higher the degree of expressive suppression, the more severe the anxiety-depressive disorders); place of residence (p = 0.415, moderate), being married (p = -0.403, moderate), receiving help from other family members (p = -0.431, moderate) and affiliation with associations (p = -0.387, weak). This means that anxiety-depressive disorders are more frequent in single parents living in rural areas without access to social support. There is also a significant correlation between the sum of the points obtained on the HAMD-7 scale and the financial standing of the families (p = 0.667), which reflects the impact of low social status on the occurrence of anxiety and depressive disorders (Fig. 1).

Table 4.    **Comparison of parents with a high CECS score depending on the place of residence**

|  | MEL | MChA | MCA | ChDT | NCh | FS | AS | MB | H | MS | A | PE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total n = 35 | 65 ±6.0 | 12 ±10.0 | 37 ±11.9 | CP 40% | two 49% | satisfactory 57% | 74% | 29% | 71% | 86% | 63% | 37% |
| City n = 14 | 62 ±4.4 | 3 ±1.9 | 28 ±1.9 | CP 64% | two 64% | satisfactory 86% | 93% | 36% | 100% | 100% | 100% | 43% |
| Town n = 9 | 65 ±6.7 | 25 ±8.7 | 54 ±8.5 | DS 44% | two 44% | satisfactory 67% | 44% | 22% | 67% | 78% | 89% | 44% |
| Village n = 12 | 70 ±4.8 | 11 ±3.1 | 34 ±5.4 | CD 33% | two 33% | bad 67% | 75% | 33% | 50% | 75% | 0% | 17% |

MEL - mean elevated level of expressive suppression, MChA - mean child age, MCA - mean caregiver age,
ChDT - child's disability type (CP - cerebral palsy, DS - Down Syndrome, CD combined disability),
NCh - number of children in the family, FS - financial situation, AS - additional financial support, MB - marriage breakdown,
H - help available from other family members, MS - mental support of the family, A - affiliation with associations, PE - paid employment.

In addition, in a small town, professionally active parents exhibited a higher degree of expressive suppression, as evidenced by a significant strong correlation between the sum of the points obtained on the CECS scale and paid employment ($p = 0.705$). In rural areas, on the other hand, a significant moderate correlation between the CECS score and received mental support ($p = 0.588$) indicates a higher degree of expressive suppression in parents who could talk about their problems (Table 4).

In the study group ($n = 60$), there was no significant correlation between expressive suppression and depressive-anxiety disorders, the child's disability type or the occurrence of other chronic diseases in the family.

## DISCUSSION

The manner of emotion regulation has serious implications for our well-being and mental health (Gross and John, 2003). The most frequently used strategies for regulating emotions are cognitive reappraisal and expressive suppression (Gross and John, 2003; Gross and Levenson, 1993). Both techniques affect the subjective well-being and social relationships of an individual, with reappraisal having a positive effect, as it involves changing the way one thinks about a negative stimulus by giving it a new meaning (Gross and John, 2003). Expressive suppression has a negative correlation with the sense of social support (Gross and John, 2003; Srivastava et al., 2009; Lopes et al., 2005; Marroquín, 2011; Zaki, Williams, 2013; Marroquín, Nolen-Hoeksema, 2015), the closeness of interpersonal relationships (English et al., 2012) and it contributes to the sense of loneliness (Smith et al. 2019).

The present study shows the occurrence of a higher level of expressive suppression in people who did not benefit from any disability associations (in particular, none of the caregivers among the families living in rural areas declared belonging to such associations). This study also shows that single parenthood and lack of support from other family members are conducive to anxiety-depressive disorders. However, no significant correlation exists between expressive suppression and partner relationships, and it should be stressed that in the group with elevated levels of expressive suppression, marital breakdown occurred in as many as 29% of families, while only 8% of families are affected in the group with low suppression levels.

Cognitive reappraisal is typically accompanied by less severe symptoms of anxiety-depressive disorders, higher self-esteem, better general well-being and better coping skills (Gross and John, 2003; Joormann and Gotlib, 2010;

Cutuli, 2014). Expressive suppression generally leads to intensification of anxiety and depression, lower self-esteem and reduced satisfaction with life (Gross and John, 2003; Joormann and Gotlib, 2010; Berking et al., 2014; Cutuli, 2014; Sloan et al., 2017; d'Arbeloff et al., 2018). This study confirms the link between expressive suppression and the occurrence of anxiety-depressive disorders. It also shows that as many as 74% of parents with an elevated suppression level benefit from additional financial support (compared to 56% in the group of parents with lower suppression levels), which could indicate poorer life-coping skills, as financial support depends on income per family member.

In this context, it is interesting that the results of the study attest to a strong correlation between the level of expressive suppression and paid employment among parents living in a town. Also, the group of parents with elevated expressive suppression levels who live in a town comprised a relatively small proportion of families, benefit from additional financial support (44%). This may be due to several overlapping factors, e.g. worse organization of social assistance than in the city and greater opportunities to take up paid work than in rural areas.

In addition, a sense of poverty is conducive to expressive suppression and the occurrence of depressive symptoms (Keltner et al., 2003; Langer et al., 2012). The subjective perception of one's socio-economic situation as disadvantageous significantly affects mental and physical health (Adler et al., 2000; Adler et al., 2008; Goodman et al., 2001; Leu et al., 2008; Singh-Manoux et al., 2003). The study confirmed the link among expressive suppression, anxiety-depressive symptoms and low financial status, especially in the case of families living in rural areas. Factors determining the socio-economic status, such as education, occupation and income, were not directly studied. Apart from the subjective assessment of financial status, the number of children in the family may constitute a variable which adversely affects the financial situation of households indirectly. This study demonstrates a weak positive correlation between an elevated level of expressive suppression and the number of children in a family.

The mean age of the children varied according to the place of residence because the study was carried out at educational and pedagogical facilities representing different educational stages. The results show a significant weak positive correlation between an elevated level of expressive suppression and the age of the children. No studies by other authors were found that could confirm this dependence. However, a study by Goldsmith and Kelley (2018) demonstrated a lack of correlation between expressive

suppression in parents of children with autism spectrum disorders and the age of the child.

## CONCLUSIONS

Strong dependencies detected between an elevated level of expressive suppression and the place of residence as well as between anxiety-depressive disorders and financial situation suggest that those who have the greatest need for support are the most deprived parents and those who live the furthest from the centres that can provide such support. Perhaps this situation is the result of continued stigmatization and the persistent stereotypes associated with disability. Small, rural communities are characterized by transparency, hence the increased need for parents to hide their emotions, especially the negative ones. In addition, pejorative negative associations evoked by professions such as psychology, psychotherapy or psychiatry prevent people from seeking help and lead to the exacerbation of untreated symptoms of anxiety and depression. While on the one hand, suppression of emotions allows parents of children with disabilities to function in the society, on the other, it has an adverse impact on their interpersonal relationships and is detrimental to their mental health.

Further research is planned to create a comprehensive program to support families with children with disabilities. It is important to see the family as a union and not to care more about the child's physical condition than the parents'/caregivers' mental condition.

## REFERENCES

Adler N., Epel E., Castellazzo G., Ickovics J.R. (2000). Relationship of subjective and objective status with psychological and physiological functioning: Preliminary data in healthy white women. *Health Psychology*, 19(6), 586–592.

Adler N., Singh-Manoux A., Schwartz J., Stewart J., Matthews K., Marmot M.G. (2008). Social status and health: A comparison of British civil servants in Whitehall-II with European- and African-Americans in CARDIA. *Social Science and Medicine*, 66(5), 1034–1045.

Alon R. (2019). Social support and post-crisis growth among mothers of children with autism spectrum disorder and mothers of children with down syndrome. *Research in Developmental Disabilities*, 90, 22–30.

d'Arbeloff T.C., Freedy K.R., Knodt A.R., Radtke S.R., Brigidi B.D., Hariri A.R. (2018). Emotion Regulation and the Experience of Future Negative Mood: The Importance of Assessing Social Support. *Frontiers in Psychology*, 20(9), 2287. https://doi.org/10.3389/fpsyg.2018.02287.

Berking M., Wirtz C. M., Svaldi J., Hofmann S. G. (2014). Emotion regulation predicts symptoms of depression over five years. *Behaviour Research and Therapy*. 57, 13–20. https://doi.org/10.1016/j.brat.2014.03.003.

Bujak E. (2013). Phenomenon of „burning out" in mothers of disabled children. *Social Dissertations*, 2 (7), 112–125.

Cichoń E., Szczepanowski R. (2015). Mechanisms of suppressing undesirable feelings and thoughts in a metacognitive approach. *Yearbook of Cognitive Science*, 8, 79–89.

Cutuli D. (2014). Cognitive reappraisal and expressive suppression strategies role in the emotion regulation: an overview on their modulatory effects and neural correlates. *Frontiers in Systems Neuroscience*, 8, 175. https://doi.org/10.3389/fnsys.2014.00175.

Derguy C., Bailara K. M., Michel G., Roux S., Bouvard M. (2016). The need for an ecological approach to parental stress in autism spectrum disorders: The combined role of individual and environmental factors. *Journal of Autism and Developmental Disorders*, 46, 1895–1905.

Doroszuk J. (2017). The crisis of parents of a child with a disability in the perspective of new standardization tools. *Interdisciplinary Contexts of Special Pedagogy*, 19, 51–67.

English T., John O. P., Srivastava S., Gross J. J. (2012). Emotion regulation and peer related social functioning: A 4-year longitudinal study. *Journal of Research in Personality*, 46, 780–784. https://doi.org/10.1016/j.jrp.2012.09.006.

Goldsmith S.F., Kelley E. (2018). Associations Between Emotion Regulation and Social Impairment in Children and Adolescents with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 48(6), 2164–2173. https://doi.org/10.1007/s10803-018-3483-3.

Goodman E., Adler N.E., Kawachi I., Frazier A.L., Huang B., Colditz G.A. (2001). Adolescents' perceptions of social status: Development and evaluation of a newindicator. *Pediatrics*, 108(2), 1–8.

Gross J. J., John O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. J*ournal of Personality and Social Psychology*, 85, 348–362. https://doi.org/10.1037/0022-3514.85.2.348.

Gross J. J., Levenson R. W. (1993). Emotional suppression: Physiology, self-report, and expressive behavior. *Journal of Personality and Social Psychology*, 64, 970–986.

Hutchison L., Feder M., Abar B., Winsler A. (2016). Relations between parenting stress, parenting style, and child executive functioning for children with ADHD or autism. *Journal of Child and Family Studies*, 25(12), 3644–3656. https://doi.org/10.1007/s10826-016-0518-2.

Joormann J., Gotlib I. H. (2010). Emotion regulation in depression: relation to cognitive inhibition. *Cognition and Emotion*, 24, 281–298. https://doi.org/10.1080/02699930903407948.

Keltner D., Gruenfeld D.H., Anderson C. (2003). Power, approach and inhibition. *Psychological Review*, 110(2), 265–284.

Langner C.A., Epel E.S., Matthews K.A., Judith T. Moskowitz J.T., Adler N.E. (2012). Social Hierarchy and Depression: The Role of Emotion Suppression, *The Journal of Psychology*, 146(4), 417–436, https://doi.org/10.1080/00223980.2011.652234.

Leu J., Yen I.H., Gansky S.A., Walton E., Adler N.E., Takeuchi D.T. (2008). The association between subjective social status and mental health among Asian immigrants: Investigating the influence of age at immigration. *Social Science and Medicine,* 66(5), 1152–1164.

Marmola M. (2017). Styles of coping with stress by mothers of children with disabilities. *Culture - Transformations - Education*, 5, 267–281.

Măirean C. (2016). Emotion Regulation Strategies, Secondary Traumatic Stress, and Compassion Satisfaction in Healthcare Providers. *The Journal of Psychology,* 150(8), 961–975.

Rosińczuk J., Kołtuniuk A., Księżyc M., Wolniak M. (2013). Parents of a child with cerebral palsy in the face of everyday problems. *The Journal of Neurological and Neurosurgical Nursing,* 4 (2), 149-154.

Singh-Manoux A., Adler N.E., Marmot M.G. (2003). Subjective social status: Its determinants and its association with measures of ill-health in the Whitehall II study. *Social Science and Medicine,* 56(6), 1321–1333.

Sloan E., Hall K., Moulding R., Bryce S., Mildred H., Staiger P. K. (2017). Emotion regulation as a transdiagnostic treatment construct across anxiety, depression, substance, eating and borderline personality disorders: a systematic review. *Clinical Psychology Review*. 57, 141–163. https://doi.org/10.1016/j.cpr.2017.09.002.

Smith C.V., Lair E.C., O'Brien S.M. (2019). Purposely stoic, accidentally alone? Self-monitoring moderates the relationship between emotion suppression and loneliness. *Personality and Individual Differences*, 149, 286–290.

Srivastava S., Tamir M., McGonigal K. M., John O. P., Gross J. J. (2009). The social costs of emotional suppression: A prospective study of the transition to college. Journal of Personality and Social Psychology, 90, 883–897. https://doi.org/10.1037/a0014755. Szentagotai A., Onea D. (2007). Is repressive coping associated with suppression? *Journal of Evidence- Based Psychotherapies*, 7(2), 127–138.

Yilmaz G.. (2019). Mothers with disabled children: needs, stress levels and family functionality in rehabilitation. *Scandinavian Journal of Caring Sciences,* 11(20), 1–9. https://doi: 10.1111/scs.12783.

Żyta A. (2018). Family situation of persons with disabilities and the Convention on the Rights of Persons with Disabilities. Disability. *Discourses of Special Education ,* 30, 50–64.

# Parent's Involvement in the Education of their Children with Disabilities in Primary Schools of Bahir Dar City, Ethiopia: Voices of Parents

Mebrat Gedfie[1], Dawit Asrat Getahun[1] and Dawit Negassa[1]

[1]Department of Special Needs and Inclusive Education, Haramaya University, Ethiopia

**ABSTRACT**

The purpose of this study was to examine the extent of parents' involvement in the education of children with disabilities and the role of parent's socio-economic factors in their involvement in primary schools of Bahir Dar city. Qualitative research was carried out in the present study using the descriptive survey design to answer the research question. Data were collected using a questionnaire designed to measure six dimensions of parents' involvement in education (parenting, communicating, learning at home, volunteering, decision making, and collaborating with the community) from 143 parents selected by means of a simple random sampling technique. Five primary schools were sampled for the present study. The data obtained were analyzed using both descriptive and inferential statistics such as one–way MANOVA. The results indicated that involvement in 'parenting' is more prevalent than among dimensions of parental involvement in education. Parents revealed a below-expected level of involvement in communicating, learning at home, volunteering.

*Keywords:* Children with disabilities; Ethiopia; Parent; Parents' Involvement; Socio-Economic factors

## INTRODUCTION

The involvement of parents denotes the multidimensional nature of parents' activities that affects the learning and development of children with diverse abilities (Epstein, 2009). Parents' involvement (PI) as explained by Epstein (2001), Ngwenya (2010), and Hornby (2011) refers to education-related activities that parents perform both at home and school that impact the success of children with diverse needs. Home-based parental involvement activities may consist of helping children with homework, encouragement, discussions with children concerning school activities, reading stories at home, creating a quiet home environment for learning, providing the necessary learning materials and proper care at home. On the other hand, school-based involvement requires parents to physically engage in activities at school, such as volunteering, participating in field trips, participating in conferences, discussions with teachers and school principals, and participating in the decision-making process (Patrikakou, Weissberg, Redding, & Walberg, 2005; Ngwenya, 2010; Ibrahim, 2012).

Research shows that involving parents in education may go a long way towards the early identification of children with disabilities (CWDs) and special educational needs (SENs) that lead to a successful implementation of intervention strategies in assisting children's education (Vanderpuye, 2013; Afolabi, 2014). While parental involvement benefits all students academically, those with disabilities often require a greater degree of parental involvement than their peers without disabilities in order to receive the same level of instruction as the general student population, as they often face multifaceted challenges requiring special attention from their families (Leyser & Kirk, 2004). More specifically, research on special needs and inclusive education revealed that active participation of parents in their children's education improves students' school attendance, social skill, and academic success (Lalvani, 2015). Thus, parents are the most essential educators of their children as they provide a multitude of experiences that encourage learning for all kinds of learners (Fan & Chen, 2001; Washington, 2011).

In order to understand PI in education, several theoretical frameworks have been developed. Amongst them, Epstein's (2001) framework is the most prominent in the field (Tekin, 2011). It is the most commonly used, tested, and accepted framework which suggests six PI obligations, all of equal importance for children with different capabilities. These obligations are: (1) parenting - which includes all of the activities that parents engage in while supporting children's education to meet the basic needs; (2) communicating - which implies a frequent two-way communication between parents and teachers; (3) volunteering - refers to the participation of parents voluntarily in the school so as to help teachers as assistants; (4) learning at home - which refers to parents' participation in children's learning at home such as helping in and supervising homework and other curriculum-related activities; (5) decision-making - refers to parents' involvement in school decisions activities through school committees and participating in parent-student-teacher association; and (6) collaborating with the community - refers to parents networking with each other and community stakeholders to find resources.

Despite the general recognition of the value of PI in the education of children with and without disabilities, there are several factors that contribute to the parents' decision to participate in their children's education. These studies have shown that lack of parental involvement in the education of their children at home and school mostly stems from the socio-economic status of the family including income, education level, and occupational status (Fan and Chen, 2001; Georgiou, 2007; Sanders, 2008). These family characteristics could affect the psycho-educational development of children with and without disabilities, and they influence a parent's decision to become involved in their children's learning (Heymann & Earle, 2000). For example, parents with a higher socioeconomic status attend to school children`s activities more actively than those with a low socioeconomic status.

As outlined in the School Improvement Program (SIP), the government of Ethiopia recognizes that learners with disabilities require extra support from their parents who can be potential partners in designing and implementing educational programs for their children's success in education (Ministry of Education, 2012). In the author's first experience as an Itinerant Teacher at primary schools for more than five years, he observed that collaboration between the schools and parents in the education of children with disabilities appears to be unsatisfactory. It was not unusual to hear parents blaming the school for not involving them and the schools blaming parents for not getting involved with the school, and for not attending meetings to which they are invited. Hence, exploring the existing parental involvement in the education of children with disabilities was deemed worthwhile.

As far as parents' involvement research is concerned, there is a surplus of literature documenting parental involvement and academic achievement of the general student population using correlational design. The studies

have examined the association between parental involvement practices and children's academic achievements. These correlational studies found that parental involvement practice positively correlated with academic achievement of the general student population. That is, children whose parents were involved in their learning on a regular basis tended to demonstrate higher learning achievements and better attendance at school (Hill & Taylor, 2004; Epstein, 2001; Washington, 2011; Ibrahim, 2012; Mauka, 2015; 2016).

Moreover, studies have been also conducted on the extent of parents' involvement in children's education across the globe since the involvement of parents in education is believed to be one of the most important factors of academic success. Findings in USA elementary schools reported that the majority of parents were participating in their children's education regularly in specific activities that directly impact students' achievements (Che, 2010; Flemmings, 2013; Peiffer, 2015; Thornton, 2015). Consistently, a study conducted in the United Kingdom by Desforges and Abouchaar (2003) reported that the majority of parents of the general student population work with teachers to resolve any issues or differences that come with learning. Research on the parental involvement practices in education has produced mixed results, with some results indicating that the majority of parents were not involved in their children's learning (Williams, Williams & Ullman, 2002; Monadjem, 2003). These studies focused mainly on parents of children without disabilities, excluding parents of children with disabilities.

Although many factors affecting the involvement of parents in their children's education exist, the role played by parent's socio-economic factors had a relatively stronger impact on their involvement than other factors (Maalouf & Moushaghayan, 2013). International studies carried out on roles of socio-economic factors on PI and results produced mixed findings (Toldson & Lemmons, 2013). For instance, Toldson and Lemmons (2013) found that income and educational level were positively associated with PI. However, in other studies, while a negative correlation was observed between education and PI (e.g., Abel, 2012), no correlation between income and PI has been found, (e.g., Awino, 2014) in regards to the general student population. Also, while some studies have found parents' occupation status to be insignificant, others have found it to play a significant role (Afolabi, 2015). Although parents' socio-economic factors play a role in determining the level of PI in the education of the general student population, what has been neglected is how these factors determine the level

of parents' involvement in the education of children with disabilities in particular.

Research on the involvement of parents in the education of children with disabilities is surprisingly very scant, given the fact that children with disabilities need more parental involvement in their education, which is mandated by the Individuals with Disabilities Education Act of 2004. Much of the research that has been conducted in this area focused on the benefits of parental involvement in the education of children with disabilities (Afolabi, 2014); and the correlation between parental involvement practices and psycho-educational development of children with disabilities. Mostly the studies focused on examining the relation between PI and achievement of children with disabilities. For example; Balli (2016) and Monika (2017) in regular schools of Albania, El Shourbagi (2017) in Omani regular schools of Botswana studied the involvement of parents in inclusive schools. The results indicated that the involvement of parents plays a pivotal role in the psycho-educational development of children with disabilities. Similarly, the relationship between parental involvement and mathematics achievements for students with visual impairments was studied and results showed that PI and mathematical achievement was positively related (McDonnall, Cavenaugh &Giesen, 2012). The studies reviewed did not focus on how and to what extent parents were involved in the education of children with disabilities. There is therefore a call to study the role played by parents of children with disabilities.

Locally, Girma (2017) conducted his PhD dissertation on experiences of parental involvement in the management of primary schools in the Oromiya Region, Ethiopia. The focus was on parents' participation in school management and suggested that a low level of parental involvement in the management of schools was present. In conclusion, a major gap in PI literature has been the lack of research conducted on the education of children with disabilities despite the fact that children with disabilities require more parental involvement in their education. Besides, in the author's opinion, it also appears that none of the above studies conducted in Ethiopia were focusing on the extent of parents' involvement practice and socio-economic variations on their involvement. Thus, the present research aims to address the gap stated above in the literature. As a guide to the study, the researcher formulated the following research questions: to what extent do parents of children with disabilities are involved in their children's education? Does parental involvement in the education of children with disabilities vary by socio-economic factors (education, income, and occupational status)?

## RESEARCH METHODOLOGY

### Research Design
To answer the research questions, a quantitative research approach with a descriptive survey design was employed. This is because descriptive survey design is very important and most commonly used type of quantitative research design to obtain information concerning the current status of the phenomena and to describe „what exists" with respect to variables or conditions in a situation such as the extent of parents' involvement in the education of children with disabilities (Burns & Grove, 2001).

### Sampling Techniques and Sample Size
The participants of the study were selected from five government primary schools located in Bahir Dar city administration which had considerable experience in practicing inclusive education for children with different disabilities. In the five primary schools, there were 236 students with disabilities with three categories (deaf, blind, and intellectually disabled) in which the researcher assumed to have a minimum of 236 parents based on the number of students enrolled. Cohen, Manion, and Morrison (2004) suggest that with a population of approximately 250, the ideal sample size is 151 which can be considered as representative of the population at the confidence level of 95%. Parents with more than one child with disabilities in the school were substituted after having been selected once. Therefore, the study used a proportionate stratified sampling technique to categorize parent participants into three strata. Then, using a simple random sampling technique 151 parents were selected and 143 of them were properly returned.

### Methods of Data Collection
To answer the research questions of the study, a family involvement questionnaire was used to gather data from parents of children with disabilities. The family involvement questionnaire is a multidimensional measure of involvement that identifies six family involvement dimensions. The instrument was adapted from an existing parental involvement survey questionnaire designed by Grover (2015) with the permission to use it. The questionnaire consists of 40 items (parenting with 8 items, communicating with 10 items, volunteering with 6 items, learning at home with 6 items, decision making with 5 items, and collaborating with 5 items), where parents were asked to indicate the frequency with which they participated in various activities with a four-point Likert scale format of 4 = always, 3 = usually, 2 = sometimes and 1= rarely. In addition, the survey includes: socio-economic information (e.g., parents' education level, monthly income, and occupation).

### Method of Data Analysis
As the main objective of this study was to assess the extent of parents' involvement in the education of their children with disabilities and the role of socio-economic factors on parents' involvement, descriptive statistics ( mean and SD) and inferential statistics such as a one-sample t-test, one-way MANOVA, and Pearson product movement correlation were used. One-way MANOVA was used to identify differences in parents' involvement based on their occupational type and educational level. Pearson product movement was used to measure the relationship between parents' involvement and their income. A single sample t-test was also used to compare the population mean and sample mean scores of each dimension of parental involvement in the education of their children with disabilities.

## RESULTS

### The Extent of Parents' Involvement in the Education of their Children
The frequency of parent's participation in a number of involvement activities in their children's education was assessed. The main focus was the six dimensions of parental involvement in education (parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community).

### The Involvement of Parents in Parenting Activities
Parents were asked to respond to statements concerning their involvement in parenting. The mean and SD of their responses have been presented in descending order and a one-sample t-test was computed (see Table1)

From the analysis, the total item mean score ranges from between the highest mean score of (M=2.79) to the lowest mean score (M= 2.22). The results reported parents of children with disabilities were engaged in a number of activities as far as their involvement in their children's education was concerned. The majority of the parents report that they took part in monitoring where their children spent time outside school; this had a high mean score of (M=2.79, SD=1.02) and they provide their children learning resource materials (M=2.71, SD=0.98) respectively. Table 1 further showed that a number of the activities recorded lower parental involvement. For instance, parents were not frequently involved in monitoring their children's TV watching at home (M=2.21, SD=0.96) and they did

Table 1                              **Items and Mean Scores of Parents' involvement in parenting activities**

| ITEMS | N | Mean | SD |
|---|---|---|---|
| I monitor the way my child/ children spends his/her time outside of school. | 143 | 2.79 | .98 |
| As a parent, I make available/provide learning resource materials such as pens, pencils, Braille and sign language books, calculators, and others. | 143 | 2.71 | .97 |
| I strictly monitor my child's/ children's relationship with his/her peer groups reasonably. | 143 | 2.59 | 1.09 |
| I send my child/children to school clean and well-fed. | 143 | 2.57 | .97 |
| I keep a regular morning and bedtime schedule for my child | 143 | 2.54 | 1.08 |
| I maintain clear rules at home that my child should obey. | 143 | 2.51 | 1.02 |
| As a parent, I establish age and grade-appropriate home conditions that support my child's learning | 143 | 2.34 | .91 |
| I limit my child's/ children's TV watching at home. | 143 | 2.22 | .96 |

Average rating of all items= 2.29

not establish age and grade-appropriate home conditions (M=2.34, SD=0.91).

Further examination was computed using a one-sample t-test to determine if a significant difference evident between parenting scores from a sample and the general population. The test revealed that the observed mean of parenting score of the sample (M= 20.28, SD= 5.89) was significantly greater than the test value or population mean of the score (M=16), t (142) = 8.70, p<.05) at alpha .05. Parents were more involved in parenting because in six out of eight activities, the parents mean shows that the majority of the parents followed the theme frequently.

**The Involvement of Parents in Communicating Activities**

The parents were also asked to respond to a set of items concerning parents' involvement in communicating (see Table 2)

It is revealed in Table 2 that an overall mean rating of 2.29 was achieved which is described as "sometimes". The total item mean score ranges from between the highest mean score (M=2.58) to the lowest mean score (M= 2.09). Most parents participated in monitoring messages which the teachers sent them, (M=2.58, SD=1.02) which was greater than the total mean of communicating items. Indeed, among the 10 items of communicating sub-scale, only follow up on messages which the teachers send to parents was observed above the expected mean value. The aggregate mean showed a low level of parents' involvement in the communicating dimension.

In addition, a one-sample t-test was performed to see if the mean score of the sample result (M= 22.89, SD= 7.48) is significantly different from a test value of 25, which yielded a significant difference between the scores. That is, the mean communicating score of parents was significantly

Table 2                              **Items and Mean Scores of Parents' involvement in communicating activities**

| ITEMS | N | MEAN | SD |
|---|---|---|---|
| I follow up on messages which the teacher sends me about my children or the school. | 143 | 2.58 | 1.02 |
| I talk to my child's teacher about the classroom rules and regulations. | 143 | 2.34 | .93 |
| I talk with my child's teachers or principals about disciplinary problems at school. | 143 | 2.34 | .93 |
| I attend conferences with the teachers to talk about my child's learning. | 143 | 2.31 | .98 |
| I have a regular schedule of useful notices, memos, phone calls, and other communications. | 143 | 2.28 | .97 |
| I talk to my child's/children's teacher about his/her daily school routine and class schedule. | 143 | 2.26 | .97 |
| I attend sign language, Braille, life skill, and other related training sessions organized by the school. | 143 | 2.24 | 1.03 |
| I involve myself in an organized, ongoing, and timely way in the planning, review, and improvement of programs for my child's learning. | 143 | 2.24 | 1.01 |
| I ask the teachers about my child's strengths & weaknesses and talents. | 143 | 2.23 | 1.07 |
| I contact the teachers and principals to get information concerning my child's learning at school regularly. | 143 | 2.09 | 0.88 |

Average rating of all items= 2.43

Table 3 **Items and Mean Scores of Parents' involvement in volunteering activities**

| ITEMS | N | MEAN | SD |
|---|---|---|---|
| I participate in fundraising activities voluntarily. | 143 | 2.41 | 0.89 |
| I volunteer for my children's classroom (in a classroom, materials preparation, etc.). | 143 | 2.31 | 0.86 |
| I initiate contact with the teachers concerning my children's learning voluntarily. | 143 | 2.25 | 0.96 |
| I attend extracurricular activities, assemblies, celebrations, and other events voluntarily. | 143 | 2.24 | 1.07 |
| I talk to teachers to create flexible volunteering and school events schedules. | 143 | 2.22 | 1.06 |
| I take my child to the library and to other places which help in educating him/her with my initiation. | 143 | 2.08 | 1.02 |

Average rating of all items= 2.25

less than the population mean of communicating score, t ( 142) = -3.365, p <.05). In sum, the findings revealed that parents did not exhibit an active involvement in communicating sub-scale.

### The Involvement of Parents in Volunteering Activities

To measure the view of parents of children with disabilities on their involvement in volunteering activities to assist their children's education, six items were used. See Table 3

Results in Table 3 showed that the parents report that they were not engaged in all voluntary activities as far as their involvement in their children's education was concerned. Though the table suggested a low level of parental involvement in each item, the mean scores of all items are quite similar to each other (between 2.41 & 2.08) implying that respondents responded to the items in a similar fashion. The mean rating of all items depicted that most parents were not involved frequently in the education of their children with disabilities.

Besides, a one-sample t-test indicated that the calculated mean (M=13.40, SD= 4.66) of the score is significantly less than the expected mean score (M= 15), t (142) = -4.091, p<.05) at alpha .05. That means the obtained mean score pertaining to parental involvement in volunteering was significantly less than the expected mean score.

Therefore, it could be concluded that the involvement of parents in the education of their children with disabilities in volunteering activities was low.

### The involvement of Parents in learning at Home Activities

Six items were used to measure parents' views on their involvement in learning at-home activities to support their children's education. See Table 4

As depicted in Table 4, the total item mean score ranges from a maximum of (M= 2.62) to a minimum of (M=2.08). Two items that generated highly positive responses among the parents perform the activities to assist their children's learning at home respectively were 'I look over and express concern for my children's work which they bring home' (M=2.62, SD=1.37) and 'I try to help and monitor my children in a positive way with homework and other activities' (M=2.60, SD= 0.84) that implied that parents participated in these learning at home activities than other activities of learning at home. In contrast, the lowest mean score was observed for the item 'I read with my children on a daily basis' (M=2.08, SD=1.04), a reply suggesting that majority of parents were not involved in reading with their children regularly. Furthermore, a one-sample t-test indicated that the cal-

Table 4 **Items and Mean Scores of Parents' involvement in learning at-home activities**

| ITEMS | N | MEAN | SD |
|---|---|---|---|
| I look over and express concern for my children's school work which they bring home. | 143 | 2.97 | 0.97 |
| I try to help and monitor my children in a positive way with homework and other activities at home | 143 | 2.60 | 1.34 |
| I talk to my child about his/her learning at home. | 143 | 2.39 | 1.01 |
| I support my child in curriculum-related activities and in setting goals at home. | 143 | 2.28 | 1.08 |
| I bring home learning materials for my child (tapes, videos, books). | 143 | 2.27 | 1.05 |
| I read with my children on a daily basis at home. | 143 | 2.08 | 1.04 |

Average rating of all items= 2.29

Table 5                                                    **Items and Mean Scores of Parents' involvement in decision making**

| ITEMS | N | MEAN | SD |
|---|---|---|---|
| I engaged in deciding matters relating to the discipline of my children. | 143 | 2.31 | .97 |
| I participate in revising the school curricula, individual education plan (IEP), and other activities to support my child's learning. | 143 | 2.23 | 84 |
| I attend and decide on organized family-school associations at my children's school (e.g., PTA and IEP meetings). | 143 | 2.17 | .96 |
| I Involved in decision making in school regarding development projects, fees, and teacher employment/firing. | 143 | 1.90 | .99 |
| I have clear information on all school policies, programs, reforms, and transitions for the decision making process. | 143 | 1.85 | .83 |

Average rating of all items= 2.09

culated mean (M=14.04, SD= 3.94) of the score was significantly lower than the expected mean score (M=15), t (142) =-2.91, p<.05) at alpha .05. Therefore, a low level of involvement was scored in learning at home activities.

## The Involvement of Parents in the Decision Making Process

Parents' involvement in decision making is one of the main categories included in Epstein's typology of PI. See Table 5

As indicated in Table 5 above, the sample mean of scores of each item was below the expected mean of each item scores with an overall mean of (M= 2.05). This told us the extent of parent's involvement in the education of children with disabilities was low. Furthermore, to determine the level of parental involvement in the decision making dimension, a one-sample t-test was performed to see if there is a statistically significant difference between the mean score of a population mean (M=12.5) and the calculated mean score (M=10.5), t (142) = -6.707, p<.05) at alpha .05. Thus, the obtained mean score pertaining to PI in learning at home was significantly lower than the test value. This suggested that the level of parents' involvement in decision making was below the average score of the population.

## The Involvement of Parents in Collaborating with Communities

Six items with four response scales were used to measure parents' views on their involvement in collaborating with community activities to support their children's education. See Table 6

As depicted in Table 6, the mean scores of all items are closely similar to each other (between 2.36 & 2.16) implying that parent participants responded to the items in a similar manner in which parents' view on their involvement in collaboration in the community activities is not that much varied. In addition, the scores of each item are below the expected mean of each of the items that indicated parents of children with disabilities were not in a position to become involved in collaborating with the community.

Furthermore, to determine the level of parents' involvement in the area of collaborating with the community, the computed one-sample t-test yielded a significant difference which was observed between the mean score of the sample (M= 11.44, SD= 4.1) and the mean score of the population (12.5), t (142) = -2.56, p<.05). This showed that the involvement of parents in the education of children with disabilities in collaborating with the community was below the average score.

Table 6                                                    **Items and Mean Scores of Parents' involvement in collaborating with community**

| ITEMS | N | MEAN | SD |
|---|---|---|---|
| I meet with other parents at school and discuss issues or concerns about the school and children's learning. | 143 | 2.36 | .98 |
| I speak up for the school in my community. | 143 | 2.34 | .97 |
| I serve in identifying and integrating community resources to improve schools, strengthen families, and assist students to succeed. | 143 | 2.30 | .96 |
| I Participate in income-generating activities in collaboration with other stakeholders. | 143 | 2.28 | 1.03 |
| I participate in community and family social activities at my child's school (e.g., sports games, plays, festivals). | 143 | 2.16 | 1.01 |

Average rating of all items= 2.28

In summary, one-sample t-test results showed that one of the six dimensions of parental involvement in education was perceived as practiced more prevalently to assist children's education. Parents' involvement in the other five dimensions was below the average expected level. In addition to the one-sample t-test results, the mean ratings of all items of six dimensions were rank-ordered and parenting was more practiced than the other dimensions.

## Socio-Economic Variations in Parents' Involvement

To investigate whether the parents' involvement varied in terms of their educational level, occupation, and monthly income, one-way MANOVA, and Pearson product movement correlation were used. Where statistically significant differences were identified in MANOVA, a post-hoc test was conducted to identify where the differences were coming from.

## Educational level and Parents' Involvement

One-way MANOVA was performed in order to test whether the level of parental involvement in the education of their children with disabilities differed according to the educational level of parents and the results obtained are presented below. See Table 8

Table 8                                                    **MANOVA**
**Results on Parental Involvement**
**Scale for Parents' Educational level**

| EFFECT | Λ | F | df1 | df2 | sig. |
|---|---|---|---|---|---|
| Educational level | .920 | .963 | 12 | 270 | .484 |
| Intercept | 0.68 | 307.15 | 6 | 135 | 0.00 |

df 1 = hypothesis degree of freedom; df 2 = error degree of freedom

Parents' education level was split into three groups based on the highest level of education which they had completed. Group one consisted of parents of children with disabilities who reached up to primary education level. Group two consisted of parents who had completed secondary education (from grade 9-12). Group three consisted of parents who had completed their tertiary level (certificate and above). The one-way MANOVA revealed no statistically significant effect was found for parents' educational level on their involvement scale, F (12, 270) = .963, p > .05. Therefore, the test suggested that parents' educational level did not affect the level of involvement in their children's education.

## Parents' Occupation and Parents' Involvement

Secondly, to examine the difference in parental involvement in the education of their children with disabilities and type of parent's occupation, a one-way MANOVA test was used. The results are presented in Table 9 below.

Table 9                                                    **MANOVA**
**test results of Parental Involvement**
**according to the type of parent's occupation**

| EFFECT | Λ | F | df1 | df2 | sig. |
|---|---|---|---|---|---|
| Educational level | .725 | 3.93 | 12 | 270 | .00 |
| Intercept | 0.08 | 307.18 | 6 | 135 | .00 |

df 1 = hypothesis degree of freedom; df 2 = error degree of freedom

Type of parent's occupation was coded into three categories (government employee, private or business employee, and unemployed). Types of occupation were found to be significant as a factor in the involvement of parents in their children's education, F (12, 270) = 3.93, P< 0.05. Furthermore, a post-hoc analysis was utilized to assess which group means differ from which others. The mean scores for each type of occupation such as government employee (M=106.04, SD=25.68), private or business (M=89.05, SD=27.00), and unemployed (M=77.65, SD=24.06). Therefore, the test indicated that parents who were government employees display a higher level of involvement in their children's education than those who were unemployed or private/business workers.

## Income and Parents' Involvement

Pearson product movement correlation was employed to examine the correlation between income and level of involvement in the education of children with disabilities. See Table 10

Pearson product-moment correlation indicated a positive relationship between the monthly average income of parents and parental involvement scores of parents in their children's education, (r = 0.439, p < 0.05). This suggests that when the monthly income of parents increases, the level of parents' involvement increases as well and vice versa.

Table 10          **Correlation test result on parents' income**
**and their level of involvement**

| No. | Variable | PI (correlation coefficient ) | Sig. |
|---|---|---|---|
| 1 | Monthly income | .439 | 0.00 |

## DISCUSSION AND IMPLICATION

This study investigated the range of parents' involvement in the education of their children with disabilities. In addition, it examined differences in parental involvement as related to parents' socio-economic background that participants were asked about. The study was guided by two research questions.

### Research Question 1:
**To what extent are parents of children with disabilities involved in their children's education?**

This section examines the extent of parents' involvement in the education of their children with disabilities. The involvement of parents in all dimensions of parental involvement in children's education is vital for student's academic achievement although parents were less likely to be involved in all dimensions regularly. Based on this finding, the level of parental involvement was below the expected level in all dimensions of parental involvement in education except the parenting sub-scale. The majority of parents of children with disabilities were involved prevalently in parenting activities rather than in other dimensions of parental involvement. This finding is virtually consistent with previous studies which state that parents were more involved in parenting activities of parental involvement than in other dimensions (Ibrahim, 2012; Mwaikimu, 2012; Compton, 2016; Mason, 2016). These authors explained that parents were involved in basic parenting activities such as providing stationery and books for their children. This implies that parents of children with different types of disabilities are involved in parenting particularly by providing basic stationery and clothes. More specifically, parents participating in this study were not actively monitoring their children when they watched TV nor creating age and grade-appropriate home conditions which is consistent with the findings by Erlendsdóttir (2010) and Kavanagh (2013) who explained parents did not monitor activities such as television watching. Thus, the studies imply that parents exhibit more involved participation in most activities of parenting while they display a low level of participation in monitoring their children when they watch TV and creating age and grade-appropriate home conditions.

Considering the overall mean rating, most parents of children with disabilities were not participating in communicating and learning at home activities. For instance, the researchers learned that the majority of parents of children with disabilities were not involved in learning at home activities that support their children's education regularly. The findings from the present study are complementary to previous findings by Munowenyu, (1997); McDonnall, Cavenaugh, and Giesen, (2009) who stated that most parents are reluctant to become fully involved in the area of learning at home activities to support the education of their children with special needs. Similarly, the research by Mauka (2015) and Girma (2017) revealed that a large number of parents did not check and supervise their children's homework and assignments regularly because most of them did not know the subject matter. Another pattern exhibited in these studies that occurs in the general student population was a higher level of parental involvement when compared with parents of children with disabilities because most parents of the general student population monitored and assisted children with homework at home and checked whether their children have finished their activities at home or not at a regular basis (Erlendsdóttir, 2010; Van Voorhis, 2003; Kavanagh, 2013; Compton, 2016). Therefore, it is essential that primary schools in this context need to educate parents of children with disabilities on how important their participation is in regards to their children's future at home. Besides, It is the author's suggestion that more research is required to determine the practice of parents' involvement from the perspective of parents of children with and without disabilities.

The result also showed that the communication that occurred between parents of children with disabilities and school teachers and principals were below the expected level. That is, a great majority of participants responded to each item of communication by saying "sometimes" which means parents were not communicating with teachers regarding their children's daily progress frequently. This, in turn, might negatively affect the academic and psychosocial development of children with disabilities. A study by Girma (2017) revealed similar results with the current research at primary schools of Oromia regional state. In contrast with the current research, most parents reported that parents of the general student population were involved in communication activities of parental involvement with teachers and school principals on a regular basis (Erlendsdóttir, 2010; Hornby, 2011; Mwaikimu, 2012; Kavanagh, 2013). This result implies that teachers and principals should encourage parents of children with disabilities to be active in the education of their children because the importance of encouraging PI has been recognized by the government of the federal democratic republic of Ethiopia.

Furthermore, below the expected level of parents' involvement was observed in all activities of volunteering, decision-making process, and collaborating with the community because the average mean score on these three dimensions showed that parents were reluctant to participate in their children's education regularly. This finding is analogous with previous findings that reported the involvement of parents in their children's education (Mwaikimu, 2012; Flemmings, 2013; Peiffer, 2015; Dameh, 2015; Cetin and Taskin, 2016; Girma, 2017). In fact, the above findings have implication for indicating how much of the problem is severe and suggest that the intervention strategy should be designed in the future to address the problem. This implies that parents were not in a position to become regularly involved. This means due attention has to be in place to increase their involvement because this surely has adverse effects on the achievements of children with disabilities.

**Research question 2:**

**Is there a significant difference in parental involvement as a function of parent's socio-economic factors?**

In this section of the research, socio-economic factors such as parent's education, occupation, and monthly income were presented. The current research revealed that no significant differences were observed with regard to parental involvement as based on parent's varying educational levels. The results imply that parents' level of involvement may not be significantly associated with parents' level of education. The results of the study indicate that parents from different educational levels do not have starkly different ideas about the process of involvement in the process of education. The findings of the present study are in agreement with the study carried out by (Baeck, 2010; Kavanagh, 2013) who suggested that parents with higher level of education are not more likely to help their children in their education. This may be because parents with high levels of education would not have time to participate in the education of their children. In contrast to the current study, researchers argued that there was a significant difference between educational level and parents' involvement in education (Herrell, 2011; Vanderpuye, 2013). I have observed that these two pieces of research are dissertations with large sample sizes which may be the reason for the discrepancies in the findings. I am also at times inclined to refuse the assumption that there exists a relationship between parents' high level of education and PI with their children's education. These contradicting findings serve as an invitation for researchers to conduct additional studies.

Moreover, the findings of the current study revealed that a significant difference was observed between parental involvement and parent's occupation. The study revealed that government-employed parents of children with disabilities showed better involvement in their children's education than unemployed parents. It was also noted that parents who were private/business workers were involved in a higher degree than the unemployed parents of children with disabilities. It may be because the occupation status of parents is tied with the monthly income of parents. Therefore, parents with high income and occupational status can provide the necessary learning materials, discuss the future and other conditions needed by their children. The findings in this study comply with the findings of (Kavanagh, 2013; Vanderpuye, 2013; Al-Matalka, 2014), in regards to the effect of parental occupation on their involvement.

Finally, the findings of the present study indicated that parents' monthly income level has an impact on their level of involvement. In the present study the higher the income level of parents, the higher would be the parental involvement in the education of their children with disabilities. This suggested that parents of children with disabilities with high income could be more likely to help their children in activities at home and provide them the necessary learning materials and knowledge. Their involvement may be also hindered by transportation problems that parents with low levels of income can face. The findings of the current study are consistent with the findings of (Kavanagh, 2013; Al-Matalka, 2014; Dameh, 2015; Peiffer, 2015), who argued that parents with high levels of income scored higher in levels of involvement in the education of their children than economically disadvantaged parents. In addition, it was found that parents with a good economic status were more willing and active in participating in the process of education (Cetin and Taskin, 2016).

## CONCLUSIONS

In this study, the researcher investigated the involvement of parents in the education of children with disabilities. In addition, the study examined the role of socio-economic factors on parents' involvement. The study was carried out in primary schools of Bahir Dar city administration, Ethiopia where inclusive education is practiced. Research question one investigated the extent of parents' involvement in the education of their children with disabilities considering the six dimensions of PI proposed by Epstein. Parents of children with disabilities were found to display

higher involvement in almost all parenting activities. However, parents did not create age and grade-appropriate home conditions. In relation to parental involvement in learning at home, the majority of parents of children with disabilities in the study area were not supervising and monitoring their children's work at home on a daily basis. Only a small number of parents of children with disabilities in the study area were involved in their children's education in learning at home activities. Parental involvement in communicating was also minimal. Similarly, low levels of parents' involvement were observed in activities of volunteering, decision making, and collaborating with the community.

Additionally, this study found a statistically significant difference in parents' level of involvement as a function of their income level. The study suggests that parents with high levels of monthly income participated higher than did parents with low income. A statistically significant difference was also observed in parents' levels of involvement based on their occupational status. This implies that unemployed parents display lower levels of involvement than government and private/business workers. However, a statistically significant difference was not observed in parental involvement as a function of their educational level. The results suggest that parents with varying levels of education were similarly involved.

## REFERENCES

Abel, Y. (2012). African American fathers' involvement in their children's school-based lives. *Journal of Negro Education*, 81(2), 162–166.

Afolabi, O. E. (2014). Parental involvement in inclusive education: an empirical test for psycho-educational development of learners with special needs in Botswana. *International Journal of Education*, 10(6), 200-207.

Al- Matalka, I. F. (2014).The Influence of parental socioeconomic status on their involvement at home. *International Journal of Humanities and Social Science*, 5(4), 146-154.

Awino, S.O. (2014). *Factors that influence parental involvement on enrolment of physically challenged preschool children in Langata District, Nairobi.* Unpublished Master's Thesis, University of Nairobi, Kenya.

Baeck, U. K. (2010) 'Parental involvement practices in formalized home–school cooperation. *Journal of Educational Research,* 54(6), 549-563.

Balli, D. (2016). Importance of parental involvement to meet the special needs of their children with disabilities in regular schools of Italy. *Journal of Interdisciplinary Studies,* 5(1), 147-151.

Burns, N., & Grove, S.K. (2001). *The practice of nursing research, conduct, critique, and utilization* (4th ed.). W.B. Saunders Company.

Cetin, S., & Taskin, P. (2016). Parent involvement in education in terms of socio-economic. *Eurasian Journal of Educational Research*, 66(6), 105-122.

Che, S. (2010). *Parental involvement in education: how do schools get parents involved?* Unpublished Master's Thesis. New Mexico University, USA.

Chindanya, A. (2011). *Parental involvement in primary schools in Zaka District of Zimbabwe.* Unpublished Doctoral Dissertation, University of South Africa, South Africa.

Cohen, L., Manion, L., & Morrison, K. (2004). Research methods in education (6th ed.). Falmer Press.

Compton, N.A. (2016). *Strategies for increasing parental involvement for elementary schools.* Unpublished Doctoral Dissertation, Walden University, USA.

Dameh, A.B. (2015). *The impact of parent Involvement Practices in Special education programs.* Unpublished Doctoral dissertation. St. Cloud State University, USA.

Donkor, A. K. (2010). Parental involvement in education in Ghana: The case of a private elementary school. *International Journal about Parents in Education*, 4(1), 23-38.

El Shourbagi, S. (2017). Parental involvement in inclusive classrooms for students with learning disabilities. *Journal of Psychology,* 2(2), 133-137.

Epstein, J. L. (2009). *In school, family, and community partnerships: Your handbook for action* (3rd ed.). Corwin Press.

Epstein, J.L. (2001). *School, family and community partnerships: Preparing educators and improving schools.* Westview Press.

Erlendsdóttir, G. (2010). *Effects of parental involvement in education in Namibia. Unpublished M.Ed.* Unpublished Master's Thesis, University of Iceland, Reykjavík, Iceland.

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review,* 13(1), 1-22.

Flemmings, B.J. (2013). *Parental involvement: a study of parents' and teachers' experiences and perceptions in an urban charter elementary school.* Unpublished Doctoral Dissertation, Rowan University, New Jersey, USA.

Georgiou, S. N. (2007). Parental involvement: beyond demographics. *International Journal about Parents in Education,* 7(1), 59–62.

Girma,W. (2017). *Experiences of parents' involvement in the management of primary schools in Oromiya National Regional State, Ethiopia.* Unpublished Doctoral Dissertation, University of South Africa, South Africa.

Heymann, S. J., & Earle, A. (2000). Low-income parents: How do working conditions 109 affect their opportunity to help school-age children at risk? *American Educational Research Journal,* 37(4), 833-848.

Herrell, O.P. (2011). *Parental involvement: parent perceptions and teacher perceptions.* Unpublished Doctoral Dissertation, East Tennessee State University, USA.

Hornby, G. (2011). *Parental involvement in childhood education: Building effective school-family partnerships.* Springer Press.

Ibrahim, A.T. (2012). *Parental involvement in the schooling process for students' academic success.* Unpublished Doctoral Dissertation, Abuja, Nigeria.

Joseph, G., & Muthee, J. (2016). Role of parents in the education of Mentally Retarded learners in selected schools in Madaraka Zone, Kenya. *Journal of Education and Practice,* 5(3), 20-25.

Kavanagh, L. (2013). *Mixed methods of investigation of parental involvement in Irish Immersion primary education: integrating multiple perspectives.* Unpublished Doctoral Dissertation, University College of Dublin, Ireland.

Koech, P. K. (2009). *Parent-teacher partnerships for enhancing pre-school children's education.* Unpublished Doctoral Dissertation, Kenyatta University, Kenya.

Lalvani, P. (2015). Disability, stigma & otherness: perspectives of parents & teachers. *Journal of Disability, Development and Education,* 62(4), 379–393.

Lee, J., & Bown, N.K. (2006). Parent involvement, cultural capital, and the achievement gap among elementary school children: *American Educational Research Journal,* 43(2), 193-200.

Leyser , Y., & Kirk, R. 2011. Parents' perspectives on inclusion and schooling of students with Angelman Syndrome: suggestions for educators. *International Journal of Special Education*, 26 (2):11-16.

Maalouf, M., & Moushaghayan, R. (2013). *Parental involvement in a child's education: effects and implications in elementary and high school.* Unpublished MA thesis, McGill University, Canada.

Mason, A.A. (2016). *Parent involvement in education among African and Caribbean born immigrants in Saskatoon.* Unpublished MA thesis, University of Saskatchewan, Canada.

Mauka, A. (2015). *Parental involvement and its effects on students' academic performance in public secondary schools in Korogwe, Tanzania.* Unpublished Doctoral Dissesrtation. University of Tanzania, Tanzania.

McDonnall, C.M, Cavenaugh, B., & Giesen, M.J (2009). The Relationship between Parental Involvement and Mathematics Achievement for Youth with Visual Impairments. https://doi.org/10.1177/0022466910365169

McDonnall, C.M, Cavenaugh,S.B., & Giesen, M.J. (2012). The Relationship between parental involvement & mathematics achievement for students with Visual Impairments. *Journal of Special Education,* 45(4), https://doi.org.10.1177/00226910365169

Ministry of Education (MoE). (2012). Special needs/ inclusive education strategy. Ethiopia.

Monadjem, L.C. (2003). *The development of a parental involvement program for urban high schools in Swaziland.* Unpublished Doctoral dissertation, University of South Africa, South Africa.

Monika. (2017). Role of family in inclusive education. *International Journal of Advanced Educational Research,* 2 (6), 258-260.

Munowenyu, M. E. (1997). Parental Involvement in the education of children with special needs. *The Zimbabwe Bulletin of Teacher,* 5(2), 26-28.

Mwaikimu, A. (2012). *Parent involvement in public primary schools in Kenya.* Unpublished Doctoral Dissertation, University of South Africa, S. Africa.

Ngwenya, V. C. (2010). *Managing parental involvement with education in Zimbabwe.* Unpublished Doctoral Dissertation, University of South Africa.

Patrikakou, E. N., Weissberg, R. P., Redding, S., & Walberg, H. J. (2005). *School-family partnerships for children's success.* Teachers College Press. Peiffer, G. (2015) *The Effect of self-efficacy on parental involvement at the secondary school level.* Unpublished Doctoral Dissertation, University of Pittsburgh.

Sanders, M.G. (2008). How parent liaisons can bridge the home-school gap. *The Journal of Educational Research*, 101(5), 287-292.

Tekin, A.K. (2011). *Parent Involvement revisited: background, theories and models.* Sultan Qaboos University.

Toldson, I.A., & Lemmons, B.P. (2013). Social demographics, the school environment, and parenting practices associated with parents' participation in schools and academic success among Black, Hispanic, and White students. *Journal of Behavior in the Social Environment,* 23(2), 241-248.

Van Voorhis, F. L. (2003). Interactive homework in middle school: Effects on family involvement and science achievement. *The Journal of Educational Research*, 9(6), 323-338.

Vanderpuye, I. (2013). *Piloting inclusive education in Ghana: parental perceptions, expectations and involvement.* Unpublished Doctoral Dissertation, University of Leeds, England.

Vellymalay, S. (2012). Parental involvement at home: analyzing the influence of parents' socioeconomic status. *Studies in Sociology of Science,* 3(1), 1-6.

Washington, A. (2011). *A national study of parental involvement: Its trends, status and effects on school success.* Unpublished Doctoral Dissertation, Western Michigan University, Michigan, USA.

Williams, B., Williams, J., & Ullman, A. (2002). P*arental involvement in education (3rd ed.).* Queen's Printer publishers.

# A Model of Developmental Support for Children after TTTS – Case Study

Leszek Ploch[1]

[1]Siedlce University of Natural Sciences and Humanities, Poland

## ABSTRACT

This paper describes a model of developmental support of a nine-year-old girl, born as a twin in the 27th week of pregnancy, with significant perinatal history. Prenatal examination diagnosed Twin-Twin Transfusion Syndrome (TTTS). Due to premature birth and numerous developmental dysfunctions resulting from it, the girl required the assistance of complex specialist care. However, in the first four years of the child's life, the strategy of developmental support was drastically neglected. The basic aim of the study was to present the author's individual model of support, designed especially for the four-year-old girl together with recommendations of conduct for therapists and the child's parents. The model was developed on the basis of a multi-profile diagnosis, which allowed proposing an individual strategy for intensive developmental support for children after TTTS. Developmental support activities in the proposed model were performed for 58 months, and after this period diagnosis revealed significant changes in the level of functioning of the child regarding ways of responding to communication with the environment. The study confirmed the efficiency of an individual model of developmental support, indicating its beneficial results.

*Keywords:* prematurity; TTTS; Twin-Twin Transfusion Syndrome; multiple disability; multiple pregnancy; interpersonal communication

## INTRODUCTION

Twin-Twin Transfusion Syndrome (TTTS) dates back probably to 1617. At that time Jacob Dirkszoon de Graeff, the mayor of Amsterdam, had two male twins who unfortunately died after birth. The desperate father commissioned a painter to commemorate them on canvas. In this instance, which is essential, the painter stressed differences between the color of the neonates' skin - one pale, the other extremely red. This allowed recognition of twins born with TTTS together with their unequal share of nutrients and oxygen, i.e. distinction between the „donor" and the „recipient". As indicated by specialists, nearly 100% of twins from complicated pregnancy with TTTS are born before the appointed time (Forsblad, Källén, Maršál & Hellström-Westas, 2007; Quintero, Morales, Allen, Bornick, Johnson & Kruger, 1999; Szymankiewicz, 2010).

According to scientists in the field of medicine, a dozen or so years ago, premature infants would not have any chance to survive. At present, modern therapeutic methods, involving diagnosis, preventive treatment, professional medical equipment, and welfare of medical practice, allow saving increasingly immature neonates, including those burdened with a higher risk of developmental disorders. Statistics show that 28 000 such children are born in Poland every year. This group of neonates born before the 37th week of pregnancy used to be called premature infants. In recent years perinatal mortality in the group of children born with the weight of 500-999 grams was in Poland 47.68 percent, whereas 25 years ago mortality in the same group of children was 86 percent (Hamuda & Kowalczykiewicz-Kuta, 2006; Malinowski & Ropacka, 2003; Preis, Świątkowska-Freund, Leszczyńska, Bidzan & Pankrac, 2010; Szymankiewicz, 2010).

Prematurity is one of the reasons linked with serious developmental and functional consequences, which could greatly limit a child in his or her abilities to cognize the world, understand and initiate changes in their community as well as communicate with their parents and consequently with their community. These difficulties are the bigger and more extensive the more illnesses are diagnosed in a child. The occurrence of numerous disorders and deficits used to be universally called multiple disability (Alfonso, Russo, Fortugno & Rader, 2005; Kornacka & Sonczyk, 2008).

According to scientists, early and precise diagnostics allows implementing a suitable treatment strategy to save children from this group (Als, Lawhon, Duffy, McAnulty, GibesGrossman & Blickman, 1994; Quintero, Morales, Allen, Bornick, Johnson & Kruger, 1999; Świątkowska-Freund & Preis, 2010b).

## The clinical picture of TTTS

The reasons for premature childbirth are of varying origin, including multiple pregnancy; the mother's illnesses (arterial hypertension, viral diseases, anemia, etc.); changes in the uterus (uterine cervical insufficiency, anatomical defects of the uterus, myomas); fetus pathology (placenta previa, premature placental detachment, hydramnion, premature rupture of fetal membranes, amniotic fluid infection); significant perinatal history: former miscarriages or dead-births (Blondel & Kaminski, 2002; Feldma & Eidelman, 2003; Kornas-Biela, 2010; Preis, Świątkowska-Freund, Leszczyńska, Bidzan & Pankrac, 2010). One of the complications, i.e. a characteristic exclusion in a multiple pregnancy, is Twin Twin Transfusion Syndrome (TTTS). As stressed by Malinowski and Jóźwiak (2012), clinical symptoms of TTTS were described for the first time in 1941 by Gillis Herlitz, however, the diagnostic criteria were introduced publicly in 1965 by Rausen et al. (Malinowski & Jóźwiak, 2012). TTTS occurs when at least two fetuses have a shared placenta with an existing vascular connection. It involves unequal blood flow between fetuses and consequently, an unequal distribution of nutrients and oxygen. The „recipient" is usually bigger and he or she receives a bigger quantity of blood, but he or she is in danger of complications such as problems with respiration, with the digestive system, heart as well as brain damage. The „donor" receives a too small quantity of blood and in effect, he or she develops anemia. However, his or her internal organs are less overloaded in comparison to the „recipient" (Michałus, Haładaj & Chlebna-Sokół, 2009; Ropacka-Lesiak, 2013). As indicated by sources, the frequency of the occurrence of TTTS ranges from 10% to 15% of the whole number of single chorionic pregnancies, the so-called third placental circulation (Blondel & Kaminski, 2002; Forsblad, Källén, Maršál & Hellström-Westas, 2007; Preis, Świątkowska-Freund & Pankrac, 2010; Quintero, Morales, Allen, Bornick, Johnson & Kruger, 1999).

As stressed by researchers, premature infants differ from neonates born on time not only in terms of their physical appearance, i.e. thin, transparent skin, lack of or weakly developed subcutis, but first of all functional disorders, including immature respiratory and immunological systems, the fragility of blood vessels and limited auditory ability (Alfonso, Russo, Fortugno & Rader, 2005; Feldman & Eidelman, 2003; Preis, Świątkowska-Freund, Leszczyńska, Bidzan & Pankrac, 2010; Świątkowska-Freund & Preis, 2010a).

The consequences of premature birth can be of a complicated nature and the development of a premature in-

fant sometimes depends on his or her birth weight and the pregnancy week in which he or she was born. Prognoses as to premature neonates depend primarily on the maturity of their organs and tissues (Bidzan, Preis, Senkbeil, Świątkowska-Freund & Pankrac, 2010; Blondel & Kaminski, 2002; Forsblad, Källén, Maršál & Hellström-Westas, 2007; Quintero, Morales, Allen, Bornick, Johnson & Kruger, 1999). The most frequent prematurity problems, appearing just after childbirth, include: retinopathy (damage of immature blood vessels in retina and accumulation of free radicals); respiratory distress syndrome (RDS) involving problems of independent respiration resulting from insufficient maturity of lungs, the circulation system and a shortage of the surfactant reducing the surface tension of pulmonary alveoli; jaundice (a sudden increase in disintegration of erythrocytes resulting in appearance of bilirubin), which can cause the jaundice of the nuclei of the base of the brain, which consequently causes very serious neurological disorders; septicemia (a heavy general infection of the body, as a reaction to pathogens and their toxins in blood); disorder of carbohydrates metabolism (hipoglycaemia and hyperglycaemia); necrotizing enterocolitis (NEC), which can lead to intestine perforation or intestines breaking; anemia; bronchopulmonary dysplasia, often turning into asthma; hypothyreosis; organic heart disease (unobstructed Botall's duct); intraventricular hemorrhage, periventricular hemorrhage (originating from the paraventricular matrix - immaturity of the capillary network) and interstitial hemorrhage (vasogenic damage in the neurocyte proliferation zone), causing hydrocephalus, abnormal psychomotor development, damage of sight and hearing, cerebral palsy; risk of infection, as a consequence of lowered immunity and lack of necessary antibodies; early damage to the central nervous system, caused by hypoxia and intraventricular hemorrrhage (periventricular leukomalation, also called hypoxic-ischemic encephalopathy - HIE); feeding problems (e.g. lack of sucking reflex) (Als, Lawhon, Duffy, McAnulty, GibesGrossman & Blickman, 1994; Chrzan-Dętkoś, 2012; Chrzan-Dętkoś & Bogdanowicz, 2010; Quintero, Morales, Allen, Bornick, Johnson & Kruger, 1999).

**A theoretical depiction
of developmental support activities**
For children from the population of perinatal risk, the scope of early intervention involves a great number of specific activities, including preventive, diagnostic, and therapeutic activities as well as those involving counseling on specialist care for families of children with developmental disorders. Interventionist activities are aimed at: imple-

menting activities supporting extensive development and education of children with developmental disorders; organizing forms of specialist assistance; introducing activities supporting child development to parents and caretakers, stimulating in the area of personal communication (Przyrowski, 2011). Correct assessment of developmental disorders in a child should take into account the scope of his or her over-subjective needs. Consequently, the assessment should include: early detection of existing disorders in psychomotor development; correct nursing, correct developmental standards; the early start of stimulation of correct development in all its spheres; motor rehabilitation, compensating the occurrence of disorders; pedagogical therapy, speech therapy, psychological therapy; learning interpersonal communication; secondary prophylaxis regarding psychomotor, emotional, and social development as well as speech development; early and complex education; using specially designed stimulating therapeutic methods as supporting activities (Przyrowski, 2011).

**The development of children
born from pregnancies with TTTS - research review**
The world literature seldom presents findings concerning the assessment of psychomotor development of children born from pregnancies during which TTTS developed (Szymankiewicz, 2010). The relevant examples can be found in the findings of a group of Australian researchers, in which they showed that the development of children born from pregnancies during which TTTS developed is not different from the development of children from the comparison group (twins without TTTS). Children below the age of 3 were examined with Bayley Scales of Infant Development (BSID) and with the Stanford-Binet Intelligence Scales. Intellectual disability was diagnosed if results were lower by two standard deviations. These criteria were accepted for both tests. The average result in the intelligence scales appeared to be about 8 points lower in children born from pregnancies during which TTTS developed (before the 33rd week of pregnancy). No difference between the „donor" and the „recipient" was found in respect of results obtained in the intelligence tests. In compliance with the binding criteria, intellectual disability was not diagnosed in children born from pregnancies during which TTTS developed. The final test results are influenced by the diagnosis of cerebral palsy (paralysis cerebralis infantum) which in the investigated group seems to appear more frequently (Dickinson, Duncombe, Evans, French & Hagan, 2005). Other Australian studies, involving a group of 62 children showed that some children born from pregnancies during which TTTS developed

revealed slight neurodevelopmental disorders (McIntosh, Meriki, Joshi, Biggs, Welsh, Challis & Lui, 2014). A group of American researchers presented the results obtained at the 33rd annual meeting of the Society for Maternal-Fetal Medicine in San Francisco showing that the general level of cognitive functions in children born from pregnancies during which TTTS developed was normal (Vanderbilt, Schrager, Lanes, Hamilton, Seri & Chmait, 2013).

**The aim and the assumptions of the research**
This study aims to show the effects of the effectiveness of the therapy designed for a girl with TTTS, implemented for 58 months. The basis of influences was the author's individual model of support conduct whose main assumption was to develop in a child possibly effective independence in establishing interpersonal communication in his or her own community. The obtained results were supposed to allow the assessment of the efficiency of the individually applied support model.

**Research methods and tools**
In the research the author used the following research methods and tools: analysis of medical documentation, taking into consideration the course of pregnancy (single/twin; high-risk/normal), live births (multiple/single), the perinatal period (results in the Apgar score), anthropometrical parameters of a newborn (gestational age, birth weight, sex); conversation with the child's parents connected with the case history; participating observation; an individual method of child developmental support. In his contacts with the child the author used the following research methods and tools: Callier-Azus Cognitive Scale, PIC-Pictogram (Pictogram Ideogram Communication), Picture Communication Symbols (PCS); MAKATON Dictionary; pictographic puzzles; Receptive Communication Scale, Expressive Communication Scale, Language Scale, Fine Motor Scale, Gross Motor Scale, Motor Scale.

**Case description**
The girl was born in December 2009 in a small town in the Mazovia region, Poland, in the 27th week of twin pregnancy, which is regarded here as extreme prematurity, with extremely significant perinatal history. TTTS was diagnosed prenatally. Because of the threat of asphyxia and hydramnion, the pregnancy was terminated with a Caesarean section. The girl was born with a bodyweight of 950 g. The girl scored 2 in the Apgar score. She appeared to be the „recipient" neonate, with general edema. After the childbirth, the girl was diagnosed with such complications as: respiratory failure (RDS); pulmonary hemorrhage; plasmatic and thrombocytopenic diathesis; innate infection; secondary infection; hyperbilirubinemia; secondary anemia, periventricular leukomalacia (bilateral encephalopathy) and premature retinopathy (of 1st degree). The clinical diagnosis by The International Centre of Hearing and Speech revealed a bilateral sensorineural hearing loss of a profound degree, which resulted in cochlear implantation in the right ear. Further investigations revealed binocular short-sightedness, which was a consequence of premature retinopathy, and the convergent squint of the left eye after surgical treatment; nystagmus (corrective glasses were applied). Moreover, the girl revealed intellectual disability in a moderate degree on the verge of a severe degree. The biggest problem was motor disorders of the cerebral origin (cerebral infantile paralysis - bilateral hemiparesis, hypertonia). At the age of four the girl could not walk, she could neither take the standing position nor sit independently. Other disorders included: head hold instability; global delay in psychomotor development and delay in speech development.

**The multi-profile assessment of the child's functioning before introducing the therapy model**
The assessment of the level of functioning of the four-year-old girl was performed on the basis of diagnoses using the Callier-Azus Scale, which allows determining the range of skills, the communication level, and the general psychophysical development. The diagnosis was broadened by an assessment of the functioning of senses: hearing, sight, touch, taste. At the same time, the level of development of aural reactions was defined. As a result of using the Callier-Azus Scale, it was possible to indicate the level of the child's developmental age, estimated for the third-fourth month of life, in which the zone of the nearest development falls on the sixth month of life. In the first part of the assessment sheet for the gesture development and use of a specific symbol and, an abstract symbol, the examined girl reached the level of a child aged 4 months. In this area, the girl reacted to stimulations in a reflexive manner; she tended to turn towards stimuli irritating her mouth, tightened her fingers on an object placed in her palm; she anticipated events resulting from the daily routine: she became energetic, tense, smiled, became irritated or cried. The examined girl recognized several familiar objects and situations and responded by smiling or crying. The girl operated objects - she initiated the movement with her hands as the aim of observation of her own movement; she associated certain activities after being provided with characteristic objects, she expressed her feelings with facial expressions and by crying. The zone of the nearest development in this domain was defined as the sixth month.

In the second part of the sheet concerning receptive communication, i.e. responding to communication, the girl showed functioning at the level of a developmental stage near the fourth month. She exhibited reactions to stimulations in the manner limited to reflexive changes in her behavior while ticking, stroking, rocking; she gave in to reactions of appeasement and consolation when she was crying; she revealed reactions to interesting events caused by an adult, for instance, she focused her sight for a little time; she could distinguish the intonation of the speaker's voice and showed it by smiling when the speaker's tone was friendly and by crying as a result of the speaker's voice becoming louder and angrier; she responded to familiar movements initiated by an adult and could associate familiar objects responding by smiling or crying. The examined girl was responsive to several signals used permanently in the same situations as tactual instructions by predicting a tactual game, e.g. the „poor crayfish is coming up" nursery rhyme. The zone of the nearest development in this area was defined also as the sixth month of life.

In the third part of the scale concerning the level of development of expressive communication, the examined girl revealed the degree of attained developmental stage at the level of the second month of life. She showed behavior allowing her to establish contact with others through crying, liveliness, e.g. bowing her back, turning her head away, and smiling. The girl gained and maintained an adult's attention through smiling. Except for the above-mentioned forms of contact, she presented no other signals of communication with her relatives. What hindered her in her efforts to achieve higher levels of the described sphere was the state of high muscular tension, making it impossible for her to try and control them. The nearest sphere of development in this area was defined as the second month of life. This state meant that planned support should be concentrated on forming a skill of controlling the girl's muscle tone.

In the area of cooperation, the examined girl revealed the level of development at the stage of the third month of life. In relations with other people, she stopped her behavior with regular pauses, e.g. she opened and closed her mouth, then paused and moved her hands, next she paused and moved her hands again. She focused her attention for a moment on the adult's facial expressions, speech, or gestures, e.g. she looked intently at the interlocutors' faces, turned her head upon hearing a voice. She tried to display behavior the aim of which was to establish contact (crying, looking at the interlocutor, liveliness, bending her body).

The girl could pay attention to objects which the adult moved close to her - she looked, smiled, or showed nervo-usness by bending her body or by crying. In situations in which the adult, mainly her mother, left the girl alone, she showed nervousness by crying. The zone of the nearest development for the examined girl in this area was defined as the fourth month of life. The girl attained her own best result in the area of receptive communication, involving reactions to communication, i.e. the fourth month of life, and in the area of understanding gestures and symbols in interactions, she reached the level of the fourth month of life. However, the girl had the poorest results in the sphere of the purposefulness of communicative expression, that is the second month of life, the poorest results, and cooperation (the third month of life).

**Visual perception**

The ophthalmological diagnosis in the examined girl showed esophoria (operated in 2009), hyperactivity of inferior oblique muscle of both eyes, nystagmus, and the vision defect of left eye +4 and right eye +3. At that time corrective spectacles were applied. The examination performed in the natural day environment and the presence of her mother, using a sheet for assessing visual functions and behavior controlled by sight, the girl reached the level of vision development comparable to the seventh to twelfth month of life. The findings showed that the girl reacted to faces focusing her sight for a moment; she followed moving objects; she looked at bright and colored objects with high contrast; she smiled in an interaction with an adult, e.g. her mother; she shifted her look from nearer objects to farther ones; she shifted her look towards a sound source; she examined visually her nearest environment; she happened to bring her hands closer to her eyes, however, this operation lacked signs of intention and purposefulness; she shifted her look from one object to another; she recognized familiar objects well with liveliness and smiling reactions.

The girl had the following difficulties: she had clear problems with a convergent position of her eyes while looking at a given object; she lacked precision in shifting her look, she lacked the ability to locate objects introduced into the circumferential area of vision; she made no attempt to hold out her hands towards objects; she was not interested in details of complex objects; she was not interested in presented pictures. Moreover, the visual range after introducing a stimulus (a colored toy and her mother's face), did not exceed 6 meters; she fixed her sight in the central part of the central line of her body; she had difficulty fixing her sight in the circumferential part of her body.

She could follow an object to the right and the left from the central line of her body; she had slightly bigger difficulty tracking from the top to the bottom of the vi-

sual field; she could not follow diagonal or circular movements. The examination revealed a lack of convergence - the light reflections test on the cornea showed a squint. The preferred distance in observation of visual stimuli was approximately 30 cm. The girl tended to lose visual attention in the field of a circuit and from the top to the bottom. Her eye-tracing reactions were definitely delayed and short-lived, caused by a lack of body-neck control.

### Aural perception

The examined girl revealed deep hypacusia (<90dB) of the left ear and the right ear. In 2009 she was provided with an implant in the right ear. The examination, performed in natural conditions and a familiar environment, aimed at checking her reactions to aural stimuli. Responses to prove the auditory threshold appeared after exceeding the sound intensity of 20dB. The girl did not react to whispers and quiet speech below 20 dB, at the same time she revealed clear and determined reactions to suddenly appearing sounds, e.g. the sound of an alarm clock - 30dB). The girl would react to voices with a normal or friendly tone with a slight preference of the feminine voice, moreover, the girl reacted with a smile to other people saying her name.

The girl revealed signs of searching for changing sound sources. It was ascertained that while the girl was crying, no sound could influence or change her mood.

Further hearing thresholds investigations (more than 70dB) found no doubts regarding the girl's responses to stimuli of such an intensity level. She was able to react to those sounds with firm liveliness, and even with a short freeze, then she would raise her head and look for sources of the heard sound with her sight. Undoubtedly, a considerable and recurrent difficulty for her involved instability of support of her head and inability to maintain her sight on an object for a short time.

### Gustatory perception

After determining the contraindications, e.g. allergy, a taste test was carried out in the examined girl and her reactions were observed to gradually introduced basic tastes: bitter (tea), sweet (chocolate cream), salty (salt), sour (citric acid) in order to observe emotions accompanying the substances introduced. The main intention was to obtain information on whether there appear any perceptible reactions to gustatory stimuli in the examined girl. Consequently, the sour and salty flavors caused a standard moistening reflex, eye winking, and motor stimulation - hypermyotonia. Administering substances of a pleasant favor, e.g. chocolate cream entailed clear relaxation, willingness to opening her mouth, expressing an evident

preference. Administering bitter flavor did not cause any perceptible reactions. Information coming from gustatory cells confirmed the occurrence of correct, differentiated reactions to administered substances together with a preference for the sweet flavor and with a small, almost imperceptible reaction to the bitter taste.

### Tactile perception

The examined girl was subjected to tactile stimulation. Touch in the form of massage, stroking regions of upper and lower limbs and the chest in a lying position caused positive emotions, relaxation, clear comfort, and signs of eye contact. However, the same touch turned out to be undesirable in the orofacial zone. During those activities, the examined girl decidedly bent her head and her body backward, which consequently caused an increase in the muscle tone. All pressures in the same body parts, i.e. lower and upper extremities, palms, feet, caused signs of curiosity, freezing and clear expectation of another movement. No additional negative reactions to this kind of touch were observed. What is more, the activity of blowing through a straw towards different body parts of the examined girl made her smile and then laugh. During those times, the girl would freeze with a smile, awaiting other sensations. Stimulation with different textures did not cause any fundamental signs of emotion in the child, but the area of her face appeared to be definitely oversensitive to any tactile intervention.

The strong points of the examined girl, favoring correct development, included her interest in the nearest environment and people already known to her. Such a state allowed an assumption that the examined child shows susceptibility to any type of stimulation and suitable developmental support program. It was assumed that the greatest difficulty was the high level of progressive muscle tone.

Since extreme neglect in the girl's psychomotor development was revealed, an individual procedure was designed to support the development in the following areas:

- The area of motor activities involved reduction and monitoring of the child's muscular tension, including the activity of bending and extending of an arm (a manipulative game involving grip, touch, throwing an object); using NDT Bobath method to reduce pathological reflexes, abnormal patterns, and muscle tone; SI Sensory Integration of atrioventricular and proprioceptive sensations using different textures, temperature consistencies, and vibration.

**A SERIES OF TASKS OF INDIVIDUAL THERAPY FOR DEVELOPMENTAL SUPPORT**

Table 1.                                                                                               The author's idea of a therapy model

| THE AIM IN PHASES OF THE THERAPY | THE DETAILED AIM OF THE THERAPY | SPECIFIC FACTORS | TECHNIQUES |
|---|---|---|---|
| **Phase 1:** Improvement of the level of the subjective mood and the self-confidence **Duration:** 10 therapeutic hours /five times per week /18 months of continuous support supervised by a specialist | Constructing a strategy of therapeutic support | Learning rituals in the therapy and consolidating them; accepting the established model of work in therapeutic sessions | Method NDT Bobath, Sensory Integration SI, Picture Communication Symbols - PCS |
| | Stabilization of good mood | Activation of internal resources | A receptive technique of combining sounds based on emitted colors and sounds |
| | Training to establish the feeling of self-confidence | Improving one's ability to be aware of the attained success in motor stimulation | A musical accompaniment to movement; vibroacoustic stimulation; „my greatest dream" improvisation |
| **Phase 2:** Stimulation to perform tasks by providing support instructions with sensations **Duration:** 10 hours of support / five times per week / 20 months of support of experiencing successes from task fulfillment | Working on the intensity of performing tasks | Improving the level of the intensity of one's activity | Improvisation according to one's favorite pattern of sonic and rhythmic supplements and motivation in social functioning |
| | Working on the improvement of motivation in social functioning | Motor-imaginational therapeutic stimulation; constructing alternatives of movement; freedom and flexibility | A variety of parameters of objects in free improvisation (rituals) |
| **Phase 3:** Improvement in „general functioning" and changes in regards to extending manners of independent resourcefulness **Duration:** 10 hours of support / five times per week / 20 months of support | Testing new flexible, reflexes and experiences | Practicing new forms of interaction through non-verbal communication | Ch. Knill's Method; The author's own exercises, taking into account light sources |
| | Generalization regarding attempts of independent development of manners of resourcefulness | Stabilization of one's attained aims - improvement; the farewell | Augmentative and Alternative Communication evolution of behavior regarding resourcefulness |

Source: the author's study

- The area of communication involved designing a systematized set of gestures during daily nursing activities appropriate to the child's capabilities, such as feeding, taking the child in one's arms, using outside sources: sound, touch (during bathing and washing - tactile contact with water), smell (particular scent before massage), signs (e.g. Picture Communication Symbols - PCS) - as allowing the girl to predict situations and reinforce the feeling of safety, focus on the reception of particular stimuli, prepare the body neurophysiologically. In regards to the communication elements, Ch. Knill's method will be used in order to arouse activity and encourage to take action and show one's own initiative. Moreover, other methods and tools which will be used include: Receptive Communication Scale, Expressive Communication, Language Scale, Fine Motor, Gross Motor. The accompanying music was con-nected with basic activities, e.g. rocking, opening one's hand. In this communication the Augmentative and Alternative Communication method was included, involving working on concretes, i.e. using particular matter-of-fact PCS pictures. While playing with the child, and consequently arousing spontaneous linguistic communication, simple verbal training was introduced using particular accessories, e.g. playing with a spinning top (speech sound: u), playing with a pompom (speech sounds: o, a), playing with a spring (speech sound: i), playing with a shawl involving putting it on the head and taking off (speech sounds: o, a). Playing in front of the mirror, while respiratory exercises were used in order to develop the feeling of agency, focus on the speech apparatus and modulate breath; additionally, contact with water involved the motor exercises.

• In the area of perception, the main challenge was determined as follows: developing the skill of looking, observing; and tactile stimulation to reduce muscular tension; as well as stimulation with sounds. In order to achieve that: the distances in the visual field were increased; the time of looking at an object was lengthened; interest was increased making daily care objects more attractive. Methods used included finger games; tactile system stimulation; SI method (nature material, various textures, consistencies). The child's senses were influenced, including gustatory and olfactory senses. Contact with the participation of a therapy dog was used (poly-sensory stimulation) in order to arouse positive reactions; stimulations in participation in certain activities and positive reception of the changing environment, dancing in the water of variable temperature (swimming pool).

• In the area of self-reliance, the intensified speech therapy intervention was introduced, with special regard to the development of the activity involving biting off and chewing pieces of solid food.

The chosen therapeutic activities used for 58 months with relation to the case described aimed at improving the girl's general psychophysical state; satisfying all her possible developmental needs and preventing her from secondary developmental disorders (regression); forming manners of interpersonal communication. Any interventions towards the girl were performed in the presence of her parents included in active participation in the therapy [27]. The support stimulation was accompanied by:

1. Verification of the previous activities aimed at improving the level of the child's general physical development;
2. Introduction of supportive and alternative individual forms of interpersonal communication in domestic conditions;
3. Continued intensification of the developmental support process in the urgent mode in cooperation with an expert group involving medical doctors and therapists;
4. Inclusion of parents in cooperation in terms of active therapy and stimulating socializing tasks - a cycle of instruction and training;
5. Minimization of an extremely increased status of spasticity by using suitable positions preventing the excessive body stiffening, for instance,

## THE COURSE OF SUPPORT THERAPY

Table 2. **Examples of developmental support exercises**

**A series of momentum exercises
(in a sitting position in an orthopedic chair):**

• Request to hit a balloon with photos
  of her family members on it, situated in front of the girl;
• Climbing on a horizontal bar in games called
  „chimney sweep climbing up the ladder",
  „chimney-sweep coming down the ladder";
• Throwing an object off a chair in order to achieve
  agency of action (with a „wow" effect), scattered
  confetti, sonic, and lighting effects.
• Playing with a shawl attached to the girl's wrist
  with a rubber band;
• Using vibrating toys in order to reduce muscular
  tension as much as possible;
• Massaging the shoulders
  (quick balancing horizontal and vertical movements);
• Motor activities in a swimming pool.

**A series of momentum exercises
(in a lying position on one's back):**

The lying position with legs drawn in, protected sides
(a blanket around the head), an attempt to reach
for a photo of a family member;
• Request to indicate the girl's own head, nose, and ear;
• Request to stroke her head/hair;
• Motor activities in a swimming pool.

**Exercises involving lying on side, one leg bent,
supported, stabilized, protected head:**

• Massaging the shoulder blade to provoke
  hand movements forwards;
• Warm massage of the shoulder-blade (heat stimulation);
• Trying to reach for a ball;
• Attempts to indicate photos of family members;
• Playing with a shawl attached to girl's wrist;

**A series of manual exercises:**

• Hand massage;
• Horizontal bar exercises
  (pushing and pulling the horizontal bar);
• Knill's method exercises (levels: 1st, 2nd, and a special
  level);
• Therapy session ends with relaxation with the possibility of
  using Shantala Massage or listening to a fable or a rhyme.

**A series of dog activities (pet therapy):
The appropriate part includes:**

• observation, following the dog with one's sight;
• listening attentively to the dog's barking while
  its location changes;
• stroking a dog, close contact with an animal:
  lying close to it;
• showing various photos/pictures
• increasing the distance of a shown picture
  representing the same dog;
• imitating dog barking by the therapist
• aloud, silently, from afar, from close range;
• singing simple songs about dogs;
• touching the dog's nose, tongue,
  fur with one's hands or single fingers;
• feeding a dog.

**The closing part:**

• touching the place where the dog's heart beats,
  relaxing on a mattress, and parting with the dog.

during activities, e.g. lifting, carrying, changing diapers, bathing;

6. Changing the lying position regularly: on the stomach (a roller or a wedge), at the same time holding one's hands outstretched forward and supporting the girl and lifting her head; when the girl was lying on her side, one hip and one knee were bent with a blanket in-between, preventing them from joining (relaxation of the body); on the back: bending hips and knees to prevent the body from stiffening and protracting;

7. Providing the sense of security by requiring the presence of the parents during routine-developing activities and to indicate the regularity of using activities: 'kangooring', 'nesting', 'scarfing';

8. Minimizing the child's developmental difficulties by exercises and sensory stimulation in such a manner that it can obtain a potentially higher possible level of motor, intellectual, social, and emotional development;

9. Improving the family's psychical condition to fulfill its educational, protective, and therapeutic function for the girl;

10. Regular verification of the efficiency of the applied forms of contact with the child;

11. Instructions for the parents in regards to using the tactile stimulation method (Shantala Massage) and the tactile system stimulation as manners to arouse positive emotions and relations with the child, cause a beneficial mood, spontaneous contact, relaxation, and reduce muscular tension.

In order to present a complete picture of the results of measuring methods used regularly after each 12-month period of the performed activities, data were presented in the table below (Table 3).

The Callier-Azus scale was used in periodic measurements taking into consideration the scope of changes in the level of revealed skills; the level of receptive and expressive communication; individual psychophysical development; the level of aural relations; understanding concrete and abstract symbols; the reaction of facial expressions and reflexes; expression of feelings; the level of occurrence of muscle tone. The measurements were generalized regarding the final assessment of the area of the girl's development in relation to her able-bodied peers in the development scale in months of life. In order to achieve this goal, the measuring methods indicated above were used.

As can be assessed, the applied support model provided the girl with an opportunity to overcome her developmental difficulties effectively. The support program aimed at minimizing the degree of deficits of the psychophysical character and eliciting the full potential for establishing interpersonal communication in the environment.

The research measurement was effected before the individual support session in 2015 and after it, i.e. in October 2019. The participating observation took into account areas of skills of an individual case, i.e.: the area of competence: reflexes, self-control, face mimicry; accompanying preservations, reactions of satisfaction; the area of the social functioning: interpersonal functioning, responsiveness to situations from the environment; motivation to do exercises; the area of practical activity: remembering ob-

Table 3.

**The scale of progress in the multi-profile assessment of the functioning of the examined girl with TTTS within a period of 58-month therapy**

| No. | TECHNIQUES IN THERAPY within a period of 58-month therapy | 12 MONTHS AGE OF 5 | 12 MONTHS AGE OF 6 | 12 MONTHS AGE OF 7 | 12 MONTHS AGE OF 8 | 10 MONTHS AGE OF 9 |
|---|---|---|---|---|---|---|
| 1 | NDT Bobath Method | 3 months | 5.2 months | 6.4 months | 8.2 months | 9.1 months |
| 2 | Sensory Integration SI | 1.5 months | 1.8 months | 2.2 months | 3.2 months | 4.6 months |
| 3 | Picture Communication Symbols - PCS | 1.5 months | 1.9 months | 2.5 months | 4.1 months | 7.9 months |
| 4 | Receptive Technique of Joining Sounds | 1.1 months | 1.9 months | 2.6 months | 4.4 months | 7.2 months |
| 5 | Musical Accompaniment to Movement | 1.1 months | 3.1 months | 5.2 months | 8.2 months | 12 months |
| 6 | Vibroacoustic Stimulatio | 2.1 months | 2.8 months | 3.9 months | 9.5 months | 15 months |
| 7 | Free Improvisation in Manipulation with Objects | 2.1 months | 3.5 months | 4.5 months | 6.3 months | 12 month |
| 8 | Ch. Knill's Method | 1.6 months | 2.5 months | 5.3 months | 7.4 months | 11.3 months |
| 9 | Augmentative and Alternative Communication | 2.2 months | 3.2 months | 6.2 months | 8.2 months | 13.2 months |

Source: the author's study

jects, understanding their intended use, motor efficiency. The sheet took into account risk factors of occurrence and repetition frequency factors (the course of changes due to a low level: result < 65-79%, an average level: result 66-79%, a high level: result > 80%).

## RESULTS

The research involving participation in the therapeutic cycle allowed observing the following changes in relation to the period preceding the beginning of the individual model of the girl's developmental support:

- The therapy resulted in minimizing the dynamics of growth of the existing abnormalities in the girl's psychomotor development, hindering regular activities of the therapy supporting her psychomotor development.
- The applied therapy reduced the intensity of the occurrence of symptoms of respiratory disorders, resulting from the unsatisfactory maturity of the lungs and the circulatory system, insufficient for independent respiration.
- The girl displayed independent attempts to establish interpersonal relations together with attempts to maintain the course of the narration and action of parties.
- The author noticed a reduction of the occurrence of symptoms of secondary disorders and selected abnormalities in the area of psychomotor, emotional, and social development,
- The girl showed a reduction in the muscle tone, which decreased from a high level.

The above-mentioned changes in the described case were possible to obtain on an average level, however, in relation to the period before introducing the support model, in each area, the zone of the nearest development increased consistently to about 8-10 months on average.

## DISCUSSION

The participating observation in a group of category of limitations allowed specifying as follows: a limited subjective character; a kind of rare disease; the complexity of the occurrence of disorders concomitant with TTTS in a multiple pregnancy; the multidimensionality of the analyzed variables; interdisciplinarity; the time of the therapy, full reservedness in establishing interpersonal contacts (Alfon-

so, Russo, Fortugno & Rader, 2005; Als, Lawhon, Duffy, McAnulty, GibesGrossman & Blickman, 1994; Bidzan, Preis, Senkbeil, Świątkowska-Freund & Pankrac, 2010; Kornas-Biela, 2010; Malinowski & Ropacka, 2003; Pease & Pease, 2018; Vanderveen, Bassler, Robertson &Kirpalani, 2009).

The obtained results support the belief that the cycle of support tasks for communication development and the girl's psychophysical development should be aimed primarily at providing assistance in his or her experiencing the outside world and improving defense mechanisms in a sufficiently changed quantity so that the child can systematically improve his or her own ability to modify and neutralize extreme inhibitions and limitations. In the continuity of systematically organized supportive activities, there is a chance to fulfill social and emotional development training of the described case. The risk level of the occurrence of difficulties in psychosocial and motor adaptation in the girl seemed to be very low. Participation in a specially selected model of support stimulation; there appeared an opportunity to introduce a planned improvement in: the quality of emotional functioning and communication with the environment; increasing the level of adaptation to unexpected changes in the environment; increasing the need for maintaining contact with other people; showing possibilities of experiencing acts of success, recognition, and acceptance of one's own achievements. There was a significant improvement in the states of the nervous and emotional balance of the child. It was decidedly easier to overcome problems in adaptation to the requirements and expectations of the environment. There was a significantly positive change in the status of the physical form of the child's body with a tendency to assume the erect position. Due to the significance of the problem, the issue investigated by the author requires further interdisciplinary research in enlarged research groups.

## REFERENCES

Alfonso V.C., Russo P.M., Fortugno D.A. & Rader D.E. (2005), Critical review of the Bayley Scales of Infant Development - Second Edition: Implications for assessing young children with developmental delays. *The School Psychologist, Spring,* 67-73.

Als H., Lawhon G., Duffy F.H., McAnulty G.B., GibesGrossman R. & Blickman J.G. (1994), Individualized developmental care for the very low-birth-weight preterm infant. Medical and neurofunctional effects. *JAMA No. 272*, 11, 853-858.

Bidzan M., Preis K., Senkbeil K., Świątkowska-Freund M. & Pankrac Z. (2010), The psychomotor development of children from twin pregnancies with TTTS and parental attitudes. Preliminary report. *Prenatology, Neonatology and Gynaecology* No. 3, 1, 34-40.

Blondel B., Kaminski M. (2002), Trends in the occurrence, determinants and consequences of multiple births. *Semin. Perinatol*. 26, 239-249.

Chrzan-Dętkoś M. (2012), *Prematurely born children. Psychomotor development in first years of life,* Harmonia Universalis, Gdańsk.

Chrzan-Dętkoś M., Bogdanowicz M. (2010), Psychomotor development of prematurely born twins. In T. Rostowska, B. Pastwa-Wojciechowska (Eds.), *Development of twins during their lives. Biopsychological aspects*, Impulse Publishing House, Cracow.

Dickinson J.E., Duncombe G.J., Evans S.F., French N.P. & Hagan R. (2005), The long term neurologic outcome of children from pregnancies complicated by twin-to-twin transfusion syndrome. *An International Journal of Obstetrics & Gynaecology* 112, 1, 63-68.

Feldman R., Eidelman A.I. (2003), Skin-to-skin contact (Kangaroo Care) accelerates autonomic and neurobehavioural maturation in preterm infants. *Developmental Medicine & Child Neurology* No. 45, 274-281.

Forsblad K., Källén K., Maršál K. & Hellström-Westas L. (2007), Apgar score predicts short-term outcome in infants born at 25 gestational weeks. *Acta Paediatrica* 96, 2, 166-171.

Hamuda M., Kowalczykiewicz-Kuta A. (2006), The survival rate of prematurely born neonates with body weight below 1500 g in Opole voivodship in 1998-2003. *New Pediatrics No. 1*, 27-31.

Kornacka M.K., Sonczyk A. (2008), A neonate from multifetal pregnancy requiring intensive care - a growing or a decreasing problem. Perinatology, *Neonatology and Gynaecology No. 1*, 4, 260-264.

Kornas-Biela D. (2010), Twins and multiples in prenatal and perinatal development periods. In T. Rostowska, B. Pastwa--Wojciechowska (Eds.), *Development of twins during life. Biopsychological aspects*. Impulse Publishing House, Cracow.

Malinowski W., Jóźwiak P. (2012), TTTS in historical records, part 1. Pathogenesis and diagnostics. *Perinatology, Neonatology and Gynaecology No. 5*, 3, 162-168.

Malinowski, W., Ropacka, M. (2003). Twin-to-twin transfusion syndrome. In G. H. Bręborowicz, W. Malinowski & E. Ronin-Walkowska (Eds.). *Multifetal pregnancy, Scientific Publishing Centre*, Poznań.

McIntosh J., Meriki N., Joshi A., Biggs V., Welsh A.W., Challis D. & Lui K. (2014), Long term developmental outcomes of pre-school age children following laser surgery for twin-to-twin transfusion syndrome. *Early Human Development 90*, 12, 837-842.

Michałus I., Haładaj K. & Chlebna-Sokół D. (2009), Disorders in the health state of a baby born as the „donor" from complicated single chorionic twin pregnancy with TTTS, *Paediatric Review No. 39*, 1, 65-67.

Pease A., Pease B. (2018), *Body language.* Rebis Publishing House, Poznań.

Preis K., Świątkowska-Freund M., Leszczyńska K., Bidzan M. & Pankrac Z. (2010), Pregnancy after TTTS treatment, *Perinatology, Neonatology and Gynaecology* No. 3, 1, 23-26.

Preis K., Świątkowska-Freund M. & Pankrac, Z. (2010), Is it worth performing selective laser photocoagulation of communicating vessels (SLPCV) in the first degree of progression of twin-to-twin transfusion syndrome (TTTS) according to Quintero? *Perinatology, Neonatology and Gynaecology No. 3, 1*, 27-29.

Przyrowski Z. (2011), *Sensory Integration. Introduction to the theory, diagnosis and therapy*, EMPIS, Warsaw.

Quintero R.A., Morales W.J., Allen M.H., Bornick P.W., Johnson P.K. & Kruger M. (1999), Saging of twin-twin transfusion syndrome. *Journal of Perinatology 19,* 550-555.

Ropacka-Lesiak M. (2013), Twin-to-twin transfusing syndrome - TTTS, *Perinatology, Neonatology and Gynaecology No. 6, 3,* 174-177.

Świątkowska-Freund M., Preis K. (2010a), Diagnostic criteria of twin-to-twin transfusing syndrome (TTTS). *Perinatology, Neonatology and Gynaecology No. 3, 1*, 20-22.

Świątkowska-Freund M., Preis, K. (2010b), Therapy of twin-to-twin transfusing syndrome. *Perinatology, Neonatology and Gynaecology. No. 3, 2*, 104-107.

Szymankiewicz M. (2010), Infantile incidence and mortality from multiple pregnancies. *Perinatology, Neonatology and Gynaecology. No. 3, 4*, 245-248.

Vanderbilt D., Schrager S., Lanes A., Hamilton A., Seri I. & Chmait R. (2013), Two-year neurodevelopmental outcomes in children treated with laser surgery for twin-twin transfusion syndrome (TTTS), *American Journal of Obstetrics & Gynecology, 208, 1, 86.*

Vanderveen J., Bassler D., Robertson C. & Kirpalani H. (2009), Early intervention involving parents to improve neurodevelopmental outcomes of premature infants: a meta-analysis. *Journal of Perinatology 29*, 343-351.

# Personal Predictors of Parents' Educational Aspirations for their Children with Disabilities

Janusz Kirenko[1] and Piotr Alfred Gindrich[2]

[1]Faculty of Pedagogy and Psychology, Teacher Education and Health Education Department,
Maria Curie-Sklodowska University, Lublin, Poland
[2]Faculty of Pedagogy and Psychology, Special Psychopedagogy and Special Sociopedagogy Department,
Maria Curie-Sklodowska University, Lublin, Poland

**ABSTRACT**

In order to address the main research problem, the authors determined the correlation between personal predictors, i.e. the level of self-esteem measured by Fitts' Tennessee Self-Concept Scale, the styles of coping with stress examined by Endler & Parkers' Coping Inventory for Stressful Situations, the intensity of social support measured by Norbeck Social Support Questionnaire, and the level of educational aspirations of parents of children with disabilities, assessed by K. Parental Aspirations Questionnaire. The research involved 247 mothers and fathers of children with visual, auditory, motor and intellectual disabilities. Only full families were investigated. The research relied on multiple step-wise regression analysis, factor analysis, and path analysis for mothers and fathers separately. The high level of aspirations for the education of children with disabilities was dependent on the positive self-esteem of both mothers and fathers. The article presents a discussion of the results, study limitations, practical implications and future research areas.

*Keywords:* educational aspirations; parents; children; disability; personal predictors

## INTRODUCTION

Raising a child with disability is a major challenge, particularly for parents. They usually experience higher levels of stress than parents of children without disabilities (Paster, Brandwein, & Walsh, 2009; Slattery, McMahon, & Gallagher, 2017; Hsiao, 2018). Among factors that can add to the stress of parents of children with developmental disabilities are high intensity behavioral problems, higher care demands, accumulation of financial difficulties, inadequate cooperation with care professionals and schools, and lack of support in formal and informal contexts (Phillips, Conner, & Curtner-Smith, 2017). Moreover, families whose members are people with intellectual disabilities and developmental disorders may experience a stigma, which may have a negative impact on coping and social support, causing social isolation (Mitter, Ali, & Scior, 2019). Some studies also point out that mothers and fathers may be adverse to their child's disability in different ways and have different needs for coping. Selected research results report, for example, greater depression, a stronger sense of the burden of childcare associated with more frequent absenteeism from work and lower earnings, and increased stress for mothers compared to fathers of children with disabilities (Neely-Barnes & Dia, 2008).

Many studies show that optimal psychosocial functioning of parents of children with Down syndrome and other disabilities, good family adaptation and mental health can be associated with parental self-esteem (Thompson, Hiebert-Murphy, & Trute, 2013); social support and coping (Grant, Cross, Wraith, Jones, Mahon, Lomax, Bigger, & Hare, 2013; Poon, Koh, & Magiati, 2013; Peer & Hillman, 2012; Hsiao, 2018; Onyedibe, Ugwu, Mefoh, & Onuiri, 2018). Therefore, in the presented research, self-esteem, social support and coping were identified as key personal predictors of parental aspirations for the education of children with disabilities. On the other hand, from an educational perspective, the importance of parents' educational aspirations is reflected in the fact that these aspirations constitute a determining factor for active participation and involvement of parents in the education and upbringing of their children (Vryonides & Gouvias, 2012; Wheeler, 2018). Thus, understanding the interdependencies between self-esteem, social support, coping of parents and educational aspirations for their children with disabilities can contribute to a better understanding of the determinants of good family adaptation and high quality of life.

Aspirations are sometimes equated with hopes, wishes, dreams, ambitions, and goals. They may represent an optimistic attitude towards the future or a pessimistic attitude towards the present when they illustrate desires, ambitions and longing for what a person is not, or for what he or she cannot do, or for what he or she does not have. They can be based on rationality, emotion, idealism, or pragmatism. There are many interpretations, applications, and levels of scientific analysis which are related to aspirations. They can be associated with aptitudes, the state of satisfaction with someone or something, peace of mind or evaluation or judgment (see Hart, 2016). Considering the functioning of a disabled child in school, it is vital to consider parents' aspirations for their child's education. Parents' educational aspirations for their children are important because they can directly influence the level of parental involvement in education, e.g. in more fruitful cooperation with the school, regardless of the child's level of disability (Vryonides & Gouvias, 2012; Tynkkynen, Vuori, & Salmelo-Aro, 2012; Fishman & Nickerson, 2014; Rutherford, 2015). Distinguishing between parents' aspirations and expectations may be a source of conceptual controversy. Yet, parents' aspirations can be differentiated from expectations since the former usually relate to the desires, wishes, or goals parents have regarding their children's future achievements, while the latter refer to actual parental expectations for their children's achievements (Seginer after Yamamoto & Holloway, 2010). Although parental aspirations and expectations are semantically distinct, they are sometimes used interchangeably. From time to time researchers treat parental aspirations and expectations as separate constructs, but sometimes they also combine them into a single dimension (Yamamoto & Holloway, 2010). Research on parental aspirations and expectations for the education of children with disabilities reveals certain barriers and limitations in discovering the true significance of these aspirations and expectations for the functioning of families raising children with developmental disorders. On the one hand, researchers emphasize the ambiguity and diversity of these aspirations. Besides, research results are ambiguous because the type of disability and the age of the child influence parents' aspirations and expectations regarding the child's education (Poon, Koh, & Magiati, 2013; Barak, Elad, Silberg, & Brezner, 2017).

Parental self-esteem may be a factor countering the negative influence of stigmatization as it is one of the strongest predictors of a person's mental well-being and satisfaction with life. Research on disability groups shows that low self-esteem among parents is associated with a weaker sense of well-being, inner stigma, social exclusion, and a perception of being discriminated by society, whereas high self-esteem means better family functioning (Lu, Yang,

Skora, Wang, Cai, Sun, & Li, 2015). Some studies confirm that low self-esteem among parents (both fathers and mothers) is associated with the occurrence of behavioral disorders in their children (Finken & Amato, 1993). In contrast, studies of the impact of self-esteem on the relationship between perceived stigma and symptoms of depression in parents of children with intellectual disabilities and developmental disorders demonstrate that parents with high levels of stigma and low self-esteem reveal more symptoms of depression, regardless of gender (Mitter, Ali, & Scior, 2019). There are also research reports confirming the interrelation between the overall parental self-esteem, mainly that of mothers, and the raising of children. For example, mothers with high overall self-esteem are more likely to express love and affection, rationally guide their children's development, encourage and care for them, and show less violence and aggression towards them (Kopala-Sibley, Zuroff, & Koestner, 2012). Research conducted by Kopala-Sibley et al. (2012) helped discover that mothers with high self-esteem had weaker tendencies for emotional rejection of children. A mother's low self-esteem can also be a symptom of depression. Depression and low self-esteem can have a negative impact on other family members. Moreover, a depressed mother with low self-esteem has difficulties emanating emotional warmth and patience, and setting clear boundaries in a mutual relationship with her child (Meyer, Varkey, & Aguirre, 2002).

The results of many studies and relevant specialist literature confirm our assumption that social support is a protective factor, a buffer against negative effects of stressful events. The study of the buffer function against disease is most commonly associated with the measurement of perceived social support (Jackson, Enderby, O'Toole, Thomas, Ashley, Rosenfeld, Simos, Tokatlian, & Gedye, 2002). Social support can protect parents from harmful effects of stressors that interfere with optimal raising of children and family life. It is related to mother's self-esteem, sensitivity and patience, which in turn enhances family coherence and well-being. Mothers who feel that the support they receive is insufficient may experience depression more often and tend to raise children inadequately, which leads to family tensions (Belsky after Meyer, Varkey, & Aguirre, 2002). Social support is also the strongest predictor – apart from self-esteem – of the subjective sense of parents' well-being as caregivers for children with disabilities. In their research on the impact of self-esteem and social support on the relationship between the stigma and symptoms of depression in parents of children with intellectual disabilities and developmental disorders, Cantwell et al. (2015) found a correlation between the stigma of the caregiver,

social support, self-esteem, and symptoms of depression. Emotional support was a moderator variable in a dependency path: high perceived stigma - low self-esteem - more frequent depressive symptoms while emotional support had a protective effect against depression caused by the stigma of the caregiver with low and average self-esteem. High self-esteem alone protected the mental health of the parent, regardless of whether perceived emotional support was low or high (Cantwell, Muldoon, & Gallagher, 2015). Social support can also be a mechanism where the optimism of the parent influences his or her perception of the benefits of caring for a child with disability. The presence of social support networks is the basis for optimism that allows parents to see benefits despite facing stressful events or conditions (Slaterry, McMahon, & Gallagher, 2017). Some researchers observed that perceived social support of parents correlated negatively with the stress associated with raising a child with Down syndrome. This observation indicates that the higher the social support, the lower the level of this kind of stress. This result is consistent with the hypothesis that strong social support acts as an anti-stress buffer. In addition, higher social support perceived by the parent reduces the level of stress in the caregiver by stimulating coping in the family, which is a manifestation of resilience. (Onyedibe, Ugwu, Mefoh, & Onuiri, 2018).

Coping refers to the cognitive and behavioral reactions of a person when faced with stress or other adversities (Lazarus & Folkman, 1984). This original approach by Lazarus & Folkman forms the basis for newer tools to measure coping styles, such as the Coping Inventory for Stressful Situations (CISS) developed by Endler & Parker in 1999. This tool classifies coping styles as task-oriented, emotion-oriented, and avoidant. Coping style is an important construct for understanding individual differences in susceptibility to mental and somatic health problems. For example, Endler, Parker, & Butcher revealed that emotion-oriented coping strategies combine with anxiety and depression; and that a person's inability to successfully use this coping strategy is a predictor of maladaptation and health problems (Jang, Thodarson, Stein, Cohan, & Taylor, 2007). It is emphasized that if parents of children with disabilities have developed appropriate and effective strategies of coping with stress, they enjoy a great chance of meeting the challenge of successfully raising children with disabilities. The presence of a disabled child in the family can strengthen family ties if parents adopt appropriate coping strategies to help them in difficult situations. Furthermore, some studies reveal that parents of children with disabilities have different coping strategies than parents of children without disabilities because the former

group experience more stressors and diverse situations in their lives than the latter (Paster et al., 2009).

There is a growing literature on the subject, especially research concerning the variables specified above, i.e. aspirations of parents for education of children with disabilities (see Poon et al., 2013; Fishman & Nickerson, 2014; Barak et al., 2017) and personal dispositions, i.e. self-esteem, social support and coping (see Grant et al., 2013; Lu et al., 2015; Onyedibe et al., 2018), implies a need for obtaining empirical data confirming their relatedness. Therefore, the basic research problem of this article is formulated as the following question:

> *Are there interdependencies between personal dispositions (predictors) and educational aspirations of mothers and fathers for their children with disabilities (explained variable)?*

However, the main objective of the research is to assess the interdependencies between the variables presented above. Specific research questions focus on determining the sign (positive/negative) and power of correlations between personal dispositions, i.e. the level of self-esteem and self-concept measured by Fitts' Tennessee Self-Concept Scale (TSCS), the styles of coping with stress as measured by the Endler & Parker's Coping Inventory for Stressful Situations (CISS), the level of social support as researched by The Norbeck Social Support Questionnaire (NSSQ), and the level of educational aspirations determined by K. Parental Aspirations Questionnaire (KAR) in groups of parents (mothers and fathers) of children with disabilities. With regards to the research question concerning the above-mentioned interdependencies, which delineates the main research problem of this article, the main hypothesis was formulated based on an analysis of the current state of research in this field. Therefore, it was assumed that:

> *The higher the level of personal dispositions of mothers and fathers with regard to self-esteem and self-concept, coping styles and social support, the greater the intensity of their educational aspirations for their children with disabilities.*

## METHOD

**Participants, sample characteristics and data collection**
Research involved 247 mothers and fathers of children with visual (65 pairs - 18.73%), auditory (59 pairs - 17.00%),

motor (63 pairs - 18.16%) and intellectual (60 pairs - 17.29%) disabilities[1]. In total, 361 families with disabled children were examined, including single-parent families, with single mothers more often than single fathers, yet only full families were included in the final analysis. Children with disabilities were aged between 3 and 21 years, with an average age of 7.25 years. In terms of gender, boys slightly outnumbered girls in the research group of children with disabilities. As for the relationship between gender and type of disability, the predominance of boys over girls was most evident in the subgroup with visual disabilities (56.70% of boys and 43.21% of girls), and least evident for children with auditory disabilities (52.94% of boys and 47.06% of girls). The sociodemographic details of the research reveal a high diversity in the structures of the researched families raising children with disabilities. The most frequent model was that of a mother and a father with two children (29.14%), while the second largest group represented a "two parents and a child family model" (20.64%). The third on the list was a "two parents and three children family" (19.83%). The least represented models were "parents and four children and one family member" (1.61%) and "parents and two or three children and three or five family members" (0.40%). The age of the researched parents ranged from 22 to 56, with mothers younger than fathers. Most of the researched parents lived in cities (75.30%), while the respondents from rural areas accounted for 24.69% of the research group. Both mothers and fathers had the highest incidence of secondary education (55.06% and 37.65% respectively), with mothers having this educational level more frequently than fathers. Similarly, higher education was slightly more common among mothers than fathers (20.64% and 17.40% respectively). It should also be noted that fathers of children with disabilities were more likely to have an elementary school education (8.90%) than mothers (4.04%). Percentages of educational level observed in the sample group indicate that mothers were slightly more educated than fathers. By contrast, compared to fathers, the researched mothers were less likely to be employed (working mothers constituted 53.87% and employed fathers 78.36% respectively). Housing conditions of the researched families were also investigated through determining the number of rooms occupied by parents and the number of children with disabilities who had their own room. In most cases, the interviewed parents had three rooms at their disposal (38.05%), followed by families with two (23.07%) and

---

[1] Research material was collected by MA students of Maria Curie-Skłodowska University as part of their MA seminar projects held by the authors of this article.

four (20.64%) rooms respectively. At the same time, more than half of the children with disabilities in the research group had their own room (63.67%). The percentages and numbers point to average housing conditions of the researched families. Family income was also subject to analysis. Responses of the interviewed parents most often suggested limited financial resources, minimally sufficient to meet the most important life needs, but without any savings (36.84%). Only a slightly less frequent response indicated that the funds parents had were only sufficient to cover the most basic life needs, and it is necessary for them to save on food and clothing (36.43%).

The parents were the residents of south-eastern Poland and the Lublin region. The research group of parents was completed through the agency of their children. The trained university students-pollsters were collecting the data (home addresses) on the families raising children with disabilities, making use of three independent sources. The first one, taking into account the children with sensory and intellectual disabilities, involved the teachers employed in special education centers and nursery schools with self-contained classrooms, mainstream, inclusive schools as well as preschools. The second one was the Lublin Forum of Organizations for The Disabled – Regional Council, forming a union of 45 non-governmental organizations supporting children, youth, adults with various disabilities and their parents. The third source constituted the individual relations with families, the societies of parents of children with cerebral palsy, physical disability; the national organizations helping people with sensory impairments (Polish Association of The Blind, Polish Association of The Deaf) and counseling centers. Thanks to the above-mentioned information, the university students-pollsters could access the population of parents. The parents agreed to participate in the study before they started to fill in the questionnaires.

## INSTRUMENTS

### Parental Aspirations Questionnaire (PAQ) by K.

PAQ is a Polish tool. It was designed with the use of exploratory factor analysis, which does not assume a structure for the factor system and does not require hypotheses. PAQ is based on correlations between different questionnaire items so that factors with coherent content can be distinguished. It is therefore a method of searching data in order to find the best arrangement of factors and, consequently, to determine the structure described by the highlighted factors. The questionnaire items address

parental aspirations not only in their qualitative dimensions, but also with regard to specific behaviors relating to parents' social relationships. The five-point Likert scale was used with answers spanning from strongly agree to strongly disagree.

### Tennessee Self-Concept Scale (TSCS) by Fitts

TSCS is a well-standardized research tool with a wide range of applications, enabling the subject to make a multidimensional self-description of one's concept of self and self-esteem. The TSCS scale consists of 100 descriptive items the respondent uses to portray his or her own self-image. It can be used in different groups of subjects, from healthy and well-adapted people to people with psychopathological disorders. The data processing procedure used in this research, in a modified clinical-research version of the questionnaire, involved determining the levels of self-esteem and self-perception as well as other properties of the self (defensiveness, consistency, integrity, variability etc.) of the researched mothers and fathers.

### Norbeck Social Suppor Questionnaire (NSSQ)

NSSQ enables a description of sources of social support and provides information about persons who are part of the social network providing emotional and instrumental assistance to a person, or in this case to a family, in their efforts to cope with adversity. The questionnaire consists of three parts. The first one collects information about significant persons, i.e. persons who are important for the person completing the questionnaire, or who provide for that person, and about the nature of the relationship between the researched person and each member of his or her social network. The second part of the NSSQ consists of eight questions concerning the persons listed in the first part. In part three, the respondents answer the alternative question: Did you lose an important contact during the past year due to a change of job, divorce, separation, death or other causes? (see supplemental material concerning PAQ, TSCS, NSSQ).

### Coping Inventory for Stressful Situations (CISS) by Endler and Parker

In its Polish adaptation by Szczepaniak, Strelau, & Wrześniewski, the CISS questionnaire consists of 48 statements on different behaviors of people in stressful situations. The subject determines the frequency of his or her behaviors in difficult and stressful situations on a five-point scale. The results are grouped in three scales: SSZ - Task-Oriented Style, SSE - Emotion-Oriented Style, and SSU - Avoidant Style. The Avoidant Style (SSU) can take two forms: ACZ

- Avoidant Distracted, where a person seeks distractions as surrogate actions, and PKT - Avoidant Social, involving search for social contacts as a coping strategy.

### Interview Questionnaire by K.

An interview questionnaire by K. was developed in order to characterize the researched families.

### DATA ANALYSIS

To address the main research problem, the techniques of structural equation modelling were used to determine the share of such explanatory variables as: self-esteem, coping with adversities, and sense of social support as potential predictors of educational aspirations. These interrelationships were revealed in groups of interviewed mothers and fathers by means of multiple stepwise regression analysis, which makes possible determining the system of explanatory variables that are important to explain the explained (response) variable and helps estimate the power of the interrelationship in the constructed regression model. Performing regression analysis was essential to identify groups of explanatory variables by means of factor analysis, which involved only those variables that significantly correlated with parental aspirations. The method of principal component analysis was applied, and the calculations were performed taking into account standardized data. Additionally, path models (paths) were created separately for investigated mothers and fathers. However, they were not created as separate for mothers and fathers of children with four types of disabilities due to an insufficient number of respondents enabling the construction of path models. The path analysis for the diagnosis of variables predictive of the parental aspirations of mothers and fathers gathered a total of 247 mothers and the same number of

fathers, yet 2 persons were excluded from the sample due to data gaps. Therefore, the path models were created for N=245, separately for each group of parents.

### RESULTS

### Path Models for Personal Predictors of the Educational Aspirations of Mothers of Children with Disabilities

Step-wise regression was performed to check which analyzed variables are strong predictors of educational aspirations in the group of mothers of children with disabilities.

The explanatory variables that are included in the regression model for the group of researched mothers are not numerous and their level of variability is not high: it reaches 26% in explaining the response variable of educational aspirations. Four negative correlations are reported, which makes this type of correlation prevalent (see Table 1). The two positive correlations can be interpreted as indicative of the fact that the higher educational aspirations of mothers for their children with disabilities are dependent on a greater determination and confidence in the way they perceive and describe themselves at different levels of self in addition to their more positive self-perception as members of the family. On the other hand, when interpreting the negative correlations, one can infer that the intensity of mothers' educational aspirations is contradictory to: their ability to self-criticize, the degree of agreement or disagreement with positive and negative statements (regardless of what they refer to) and the degree of variability or contradiction between mothers' responses to positive and negative statements within the same area of self-perception. Also, the intensity of mothers' educational aspirations contrasts with the conflict of consent (tendency to emphasize and affirm positive attributes of oneself and neglect negative ones excessively) or denial (tendency

Table 1    **Results of Multiple Regression Analysis for The Explained Variable Educational Aspirations and The Explanatory Variables in the Researched Group of Mothers of Children with Disabilities**

|  | **EXPLANATORY VARIABLE** Indicators | **R = .52** β | **R2 = .26** B | **F (6.23) = 14.93** t° | **P < .001*** p |
|---|---|---|---|---|---|
| self-esteem | Distribution | .04 | .28 | 3.00 | .003* |
|  | self-criticism | -.15 | -.19 | -3.06 | .002* |
|  | total net conflict score | -.03 | -.24 | -2.65 | .008* |
|  | true/false score | -1.72 | -.28 | -4.14 | .000* |
|  | family self | .17 | .28 | 3.67 | .000* |
| social support | emotions | -.07 | -.32 | -5.61 | .000* |

Note * – p < .05; ~ – p approximate significance

toward an exaggerated denial of negative attributes of self, with a simultaneous confirmation of positive ones). Moreover, social support available from various sources, perceived by mothers in its emotional dimension, pertaining to emotional reactions and experiences in an unexpected traumatic situation which causes an imbalance in relations with the social environment, constitutes an inhibitor for the development of the aspirations of mothers for the education of their children with disabilities.

Consequently, the researched personal dispositions, i.e. self-assessment, styles of coping with adversities and social support were combined into groups by means of factor analysis with the use of the method of principal component analysis. The determinant of the matrix was .007, and Bartlett's test was statistically significant: chi2(55) = 1199.68; p < .001. The KMO coefficient reached the level of .65. The resulting screen graph suggested extraction of three factors, as accepted by the authors. Due to the fact that the obtained factors were correlated, oblimin rotation was carried out and the factor loadings were extracted from the matrix of rotated components (see Table 2).

Table 2    **The Model Matrix for Factor Analysis in the Group of Mothers of Children with Disabilities**

| COMPONENT | 1 | 2 | 3 |
|---|---|---|---|
| total positive score | .95 | | |
| true/false score | .82 | | |
| family self | .73 | | |
| physical self | .72 | | |
| social self | .69 | | |
| self-criticism | .41 | | |
| total net conflict score | | .90 | |
| distribution score | | .74 | |
| support-emotions | | .60 | |
| emotion-oriented | | | .78 |
| task-oriented | | | -.64 |

Next, the factor values were recorded using the Anderson-Rubin method and the resulting factors were used in path analysis. The first factor (Factor 1) was a group of variables with positive loadings only, referring to self-esteem and self-perception. It contained: Overall Positive Score, Truth/False Score, Family Self, Physical Self, Social Self and Self-Criticism. Factor 1 can be called a general and

specific, positive perception of oneself in the somatic, family, and social spheres. Factor 2 referred to contradictions in self-perception, confidence in one's self-concept, and emotional dimension of social support perceived by the researched mothers. Thus Factor 2 focused on three positive loadings related to the variables: Total Net Conflict Score, Distribution Score, and Support-Emotions. Factor 2 can be called an entrenched self-perceptive conflict of consent or denial, combined with the need for emotional support. The last principal component (Factor 3), which includes Emotion-Oriented Coping Style with positive loading and Task-Oriented Coping Style with negative loading, can be called a disordered emotional attachment because it pertains to an emotion-oriented coping style, accompanied with a smaller proportion of a task-oriented style, which can be the result of mothers' depression and anxiety (see Jang et al., 2007).

Consequently, the identified factors were employed to build a general path analysis model for the researched educational aspirations and an additional, specific model, based on the results of step-wise regression analysis. The general model was constructed using maximum likelihood estimation while the specific model was constructed using an asymptotically unbiased method because of the significantly non-normal distribution of variables. Satisfactory indicators were obtained each time, matching the model with the empirical data. The matching index values are specified below Figures 1 and 2.

Factor 3, i.e. disordered emotional attachment, has the largest predictive power in the general model (Figure 1). Therefore, it can be predicted that the higher intensity of this factor in the group of interviewed mothers, especially their emotion-oriented style of coping, is coupled with lower educational aspirations for their children.
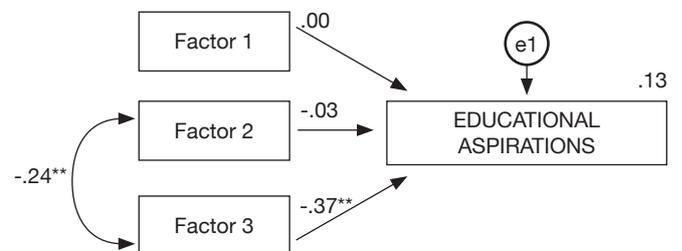


Figure 1. **The Path Analysis Model for the Educational Aspirations of Mothers of Children with Disabilities**
**chi²/df = 1.25; GFI = 1.00; AGFI = .98; RMSEA = .03**

On the contrary, in the specific model (Figure 2), all the predictors are statistically significant, but their predictive configurations call for a different interpretative approach. Analyzing the meaning of the observed interdependencies, one can conclude that the higher self-esteem of mothers as family members and their determination and confidence in their self-image allow predicting an increase in the level of their educational aspirations for their children. These aspirations are "in the predictive sense lowered" by mothers' perception of emotional support from various sources, their level of self-criticism, the degree of their agreement or disagreement with positive and negative statements, regardless of what they refer to, the degree of differentiation or contradiction between their responses to positive and negative items concerning the same area of

self-perception as well as by their conflict of consent (tendency to emphasize and affirm positive traits of self and to neglect excessively negative traits) or denial (tendency toward exaggerated denial of negative traits of self with a simultaneous affirmation of positive traits).

In the group of fathers of children with disabilities, step-wise regression was also performed to determine which explanatory variables are predictive factors of educational aspirations. The results of multiple regression analysis of the inter-dependencies of educational aspirations indicate that in the group of researched fathers the coefficient of determination between this disposition and the independent variables reaches 17% of the total variance explained. Using the model of linear step-wise regression, seven partial predictive indicators were identified at a statistically significant level, with a slight predominance of coefficients with a negative sign (see Table 3). Therefore, the predicted level of educational aspirations in the researched group correlates positively mainly with self-esteem and personality self-evaluation, excluding somatic and social aspects, and with the perception of oneself as a valuable family member as well as with the tendency to perceive some aspects of the self, particularly identity, self-acceptance and satisfaction with oneself and one's behavior in isolation from other spheres of personality. However, the emergence of greater aspirations of fathers for the education of their children with disabilities can be hampered by results in such aspects of their self-perception as: healthy openness and self-criticism, perception of one's self-esteem as a participant in social relations other than with family and relatives, and false cohesion and rigidity in the perception of various spheres of the self: physical, moral and ethical, personal, family and social, as well as perceived social support in the emotional dimension.
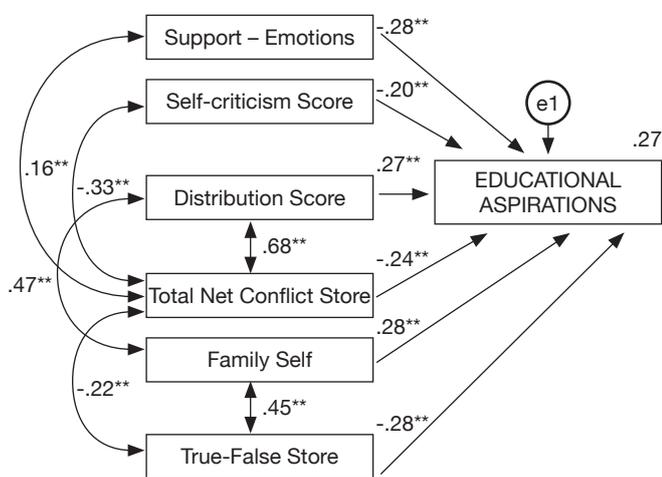


Figure 2. **The Specific Path Analysis Model for the Educational Aspirations of Mothers of Children with Disabilities**
**chi²/df = 2.10; GFI = .99; AGFI = .95; RMSEA = .07**

Table 3      **Results of Multiple Regression Analysis for the Explained Variable Educational Aspirations and the Explanatory Variables in The Researched Group of Fathers of Children with Disabilities**

| | **EXPLANATORY VARIABLE INDICATORS** | **R = .44**<br>β | **R2 = .17**<br>B | **F (7.23) = 8.19**<br>t° | **P < .001\***<br>p |
|---|---|---|---|---|---|
| self-esteem | family self | .13 | .17 | 2.39 | .018* |
| | column total variability | -.16 | -.27 | -3.64 | .000* |
| | row total variability | .20 | .26 | 3.54 | .000* |
| | self-criticism | -.15 | -.16 | -2.56 | .011* |
| | personal self | .17 | .19 | 2.68 | .008* |
| | social self | -.15 | -.17 | -2.19 | .030* |
| social support | emotions | -.05 | -.22 | -3.49 | .001* |

Note * – p < .05; ~ – p approximate significance

Similarly, the explanatory variables for the researched fathers were combined into groups by means of factor analysis with the use of principal component analysis. The determinant of the matrix was .0021, the KMO test result was .72, and the Bartlett's test was statistically significant: chi2(105) = 1806.81; p < .001. The generated screen test graph indicated four factors which were subsequently extracted by means of oblimin rotation, because – analogically to the former group of subjects – the analyzed factors were correlated. The factor loadings were extracted from the model matrix.

In the next step, factor values were recorded using the Anderson-Rubin method and the resulting factors were subject to path analysis. All the factors were positively loaded. The first one (Factor 1) deals with positive self-esteem and self-perception since it gathers the positive loadings concerning the fathers' self: The Truth/False Score, Personal Self, Social Self, Moral-Ethical Self, Behavior, Family Self and Self-Criticism. The second factor (Factor 2) can be called "self-conflicted I" because it refers to contradictions and inconsistencies in the perception of self, including the conflict of consent or denial. Thus, this factor can be said to be comprised of Total Conflict Score and Total Net Conflict Score. At the same time, the third factor (Factor 3) can be described in terms of false, rigid integration of the self, combined with a positive perception of emotional support as it is made up of a set of variables concerning cohesion within the self-concept and the emotional dimension of social support. Negative loadings have been found here: Overall Variability and Row Total Variability, and a positive loading for Support-Emotions. The last factor, i.e. Factor 4, which can be called anxiety-based avoidance, includes positive loadings of Avoidant and Emotion-Oriented Coping Styles as well as one negative loading of Task-Oriented Style. This factor implies a greater role of avoidant and emotion-oriented coping styles than of the task-oriented one (see Table 4). The factors discussed above enabled the construction of path analysis models for the educational aspirations of the researched fathers for their children with disabilities. The analysis was performed with the use of the maximum likelihood estimation method. In order to determine precisely which explanatory variables from the particular sets of predictive factors have the power to explain the level of educational aspirations of the examined fathers, specific models were also constructed. The performed analysis used the asymptotically unbiased method since the distribution of variables deviated significantly from the normal distribution.

Figures 3-4 show path analysis models for the predictors of educational aspirations of the interviewed fathers, along with the relevant fit index values given below.

Table 4          **The Model Matrix for Factor Analysis in the Group of Fathers of Children with Disabilities**

| COMPONENT | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| true/false score | .82 | | | |
| personal self | .78 | | | |
| social self | .77 | | | |
| moral-ethical self | .77 | | | |
| behavior | .74 | | | |
| family self | .48 | | | |
| self-criticism | .35 | | | |
| total conflict score | | .96 | | |
| total net conflict score | | .95 | | |
| row total variability | | | -.87 | |
| total variability score | | | -.83 | |
| support-emotions | | | .54 | |
| avoidant | | | | .81 |
| emotion-oriented | | | | .68 |
| task-oriented | | | | -.53 |

The factor of the false, rigid integration of the self, combined with a positive perception of emotional support, constitutes a significant predictor of the educational aspirations of the researched fathers for their children with disabilities, since it can help predict a reduced level of intensity of the explained variable (see Figure 3).
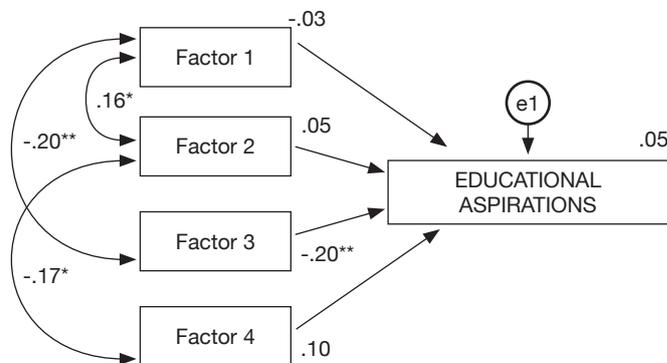


Figure 3. **The Path Analysis Model for the Educational Aspirations of Fathers of Children with Disabilities chi²/df = .59; GFI = 1.00; AGFI = .98; RMSEA = .00**

In the specific path model, only the Social Self is a non-significant predictor, and for the Family Self the level was approximately significant. Analyzing statistically significant positive correlations, one may observe a clear tendency on the part of fathers toward an incoherent perception of such dimensions of the self as identity, self-satisfaction, and satisfaction with one's behavior as well as subjective sense of self-esteem and self-adequacy. This paternal tendency allows a prediction of an increase in the level of educational aspirations for their children. Moreover, looking at the negative correlations, one can predict that the level of aspirations of the researched fathers is lowered by perceived emotional support, their tendency toward a rigid categorization of the particular spheres of the self (i.e. physical, moral-ethical, personal, family, social) as well as toward

seeing them in isolation from other aspects of the self-image and the ability of being self-critical (see Figure 4).

The models are constructed on the basis of an assumption of cause-and-effect relationships. Table 5 presents all the identified predictors of family aspirations and their power. As it turned out, the greatest predictive power regarding educational aspirations of the researched mothers is exhibited by the set of variables addressing disordered emotional attachment while, in the case of fathers, the predictive significance is displayed by a false, rigid integration of the self, combined with a positive perception of emotional support. Both for the first and the second group, the greater the intensity of these dispositions in the respondents, the lower the educational aspirations for their children (see Table 5).

In the specific path analysis models, the generated predictors were predominantly statistically significant, but their predictive configurations were of varying significance. This diversity most often resulted from the nature of intra-group correlations. The predictors of educational aspirations with the greatest scope and power for the surveyed mothers were the following: Family Self, Truth/False Score and Support-Emotions. In the group of fathers these were: Row Total Variability, Column Total Variability, and Social Support-Emotions. In both groups, the predictive variable Support-Emotions lowered the predictable level of intensity of the explained variable, whereas the variable Family Self increased it. In the group of the researched mothers, the predictors included in the path analysis models allowed a slightly more frequent prediction of a lower level of educational aspirations for their children while in the group of the researched fathers, they allowed an equal degree of prediction of higher and lower educational aspirations.
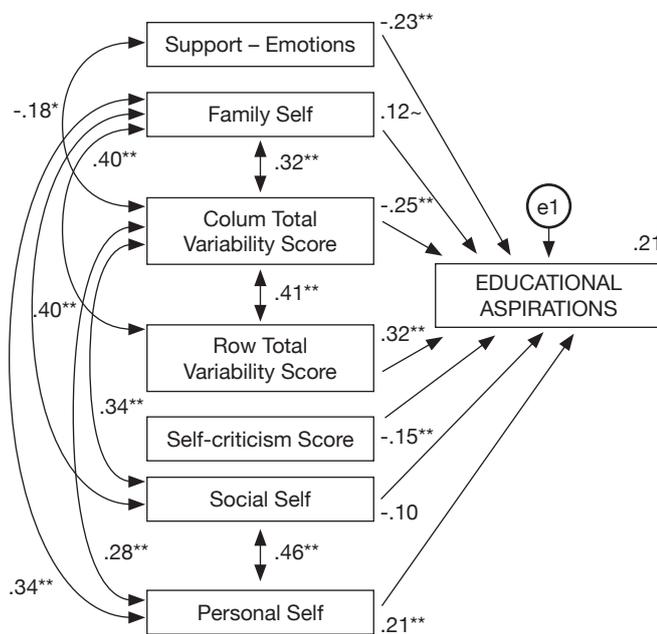


Figure 4. **The specific path analysis model for the educational aspirations of fathers of children with disabilities**
**chi²/df = 1.28; GFI = .99; AGFI = .96; RMSEA = .03**

## DISCUSSION

The main objective of the reported research was to assess the interrelations between the educational aspirations of parents

Table 5          **Predictors of Parental Aspirations for the Overall Group of Mothers and Fathers – Summary**

| PATH MODELS | PREDICTORS IN MOTHERS | PREDICTORS IN FATHERS | EXPLAINED VARIABLES |
|---|---|---|---|
| General | disordered emotional attachment (-.37) | false integration of the self with positive perception of emotional support (-.20) | educational aspirations |
| Specific | family self (.28) true/false score (-.28) support-emotions (-.28) distribution (.27) total net conflict score (-.24) self-criticism (-.20) | row total variability (.32) column total variability (-.25) support-emotions (-.23) personal self (.21) self-criticism (-.15) family self (.12) | |

of children with disabilities and the parents 'personal dispositions (predictors), i.e. self-esteem, styles of coping with stress, and perceived social support. The results of multiple regression analysis and path (general and specific) analysis allow for an observation that there exists a relationship that is differentiated in terms of power and sign between the above-mentioned predictors and the aspirations of mothers and fathers of children with disabilities for their education. This fact allows only for a partial confirmation of the main hypothesis, considering only positive relationships of the specific variables of self-esteem, expressed in the following predictors: Family Self and Distribution Score, with intensified educational aspirations in the group of mothers. In a similar way, one needs to approach the positive relationships of the specific aspects of self-esteem in the following predictors: Row Total Variability, Personal Self and Family Self, with the intensity of educational aspirations in the group of researched fathers. For mothers, the correlations imply that the higher the level of one's self-perception as a family member and the greater one's self-esteem only among the closest family members and relatives, the greater the confidence and determination in the self-concept, the higher the educational aspirations for children with disabilities. On the other hand, for fathers, the correlations indicate that the greater the diversity in self-perception at the levels of identity, self-satisfaction, and satisfaction with one's behavior, combined with the rigid categorization and perception of these spheres of the self in isolation from the others, and the more positive self-esteem, excluding the somatic and social aspects of one's self, the higher the self-esteem one feels as a family member, the higher the level of educational aspirations for the children. It should also be noted that a comparison of the specific path analysis models reveals that all the positive correlations are statistically significant in the group of mothers. In the group of fathers, the first two, with the exception of the last one concerning the Family Self, reach a level of significance. To sum up, mothers and fathers do not really differ in terms of the power and direction of the interdependence between self-esteem and educational aspirations for their children with disabilities, but they do differ with regard to the specific layout of these correlations. Undoubtedly, the positive correlations observed in both groups which allow for the confirmation of the main hypothesis, constitute the first important conclusion of this study. Regardless of the gender of the parent, their high level of aspirations for the education of their children with disabilities depends on positive self-esteem and self-perception. For mothers, these dispositions manifest themselves in a less defensive attitude and openness towards one's own self as well as in the recognition of themselves as valuable family members and relatives. For fathers,

the abovementioned dispositions mean a greater diversity of self-perception, combined with rigid categorization of some aspects of the self: perception of one's identity, self-satisfaction, and satisfaction with one's behavior in isolation from other spheres of the self and high self-esteem, excluding somatic and social aspects of personality. Although no evidence of a link between parents' self-esteem and the level of their aspirations for the education of their children with disabilities was found, there are reports in the relevant literature highlighting the impact of high and low self-esteem of both fathers and mothers on family adaptation related to the experienced stress and behavioral disorders in children (Finken & Amato, 1993; Thompson, Hiebert-Murphy, & Trute, 2013; Lu, Yang, Skora, Wang, Cai, Sun, & Li, 2015). Presumably, high and more positive self-esteem fosters higher parental aspirations since it functions as a factor increasing the level of social adaptation within the family, enhancing mental well-being. It also prevents depression and mitigates the negative consequences of the stigma felt by parenting families, in particular, families of children with disabilities (Meyer, Varkey, & Aguirre, 2002; Kopala-Sibley, Zuroff, & Koestner, 2012; Mitter, Ali, & Scior, 2019).

The remaining interrelations between the predictors - personal dispositions - and the aspirations of parents of both genders for the education of their children with disabilities justify the rejection of the main hypothesis since correlations in these areas are negative. The negative type of interrelation indicates that with the increase in these personal dispositions, the level of parental aspirations will decrease. It can also be said that, contrary to what was expected, both key general predictors, identified by factor analysis and the principal component analysis, negatively correlate with the educational aspirations of parents (both mothers and fathers), which allows for a prediction of a lower level of these aspirations. Interestingly enough, these key general predictors differ in the configuration of the specific variables that make them up. For the case of researched mothers, the general predictor - disordered emotional attachment - includes two styles of coping: Emotion-Oriented (positive) and Task-Oriented (negative). Additionally, there are no variables of self-esteem, self-perception or social support. However, in case of fathers, the general predictor of educational aspirations – the false integration of the self, and the positive perception of emotional support – highlights the greater importance of self-esteem and social support with regard to emotions while neglecting the role played by the style of coping with stress. Although it does not allow us to confirm the adopted hypothesis, the observed regularity deserves further examination. Initially, it can be explained by the differences between mothers and fathers found in

some studies devoted to the interpretation of experiences of raising children with disabilities, the severity of the experienced stress and mental health conditions or strategies for coping with adversities (Neely-Barnes & Dia, 2008).

## PRACTICAL IMPLICATIONS

The results of the presented research imply an important task for psychological and educational practice to enhance levels of self-esteem and self-perception of the researched parents (both mothers and fathers) of children with disabilities in order not only to increase these levels per se, but also to augment the positive self-image of mothers and fathers. Our research showed that higher expectations and aspirations of parents for education of their children with disabilities may be associated with parental high and positive self-esteem. However, a comparative analysis of the specific predictors in the groups of mothers and fathers revealed only a few variables of self-assessment and self-perception that positively correlated with educational aspirations, which can be indicative of a positive self-image of mothers and fathers. The majority of the specific predictors in the groups of mothers and fathers correlated negatively with these aspirations emphasizing the importance of improving self-esteem and self-perception in such detailed aspects of personality as: self-criticism (both groups), conflicting aspects in self-esteem, and false self-affirmation (mothers), and isolation of some spheres of self-perception from the others (fathers). In addition, the second important conclusion from the above analysis is the perceived emotional support which plays the role of an inhibitor of educational aspirations of both mothers and fathers. It is likely that a reduction in emotional involvement of the providers of social support from different sources, as acknowledged by the researched parents, could contribute to a raised level of parental aspirations. The last important consequence for educational practice is the disclosure of two different general predictors in terms of the configuration of the variables involved, which correlated negatively with the expected level of educational aspirations of the respondents. In case of mothers, attempts to address their disturbed emotional attachment which blocks the development of higher educational aspirations towards children with disabilities, seem to be a crucial indication for practice. In the group of fathers, it is worth considering an enhancement of the paternal self-image involving an increase in the role played by a true, authentic self of the father and reducing the impact of the excessively perceived emotional support, which may hinder the development of higher educational expectations.

## STUDY LIMITATIONS

The results of the presented studies should be interpreted with caution due to several limitations. First, the subjects of analysis were parents of children with disabilities aged 3 to 21. It was not possible to examine larger subgroups of mothers and fathers of children in younger age groups. Similarly, the effects of gender and birth order of children with disabilities on the parental, educational aspirations in the families participating in this study were not assessed due to the sample size. Second, some but not all kinds of disabilities were addressed in the studies. The research lacks reference to children with autism spectrum disorders and some chronic somatic diseases, children with social maladjustment due to emotional and behavioral disorders, and children with specific learning difficulties and speech disorders. Third, no comparison group, i.e. of parents of children without disabilities, was established in the study. Fourth, insufficient numbers of the researched parents of children with a specific type of disability prevented constructing relevant structural models, and therefore, personal predictors of educational aspirations for the subgroups of children with specific disabilities could not be determined. Fifth, educational aspirations are among many types of parental aspirations examined by PAQ. Further analysis should be carried out to address professional, life, social, and other aspirations. Sixth, the reported research only involved parents who make up full families, so e.g. the researched mothers of children with disabilities were either married or in partnership with fathers. In reality, families with disabled children are often single-parent families, and the single parent is more likely to be the mother than the father of the child.

## CONCLUSION

In conclusion, it may be said that future research on personal predictors of educational aspirations for children with disabilities exhibited by the group of their mothers and fathers can benefit from inclusion of non-educational aspirations, e.g. life, social, and professional. Equally worthwhile is introducing comparison groups of mothers and fathers of children without disabilities. Furthermore, when planning future research on parental aspirations, incomplete and reconstructed families can be involved, including single-parent family units. A number of demographic variables can also be taken into account such as gender and age of children, age and education of parents, their employment status, financial status, and living conditions of the family etc. (see the subsection Participants, Data Collec-

tion and Sample Characteristics). This approach will give an even more complete picture of the inter-dependencies between selected personal predictors and different types of parental aspirations. It will also contribute to the discovery of new meanings of these interrelations. This can empower their more effective use in educational practice in order to improve the quality of life of families raising children with developmental disorders.

## REFERENCES

Barak, S., Elad, D., Silberg, T., Brezner, A. (2017). Mothers and fathers of children with cerebral palsy: differences in future expectations. *Journal of Developmental and Physical Disabilities*, 29, 223-240. DOI: 10.1007/s10882-016-9521-1

Cantwell, J., Muldoon, O., & Gallagher, S. (2015). The influence of self-esteem and social support on the relationship between stigma and depressive symptomatology in parents caring for children with intellectual disabilities. *Journal of Intellectual Disability Research*, 59, 948-957.

Finken, L.L., Amato, P.R. (1993). Parental self-esteem and behavior problems in children: similarities between mothers and fathers. *Sex Roles*, 28, 569-582.

Fishman, C.E., Nickerson, A.B. (2015). Motivations for involvement: a preliminary investigation of parents of students with disabilities. *Journal of Child and Family Studies*, 24, 523- 535.

Grant, S., Cross, E., Wraith, J.E., Jones, S., Mahon, L., Lomax, M., Bigger, B., Hare, D. (2013). Parental social support, coping strategies, resilience factors, stress, anxiety and depression levels in parents of children with MPS III (Sanfilippo syndrome) or children with intellectual disabilities (ID). *Journal of Inherited Metabolic Disease*, 36, 281-291. DOI: 10.007/s10545-012-9558-y

Hart, S.C. (2016). How do aspirations matter?. *Journal of Human Development and Capabilities*, 17, 324-341. DOI: 10.1080/1945829.2016.1199540

Hsiao, Y.J. (2018). Parental stress in families of children with disabilities. *Intervention in School and Clinic*, 53 (4), 201-205.

Jackson, A.C., Enderby, K., O'Toole, M., Thomas, S.A., Ashley, D., Rosenfeld, J.V., Simos, E., Tokatlian, N., Gedye, R. (2009). The role of social support in families coping with childhood brain tumor. *Journal of Psychosocial Oncology*, 27, 1-24. DOI:10.1080/07347330802614634

Jang, K. L., Thordarson, D. S., Stein, M. B., Cohan, S. L., Taylor, S. (2007). Coping styles and personality: A biometric analysis. *Anxiety, Stress, & Coping*, 20, 17-24. DOI: 10.1080/10615800601170516

Kopala-Sibley, D.C., Zuroff, D.C., Koestner, R. (2012). The determinants of negative maternal parenting behaviours: maternal, child, and paternal characteristics and their interaction. *Early Child Development and Care*, 182, 683-700, DOI: 10.1080/03004430.2011.572165

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Pub. Co.

Lu, M., Yang, G, Skora, E., Wang, G, Cai, Y., Sun, Q., Li, W. (2015). Self-esteem, social support, and life satisfaction in Chinese parents of children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 17, 70-77.

Meyers, S.A., Varkey, S., Aguirre, A.M. (2002). Ecological correlates of family functioning. *American Journal of Family Therapy*, 30, 257-273. DOI: 10.1080/019261802753577575

Mitter, N., Ali, A., Scior, K. (2019). Stigma experienced by families with intellectual disabilities and autism: a systematic review. *Research in Developmental Disabilities*, 89, 10-21.

Neely-Barnes, S.L., Dia, D.A. (2008). Families of children with disabilities; a review of literature and recommendations for interventions. *Journal of Early and Intensive Intervention*, 5, 93-107.

Onyedibe, M.Ch., Ugwu, L.I., Mefoh, P.C., & Onuiri, Ch. (2018). Parents of children with Down Syndrome: Do resilience and social support matter to their experience of carer stress?, *Journal of Psychology in Africa*, 28, 94-99. DOI:10.1080/14330237.2018.1455308

Paster, A., Brandwein, D., Walsh, J. (2009). A comparison of coping strategies used by parents of children with disabilities and parents of children without disabilities. *Research in Developmental Disabilities*, 30, 1337-1342.

Peer, J.W., Hillman, S.B. (2012). The mediating impact of coping style on stress perception for parents of individuals with intellectual disabilities. *Journal of Intellectual Disabilities*, 16, 45-59.

Poon, K.K., Koh, L., Magiati, I. (2013). Parental perspectives on the importance and likelihood of adult outcomes for children with autism spectrum disorders, intellectual disabilities or multiple disabilities. *Research in Autism Spectrum Disorders*, 7, 382-390.

Phillips, B.A., Conners, F., Curtner-Smith, M.E. (2017). Parenting children with Down syndrome: an analysis of parenting styles, parenting dimensions, and parental stress. *Research in Developmental Disabilities*, 68, 9-19.

Rutherford, T. (2015). Emotional well-being and discrepancies between child and parent educational expectations and aspirations in middle and high school. *International Journal of Adolescence and Youth*, 20, 69-85, DOI: 10.1080/02673843.2013.767742

Slattery, E., McMahon, J., Gallagher, S. (2017). Optimism and benefit finding in parents of children with developmental disabilities: the role of positive reappraisal and social support. *Research in Developmental Disabilities*, 65, 12-22.

Thompson, S., Hiebert-Murphy, D., Trute, B. (2013). Parental perceptions of family adjustment in childhood developmental disabilities. *Journal of Intellectual Disabilities*, 17, 24-37.

Tynkkynen, L., Vuori, J., Salmelo-Aro, K. (2012). The role of psychological control, socioeconomic status and academic achievement in parents' educational aspirations for their adolescent children. *European Journal of Developmental Psychology*, 9, 695-710. DOI: 10.1080/17405629.2012.671581

Vryonides, M., Gouvias, D. (2012). Parents' aspirations for their children's educational and occupational prospects in Greece: the role of social class. *International Journal of Educational Research*, 53, 319-329.

Wheeler, S. (2018). The (re)production of (dis)advantage: class-based variations in parental aspirations, strategies and practices in relation to children's primary education. *Education* 3-13, 46, 755-769. DOI: 10.1080/03004279.2017.1349820

Yamamoto, Y., Holloway, S.D. (2010). Parental expectations and children's academic performance in sociocultural context. *Educational Psychology Review*, 22, 189-214.