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A Longitudinal Overview of the Situation of Families from an Inclusion Perspective Environmental and Family Factors Associated with Special Educational Needs

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Abstract

While diagnostic systems such as the ICD-11 and DSM-5 exclude social and economic factors as potential causes of disability and learning problems, statistics from the educational and social systems of many European countries contradict this approach. Our research focuses on the compensatory strategies of the education system in Hungary, as the literature suggests that disability, differential development, and learning problems are a major stress factor and problem to be solved for the education system, the individual, and the family.An examination of the Hungarian system is particularly warranted in light of the results of the most recent PISA surveys, which show that educational failure in this country is strongly correlated with family background. Our research has demonstrated that special educational needs are more strongly related to family background and social factors than to other factors, which may be indirect evidence that family and social background are significant variables in the management of stress. In the presence of an unfavorable social background, disability and learning disabilities place greater pressure and stress on the family, increasing the risk of disconnection and early school leaving.Consequently, the role of proper education and cooperation is of paramount importance, as it is clear that neither the family nor the education system alone can be successful in dealing with stress.Our research has shown that resilience is intimately connected to parental factors, which are strongly influenced by parental education. Therefore, stress management and the avoidance of additional stress can be linked to the education system, even if indirectly. Furthermore, the formal education system is a crucial site for fostering effective attitudes, underscoring the importance of formal education in shaping attitudes and preparing individuals for lifelong learning, rather than simply imparting knowledge. To effectively manage stress, individuals must continuously develop and learn new coping strategies, and consciously cultivate resilience, as future stressors are unpredictable.

Keywords: *Family, Incusion, SEN, Learning Disability.*

Introduction

The primary objective of this study is to investigate the relationship between special educational needs (SEN) and learning disabilities as stressors and environmental and familial factors in the context of differential development. According to the American Psychological Association (APA), stress refers to a multifaceted response to perceived pressures and challenges that surpass an individual's available resources and coping mechanisms (APA, 2024). As education is directly impacted by stress, we have chosen to focus on students with learning disabilities and SEN in our research. Students with diverse developmental abilities often pose significant stress for both the students themselves and their families, and this chronic stress can have long-lasting negative consequences on health and psychological well-being, although these are beyond the scope of our current research. It is essential to recognize the role of resilience in coping with difficulties and challenges. Resilient students and teachers may effectively manage stress and respond to the changes and challenges that arise from learning disabilities and SEN The education system plays an indispensable part in fostering resilience, as the problems faced by students with learning disabilities and SEN often originate and manifest within the educational setting. These issues can be carried between home and school, making isolation resolution impossible, and stress can occur in all areas. Implementing suitable educational strategies and compensating mechanisms is critical in reducing stress and promoting resilience.

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Undertaking research on stress directly poses significant challenges and raises ethical concerns, which makes it worthwhile to engage in indirect research. Furthermore, the economic indicator GDP may not be a meaningful measure of social well-being, and it is crucial to identify indicators that pertain to social capital (Nordhaus & Tobin, 1973). Social capital encompasses elements such as health, safety, friendships, love, trust, mutual generosity, equal access to opportunities, fulfillment in work, self-respect, self-determination, and justice. GDP also does not provide a direct measure of knowledge creation (Gyulai, 1991), but it can capture inputs such as educational expenditure and the number of qualifications. The objective of sustainable growth, as outlined in the EU2020 strategy, can be linked to GDP growth, provided that it does not adversely impact society and the environment. The foundation for achieving sustainable growth lies in the development of a knowledge-based economy, which necessitates the efficient utilization of human resources and can enhance the resilience of families facing challenges. This approach focuses economic output on the qualitative development of human assets, including families, which will facilitate continuous technological innovation.

Investing in education and training has economic benefits, as knowledge is considered part of fixed capital (Smith, 1959). While investing in human capital is a long-term and costly process (Schultz, 1983) that requires expenditure at the individual or national level, the returns on this investment are substantial when the trained workforce's productive capacity and innovative knowledge generate economic benefits (Kiker, 1966). It is essential to ensure that human capital keeps pace with physical capital, as a lack of progress in human capital can hinder economic growth.

The relationship between a country's GDP and the proportion of people with higher education is noteworthy. As Haribson and Myers (1964) posited, indicators of economic development include national income per capita, the ratio of workers to population, and the proportion of individuals between the ages of 5 and 14. These researchers found that human resources, specifically education, is closely linked to economic performance. Consequently, education and special educational needs can be linked to families.

In the 2012 Adult Skills Survey (PIAAC), it was found that 22% of countries participating in the study had tertiary education despite their parents not having it, indicating upward mobility. Additionally, individuals with tertiary education were 23% more likely to fall within the top 25% of monthly earnings.

The relationship between a country's economic development and the proportion of its population with tertiary education is illustrated in the graph below (Polónyi, 2013, Smith, 1992). The Czech Republic, Bulgaria, Croatia, Hungary, Italy, and Romania fall below the EU average. Austria, Germany, and Poland fall below the EU average as well. Conversely, Western European countries generally stand above the average (see Figure 1).

Figure 1: People with tertiary attainment, 2022

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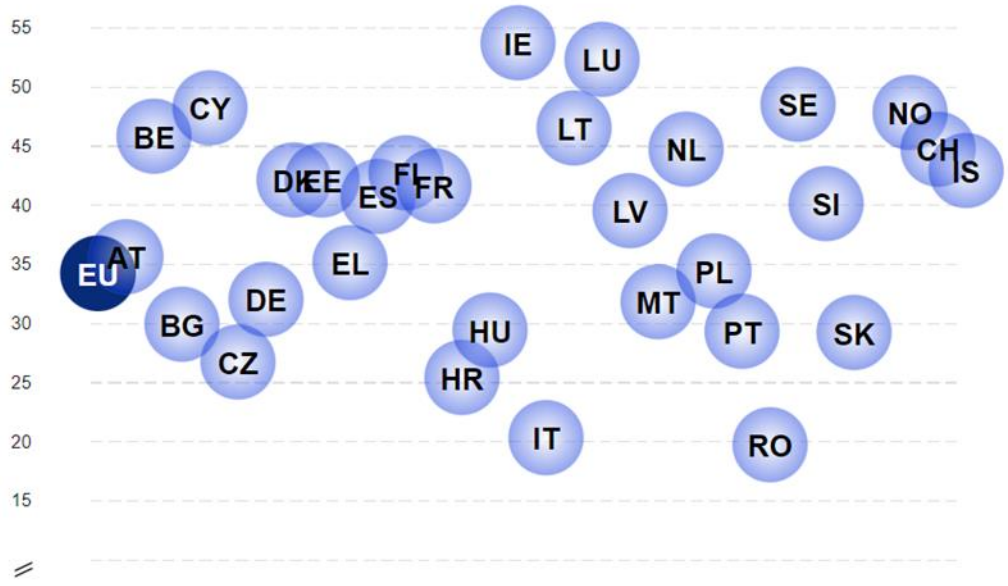
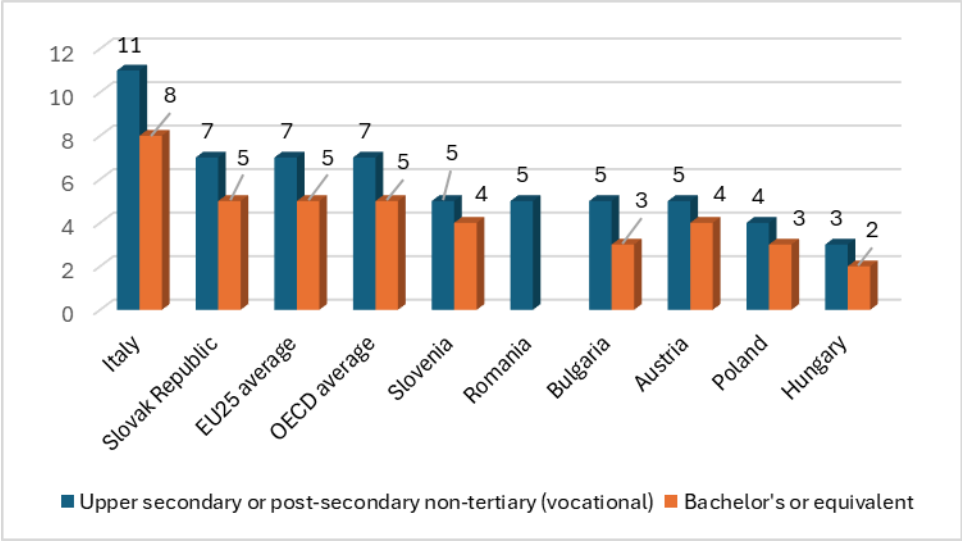


Source: Eurostat 2022

The relationship between educational attainment and economic performance is illustrated by the unemployment rate. As per OECD research, individuals with higher levels of education are less likely to be unemployed. The following table, based on OECD research, supports this claim and shows that higher education levels are associated with lower unemployment rates (Figure 2).

Figure 2: Unemployment rates of 25-34 year-olds, by educational attainment and programme orientation (2022)



Source: based on OECD 2022 own editing

The employment indicator for the EU Member States is dominated by the employment of highly educated people when comparing educational attainment (Figure 3).

Figure 3. Average employment rate in EU Member States by educational attainment for the population aged 20-64 (2023)

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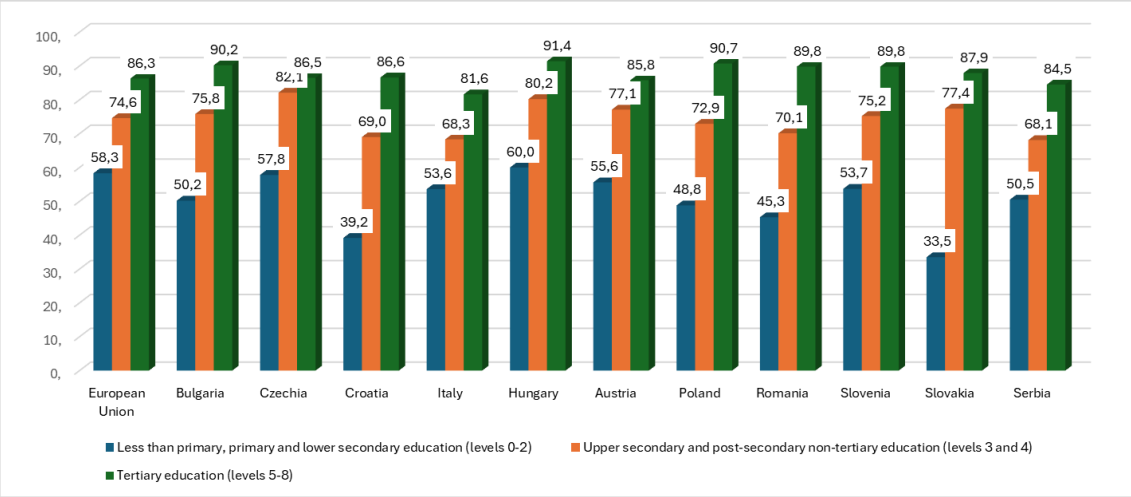
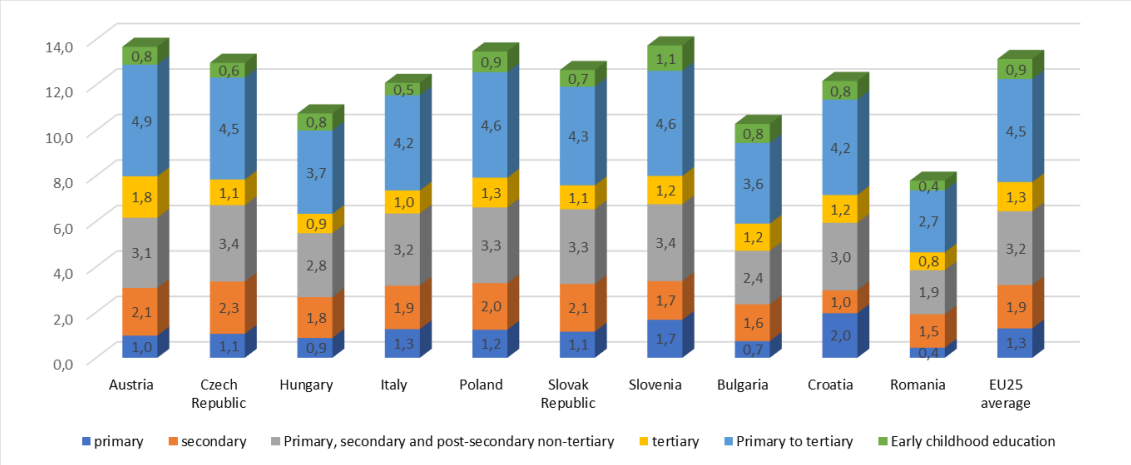


Source: based on Eurostat own editing

National GDP and spending on education show the level of each country's economy and educational potential. The selected countries are mainly from Central and Eastern Europe and nearby Western European countries, with Slovenia, Austria and Poland reaching the EU average.

Figure 4. Total expenditure on education as a percentage of GDP (2020)

Total expenditure on educational institutions as a percentage of GDP (2020)



Source: Eurostat 2020

Educational attainment has a significant impact on life expectancy, as individuals with higher levels of health tend to be more productive, have lower mortality rates, and maintain their human capital more effectively. People with higher incomes, who typically have more education, can allocate more resources towards their health, leading to healthier lifestyles. This is also closely linked to resilience and stress tolerance. The social consequences of low educational attainment are visible in a society's ability to innovate, higher unemployment rates, reduced budget revenues, poorer health outcomes, premature mortality, lower participation in screening, higher crime rates, and increased reliance on social benefits. The economic costs associated with school drop-out include private benefits such as earnings, household productivity, educational expenses, and tax burden on the state. Additionally, there are fiscal costs related to the reliance on social benefits and social costs, which are reflected in the social value of health and fiscal benefits and productivity externalities. For instance, as shown in Figure 3, Romania and Hungary have higher early

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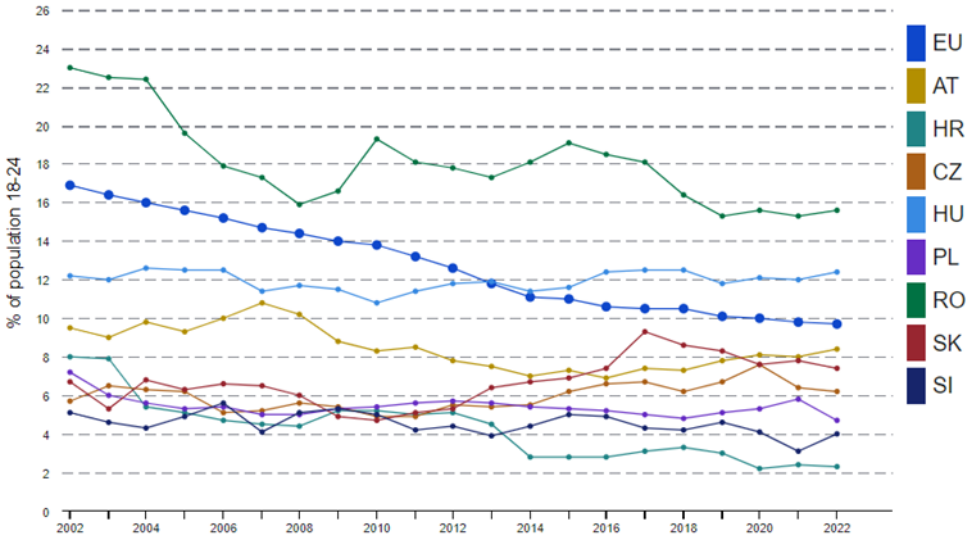
school leaving rates than the European average, while Austria, the Czech Republic, and Slovakia have rates below the EU average.

Figure 5. Early leavers from education and training



Source: Based on Eurostat own editing

Summary Of Family and Economic Variables

The primary objective of this study is to investigate the stress experienced by students with special educational needs (SEN) and learning disabilities, and how these factors relate to environmental and family influences in the context of differential development. Stress can have significant negative effects on the health and psychological well-being of both learners and their families, making it a significant challenge (APA, 2024). The research emphasizes the role of resilience in helping learners and teachers to effectively cope with stress. The education system plays a critical role in developing teaching strategies and compensatory mechanisms that can reduce stress and enhance resilience.

Analysis of economic indicators and family status has revealed a direct relationship between social welfare and educational expenditure (Nordhaus & Tobin, 1973; Gyulai, 1991). Investment in human capital can yield long-term economic benefits, as an educated workforce is capable of creating economic value through innovative knowledge (Smith, 1959; Schultz, 1983; Kiker, 1966). A large body of research supports the link between educational attainment and economic development, with higher levels of educational attainment associated with lower unemployment rates (Harbison & Myers, 1964; Polónyi, 2013; Smith, 1992). The importance of education for economic growth and social welfare is supported by both expenditure on education and its social and economic impacts (Moretti, 2007; Belfield, 2008).

Conceptual Definition: Resilience, Stress

Resilience in education is often defined as the capacity to enable students to attain high levels of performance despite their disadvantaged circumstances (OECD, 2018). To cultivate resilience, educational systems must employ a range of strategies, such as flexible curricula and a supportive learning environment in schools.

According to the American Psychological Association (APA), resilience is a process and outcome whereby individuals effectively cope with difficult or challenging life situations, particularly through mental, emotional, and behavioral resilience that enables them to adapt to internal and external demands.

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In this research, the concept of resilience refers to the capacity of learners with special educational needs to resist disengagement and adapt flexibly to their circumstances, despite their learning difficulties. This ability helps them to avoid falling behind, even when the system under study appears to be stacked against them. In the Hungarian education system under investigation, statistical data reveal that this is the case. In our interpretation, resilience is therefore a resilience that ensures successful performance in education despite negative external circumstances. The research question is therefore whether the resilience of SEN pupils under investigation is developed in relation to which background variables and whether it is related to the family, as it is evident that the majority of SEN pupils drop out in Hungary. Only 2% of the SEN population reaches the upper secondary school preparatory to higher education.

Stress, as defined by the American Psychological Association (APA), is a physical, emotional, or behavioral response that arises in response to changes in the environment. It encompasses both transient reactions, such as preparing for an upcoming event, and responses to prolonged or traumatic experiences. Stress can have a detrimental impact on an individual's mental and physical health, decrease their quality of life, and contribute to the emergence of various psychological and physiological disorders. Chronic stress, in particular, is harmful as it continually activates the stress response system, which can result in long-lasting health issues (APA, 2024).

The World Health Organization (WHO) identifies stress as a state that results from perceived pressures and challenges that exceed an individual's available resources and coping mechanisms. Stress is a common occurrence in daily life, but if it becomes excessive or persists for an extended period, it can have serious consequences for an individual's health. To mitigate the negative effects of stress on individuals and communities, the WHO emphasizes the importance of prevention and intervention.

Summary

SEN and learning disabilities are often closely tied to family and social background in the system studied, as our research has shown (Vida, 2019), but relevant literature also indicates that this is the case in other systems as well (Ayar et al., 2024; Zhang et al., 2021). Research suggests that an unfavorable social background can increase the stress associated with disability and learning disabilities, and it can also increase the risk of early school leaving and dropout, which can be considered a stressor in itself. Stress, resilience, education, and SEN are interrelated in complex ways, and elements of this relationship can be observed in the drop-out and GDP indicators. These indicators show that families under greater stress and differential development pressures may focus on their resilience, which education systems and families may work together to support students in minimizing stress and promoting the development of resilience.

Research Methodology

General Background to the Research

We conducted a meta-analysis of our previous research, focusing on stress and resilience among secondary school students with learning disabilities who participated in our study during the 2016/17 and 2017/18 school years in Hungary and Baranya County. The current focus does not include new data, as the period of absence education between 2019 and 2021 is not considered relevant to the previously presented focus. Although absence education is relevant for stress management, its study may require a different methodology and resources, which we do not currently have access to. Additionally, the research permission required to access data for the 2022 and 2023 period is still pending.

Our analysis is still relevant over this period because SEN and learning disabilities are closely related to family and social background in all periods. In the Hungarian system under study, the number of children with SEN has been steadily increasing, and drop-out rates have not improved significantly. Therefore, our analysis remains relevant. Additionally, our study can be justified from an international perspective, as it is a well-known and not only specific feature of the Hungarian system that an unfavorable social background increases the stress associated with disability and learning disabilities (Mbatha & Mokwena, 2023; Cheng & Lai, 2023; Hsiao, 2018), which increases the risk of early school leaving and dropout (Borgna & Struffolino,

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2017; European Agency, 2016a). For SEN students, it is particularly important to provide an appropriate support and educational environment to reduce stress and enhance resilience.

Research Sample

The population under study comprised pupils with learning disabilities in secondary schools who participated in a review in Baranya County during the academic years 2016/17 and 2017/18. The total sample size was 158 pupils, from which the dataset was narrowed down to 98 pupils through three stages. The first stage involved retaining only the records of students with learning disabilities, while the second stage involved selecting records that were not first examinations. In the third stage, the study population was narrowed to secondary school pupils. Three peer reviews were excluded due to missing data, resulting in a sample size of 98. The following data were examined from the archives of the relevant expert committee: age of the SEN student, grade, type of school attended (traditional, vocational, etc.), academic year of the review, IQ score, ICD code (SEN type), education of parents, number of siblings, location of the student, positive aspects in the anamnestic data or data on family accumulation, number of institutional changes, Apgar value, and location of the school where the SEN student was enrolled at the time of the review.

Tools and procedures

To investigate the influence of background factors, we created a database and utilized a quantitative approach for analysis. Our research question centered on whether it was possible to differentiate and divide the population into two groups based on the aforementioned factors using statistical tools and mathematical models. The criterion for the theoretical division of the sample was the type of secondary school, as in the Hungarian sample, it is not feasible to pursue university or college studies after completing certain types of secondary schools. Consequently, we sought to determine if a distinct pattern existed in the background variables of SEN students attending traditional upper secondary schools, vocational upper secondary schools, and other forms of upper secondary schools. The simplification of the research question was justified by the fact that traditional upper secondary schools, which primarily prepare students for higher education, award a school-leaving certificate and do not provide vocational training. This was supported by research which indicates that SEN students who attend traditional institutions that only provide A-levels and do not pursue higher education are at a disadvantage compared to those who also obtain a profession (Bakó et al., 2017). These students likely desire to continue their education and possess the potential to do so successfully. Moreover, studies from an international perspective have shown that individuals with higher education are more resilient, which may also be relevant to our research focus (Gentz et al., 2021; Qi & Yang, 2024). It is also uncertain whether any of the variables under investigation are associated with resilience, indirectly impacting stress management and learning disabilities.

A formal tone is required for the following text. No changes can be made to the citations, references, or in-line citations. The American English spelling, specific terms, and phrases must be strictly adhered to. Please do not modify any numbers in the text.

Due to the characteristics of the sample, a statistical analysis procedure was required that is insensitive to the potential difference in the number of elements between two populations and can be applied to a non-normally distributed sample. It is also appropriate for comparing more than two independent samples along a single variable, as this is the way to verify hypotheses. Only non-parametric procedures, such as the Kruskal-Wallis H-test and the Mann and Whitney U-test, are suitable for this analysis. To conduct the analysis, SPSS version 25.0 software was used, which is capable of running these two statistical procedures on the database created.

Hypotheses

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Hypotheses can be formulated to suggest that the population of SEN students attending traditional high school and other educational forms can be differentiated based on factors such as IQ, ICD code (SEN type), parental education, number of siblings, place of residence, positive anamnestic data, possible family cumulation, number of changes of institution, Apgar score, and the location of the school where they are studying.

Data

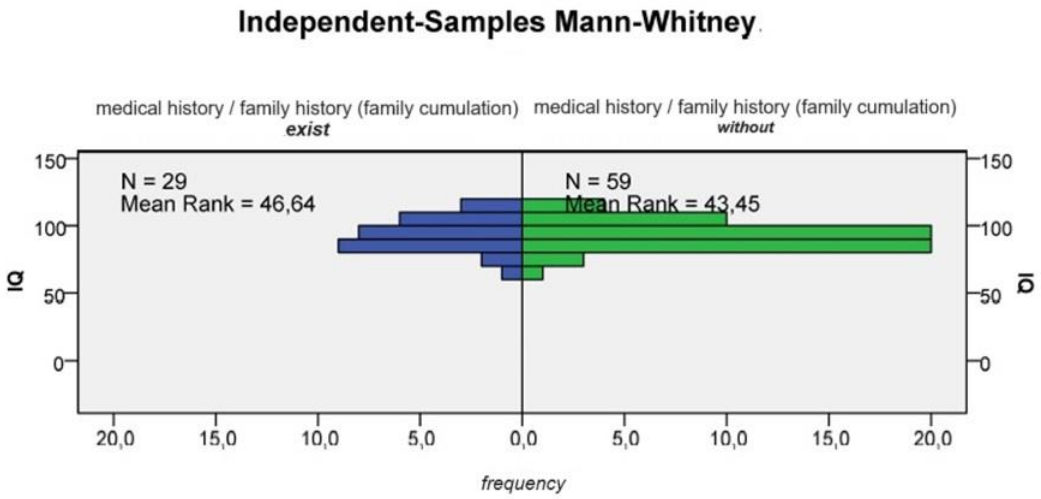

Figure 1: Correlation between intelligence test scores and anamnestic data, positives in learning disability

The Mann-Whitney U test was employed to investigate whether the positive prenatal, perinatal, and family history data could differentiate the sample of SEN students in secondary school from their intelligence test scores. This inquiry was prompted by the significance of cognitive tests in identifying and diagnosing SEN, which may influence the type of school chosen. Consequently, if the two samples originate from the same population and cannot be segregated based on these criteria or background factors, the hypothesis cannot be validated. Figure 1 reveals that there is no apparent correlation between intelligence test scores and familial accumulation, nor is there a correlation between early childhood injuries and IQ in the instance of learning disability, despite the emphasis placed on exploring this in the study. It is important to note that the objective of the study was not to exclude or confirm these findings, and it is far from being the only evidence available. However, it may draw attention to the intricate nature of the mechanism of action in learning disability, which is more complex than in intellectual disability, where familial accumulation and early childhood or prenatal impairments have been demonstrated and detected (Fletcher, 2021).

Figure 2: Relationship between intelligence test score and school type

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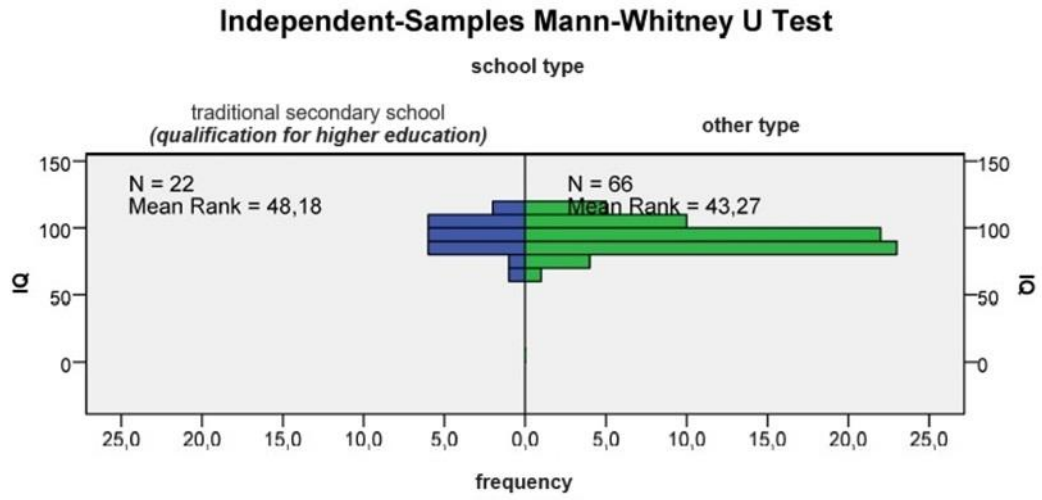

Figure 2 shows that although the two samples have different item counts (Mann and Whitney U test can nevertheless compare), there is no relationship between IQ and school type.

Results

Two-thirds of the 89 students in the studied population attended a vocational upper secondary school or a vocational school in the given academic year, as 22 out of them had done so. This finding aligns with the specific education system under investigation (KSH, 2022), which indicates that students attending upper secondary schools with a stronger focus on vocational education are underrepresented in higher education.

The analysis did not reveal any impact of anamnestic data or family cumulation on the cognitive performance and IQ of children in the study population. Although IQ shows little influence on the type of school attended, it is not even correlated with cognitive test scores in the sample analyzed.

The data presented in Figure 2 demonstrates that there is no correlation between IQ and school type, despite the fact that the two samples have varying item counts (Mann-Whitney U test can still be used for comparison, however). As a result, the study's findings do not suggest any disparities in cognitive ability between SEN students attending traditional secondary schools and those attending other types of secondary schools. Therefore, the sample cannot be divided based on IQ.

The hypothesis that the population of secondary school students with SEN attending traditional high school and other forms of education can be distinguished by IQ, ICD code (SEN type), parental education, number of siblings, place of residence, positive anamnestic data, possible family history, number of changes of institution, Apgar score, and location of the school where they are currently attending was not fully supported. Only parental education showed a significant difference, i.e., the mother's education is a crucial background variable for determining where the SEN child continues their education. Higher parental education is associated with a higher proportion of children with learning disabilities who are enrolled in institutions preparing them for further education, regardless of their developmental abilities.

Discussion

The present study examines the relationship between IQ and school type, demonstrating that these factors are influenced by a single background variable: parental education, primarily the mother's education. This finding is supported by research and literature (Alibraheim & Taifour, 2023; Yu, 2024; Joyce et al., 2018). Although the study's results should be treated with caution, the findings do not contradict international discourse. The sample's characteristics and size may have contributed to inaccuracies, but a pattern emerges

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suggesting that parental education is the most critical factor in the development of students' cognitive abilities and the education of SEN students in the study population. The influence of family, stress management, and resilience on cognitive efficiency and educational level is likely underestimated in the practice under study. While the precise mechanism remains unknown, the evidence suggests that SEN pupils living in low-educated municipalities have lower cognitive efficiency, face greater difficulties in compensating for disadvantages, and experience less catching up and facilitation. It is important to recognize that the study's scope does not allow for more extensive conclusions, but it does highlight the significance of parental education in shaping students' cognitive abilities and educational outcomes.

Conclusion

Therefore, it can be asserted that family dynamics play a crucial role in determining resilience, as demonstrated by this research, which assesses the parent's education as a measure of resilience. It is essential to consider the family's social context when examining the public education system comprehensively.

The outcomes indicate that there are several avenues for further investigation on the study population, although it is evident that the vulnerable group of children who cannot overcome disadvantage without assistance, the SEN children, are not effectively equalized in the study sample. This is supported by the data, as if parents transmit their low educational attainment or if the parent's educational level is the only determining factor for further learning among SEN pupils, then the public education system's value-add is not apparent.

Furthermore, this finding can be linked to the fact that the equalizing function of public education in the SEN population is currently minimal. To enhance compensation for disadvantage, it is worth considering starting before birth or during the prenatal period, focusing on language socialization and home education, rather than starting with the child or after birth.

The DSM-5 and ICD-11 systems, which distinguish strongly between socio-economic background and the causal background of learning disability, require revision or a more focused and adequate screening process in the educational system under study. It is evident that in the Hungarian educational system and possibly in other systems as well, the reasons for disconnection and learning problems are not solely attributable to cognitive, intellectual, or non-external factors.

Conceptual difficulties and unclear boundaries increase stress levels for all stakeholders and diminish efficiency. Additionally, parental factors linked to the mother's education may pose a risk of failure in early childhood.

Return on Education

Education brings both economic and social benefits. An individual's education boosts his or her personal income and contributes to the national economy through labour market productivity. Table 1 below shows that schooling is a positive investment, with high rates of return on education expenditure in the countries described, reinforcing the case for school leaving reforms.

Table 1. Private and fiscal returns to education

Private and fiscal returns to schooling

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Country	After-tax rate of return to an additional year of schooling	Recovery rates on educational expenditure
Austria	8.52%	37.50%
Belgium	7.47%	108.58%
Denmark	7.99%	12.93%
Finland	9.98%	154.93%
France	8.63%	93.96%
Germany	9.13%	139.15%
Greece	9.18%	84.64%
Ireland	11.03%	201.31%
Italy	8.44%	82.99%
Netherlands	6.95%	37.98%
Portugal	10.30%	57.08%
Spain	7.50%	126.63%
Sweden	4.28%	-26.07%
UK	12.25%	115.21%

Source: De la Fuente and Jimeno (2009)

According to a US school survey conducted in 2020, the number of students with special needs has increased significantly among students who have returned to school after the pandemic, with schools spending ten times more than for students without special needs, and the state contribution is 40% (Lieberman, 2023). In Hungary, the state pays twice the per capita norm for SEN students (Erdei, 2014). Children from families with low socio-economic status develop learning skills more slowly. They have less access to material, cultural and social resources, which negatively affect their ability development. Children with low socio-economic status perform on average 10% less well in school tests, starting secondary education five years behind (Carlisle & Murray, 2015; Manstead, 2018). The socio-economic profile of schools reveals a correlation between school status and students' academic performance. In schools with higher status, students perform better in their studies. In OECD countries, 48% of disadvantaged pupils attend schools with low status (OECD, 2018).

Families with special educational needs often face additional costs, which can result in lower earning potential due to lower educational attainment. (UNESCO, 2020) Families with children who have special educational needs, or those living with these individuals, typically experience higher individual costs than their peers, representing a social and economic loss. These costs include medical and healthcare expenses, therapeutic costs, special education costs, production loss costs, informal care costs, and loss of family productivity. A significant number of individuals with special educational needs are among the unemployed or receiving benefits (UNICEF, 2015). As illustrated in Figure 6, inclusion has a positive correlation with generating economic benefits. Inclusion encompasses skills development, the formation of social networks, the acceptance of disability, and a reduction in care needs. These factors contribute to greater participation in employment and other income-generating activities, which can lead to an increase in labor force activity, personal income, poverty alleviation, and long-term economic growth as a productive member of society. Inclusion also promotes personal development, which in turn enhances participation in employment.

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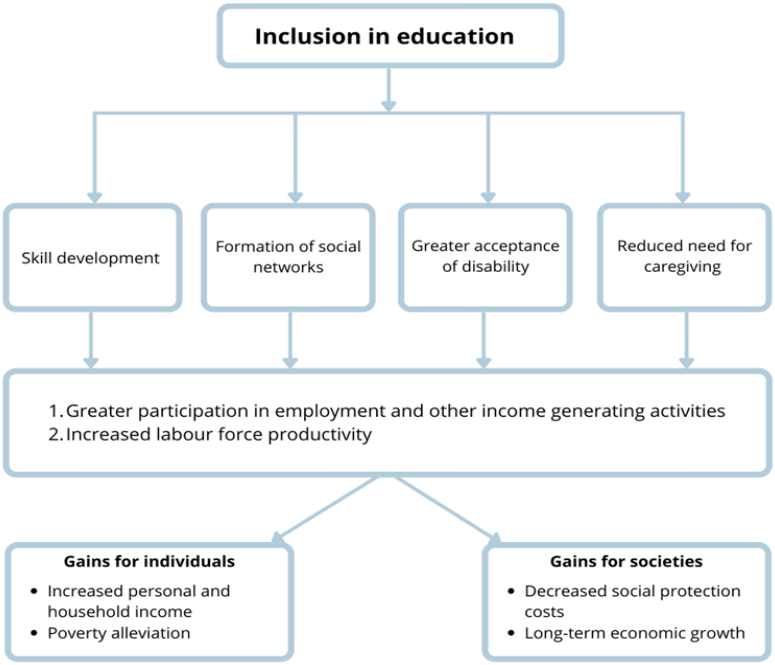

Figure 6. Inclusive education pathways to economic benefits

Inclusive education pathways to economic gains

Source: Morgon Banks and Polack, 2015

Inclusive education is more cost-effective than segregated education, and thus, the pursuit of an integrated education system should be prioritized (Walton, 2012). Studies by the Organisation for Economic Co-operation and Development (OECD) have shown that the per capita cost of special education is 2.5 times higher than that of regular education (UNICEF, 2012). According to a study, the cost of inclusive education was 13% lower than that of segregated education (Halvorsen et al, 1996). Professionals believe that the development and support of individualized, flexible learning pathways are the solution to integrating children with special needs into the labor market and empowering them. This can be facilitated by the development of an orientation year, the introduction of preparatory classes, the creation of workshops in small groups with mentoring support from special needs teachers and development teachers. The role of the special needs teacher is not to be a permanent presence in the student's life, but to collaborate with other professionals to develop individualized approaches to students with different abilities, identify specific learning needs, and work with other professionals. This process will ensure that children with special needs succeed in the labor market, leading to growth for the national economy.

In Hungary, a study conducted in Budapest (Czeizel et al., 1978) revealed that families living on the margins of society face increased stress. Despite having intellectually sound children, these families often placed their children in segregation and special education (i.e., special schools), as permitted by law. Consequently, these children faced disadvantages in the labor market. Our analysis aimed to demonstrate that while the situation has improved by 2024, there are no significant changes, and families with children who have diverse developmental needs are collectively susceptible to social exclusion. This finding is supported by our research results and the relevant statistical analyses.

Recommendation

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Based on the findings of this research, a number of recommendations can be made to improve support for families and students with special educational needs (SEN) and to enhance educational outcomes in this context.

Developing comprehensive support programs for families of children with SEN is crucial (Cristina et al., 2024). Such programs should include counseling services, parental training workshops, and community support groups to help families manage their stress and build resilience. Recent studies (Anders et al., 2010) indicate that family support has a significant impact on the educational success of SEN children.

Enhancing teacher training is essential for SEN student education (Ozel et al. 2018). Therefore, it is recommended that continuous professional development and specialized training programs be implemented to equip teachers with the skills necessary to address diverse learning needs (Coelho et al., 2017). Research suggests that well-trained teachers can better support the inclusion and progress of SEN students (Coelho et al., 2017).

The adoption of inclusive educational practices may also be relevant (Robiyansah et al., 2020). Schools should adopt inclusive educational practices to promote the integration of SEN students into mainstream classrooms. This includes differentiated instruction, adaptive learning technologies, and collaborative teaching models. Inclusive practices have been shown to improve academic outcomes and social integration for SEN students (Szumski, Smogorzewska, & Karwowski, 2017).

Adequate funding is essential to ensure that Special Education Needs (SEN) students receive the necessary resources and support. Governments and educational institutions must allocate sufficient funds to boost SEN programs, including specialized teaching aids, assistive technologies, and additional staff. Studies have demonstrated that increased funding is correlated with improved educational outcomes for SEN students (Marsh, Gray, & Norwich, 2022).

Continual research and data collection are crucial to comprehend the evolving requirements of SEN students and the effectiveness of educational interventions. Educational institutions should collaborate with researchers to conduct longitudinal studies and gather comprehensive data from the SEN population. Such research can inform policy decisions and lead to more targeted and efficient support strategies (Molina Roldán, Marauri, Aubert, & Flecha, 2021).

Effective support for SEN students requires collaboration among various stakeholders, including educators, parents, healthcare providers, and policymakers. Establishing multidisciplinary teams and communication channels can ensure a comprehensive approach to meeting the needs of SEN students. Collaborative efforts have been shown to enhance the educational experiences and outcomes of these students (Vlcek & Somerton, 2023).

References

Abad, J. V., & Pineda, L. K. (2018). Research training in language teacher education: reflections from a mentee and her mentor. Íkala, revista de lenguaje y cultura, 23(1), 85-98. https://doi.org/10.17533/udea.ikala.v23n01a07

Alibraheim, E. A., & Taifour, E. A. (2023).The relationship between mothers' educational levels and their children's academic performance.Pegem Journal of Education and Instruction, 13(3), 36-40.

Anders, Y., Sammons, P., Taggart, B., Sylva, K., Melhuish, E., & Siraj-Blatchford, I. (2010). The influence of child, family, home factors and pre-school education on the identification of special educational needs at age 10. British Educational Research Journal, 36(3), 421-441. https://doi.org/10.1080/01411921003725338

Ayar, G., Yalçın, S. S., Artan, Ö. T., Kahveci, A., & Çöp, E. (2024). Which factors accompany maternal acceptance-rejection in children with specific learning disabilities? BMC Psychiatry, 24(1), 119. https://doi.org/10.1186/s12888-024-05584-8.

Bakó, T., & et al. (2017). 2015-2018 labour market situation and developments (expected), impact on growth and public finances. MTA KRTK KTI, Budapest.

Belfield, C. R. (2008) The Cost of Early School-Leaving and School Failure. mimeo.

Borgna, C., & Struffolino, E. (2017). pushed or pulled? Girls and boys facing early school leaving risk in Italy. Social Science Research, 61, 298-313. https://doi.org/10.1016/j.ssresearch.2016.06.021

Brunello, G., & De Paola, M. (2014). IZA Journal of Labor Policy, 3, Article 22. https://doi.org/10.1186/2193-9004-3-22

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Carlisle, B. L., & Murray, C. B. (2015) Academic performance, effects of socio-economic status on. In J. D. Wright (Ed.), International Encyclopedia of the Social & Behavioral Sciences (2nd ed., Vol. 1, pp. 43-48). Oxford: Elsevier. ISBN: 9780080970868

Cheng, A. W. Y., & Lai, C. Y. Y. (2023). Parental stress in families of children with special educational needs: a systematic review. Frontiers in Psychiatry, 14, Article 1198302. https://doi.org/10.3389/fpsyt.2023.1198302

Cristina, L., Mihaela, R., Luminiţa, S. M., & Rus, C. V. (2024). The role of the family in the lives of children with SEN. Technium Social Sciences Journal, 55(3), 248-261. https://www.techniumscience.com

Czeizel, E., Lányiné Engelmayer, Á., & Rátay, C. (Eds.) (1978). The pathogenesis of mental retardation: in the light of the Budapest study. Budapest. 224 pages.

De la Fuente, A., & Jimeno, J. (2009) The private and fiscal returns to schooling in the European Union, Journal of European Economic Association, 7(6), 1319-1360.

Erdei, N. (2014). Comparative study of students with special educational needs in two primary schools. Agricultural Science Publications, 2014(58).

Eurostat (2022). Visualisations. European Commission. https://ec.europa.eu/eurostat/web/education-and-training/visualisations

Fletcher, T. (Ed.). (2021). Examining the role and significance of parental support on children's uptake of sport (Chapter 12). https://doi.org/10.4324/9780429323300-12

Gentz, H., Zeng, C., & Ruiz-Casares, M. (2021). The role of individual-, family-, and school-level resilience in the subjective well-being of children exposed to violence in Namibia. Child Abuse & Neglect, 119(2), Article 105087. https://doi.org/10.1016/j.chiabu.2021.105087

Gyulai, I. (1991). Sustainable development and sustainable growth. Statistical Review, 91(8-9), 797-822.

Halvorsen, A., Neary, T., Hunt, P., & Piuma, C. (1996) A Cost-Benefit Comparison of Inclusive and Integrated Classes in One California District, U.S. Department of Education.

Harbison, F. H., & Myers, C. A. (1964) Education, Manpower and Economic Growth: Strategies of Human Resources Development. New York, NY; Toronto, ON; London, UK: McGraw-Hill.

Hsiao, Y.-J. (2018). Parental Stress in Families of Children With Disabilities. Intervention in School and Clinic, 53(4), 201-205. https://doi.org/10.1177/1053451217712956.

Joyce, S., Shand, F., Tighe, J., Laurent, S. J., Bryant, R. A., & Harvey, S. B. (2018). Road to resilience: a systematic review and meta-analysis of resilience training programmes and interventions. BMJ Open, 8(6), e017858. https://doi.org/10.1136/bmjopen-2017-017858

Juhász, J., & Mihályi, K. (Eds.) (2014). Research findings, case studies, local initiatives on early school leaving. Budapest: Tempus Public Foundation. ISBN 978-615-5319-16-7

Kiker, B. F. (1966) The Historical Roots of the Concept of Human Capital. Journal of Political Economy, 74(5), 481-499. https://doi.org/10.1086/259368.

Lieberman, M. (2023, April). Special Education Is Getting More Expensive, Forcing Schools to Make Cuts Elsewhere. Education Week. https://www.edweek.org/leadership/special-education-is-getting-more-expensive-forcing-schools-to-make-cuts-elsewhere/2023/04.

Manstead, A. S. R. (2018) The psychology of social class: How socioeconomic status impacts thought, feelings, and behaviour. British Journal of Social Psychology, 57, 267-291.

Marsh, A. J., Gray, P., & Norwich, B. (2022). Fair funding and levelling up for pupils with special educational needs and disability in England 2014 to 2023. Advance, February 2022. https://doi.org/10.31124/advance.19134065.v2

Mbatha, N. L., & Mokwena, K. E. (2023). parental stress in Raising a Child with Developmental Disabilities in a Rural Community in South Africa. International Journal of Environmental Research and Public Health, 20(5), Article 3969. https://doi.org/10.3390/ijerph20053969

Molina Roldán, S., Marauri, J., Aubert, A., & Flecha, R. (2021). How inclusive interactive learning environments benefit students without special needs. Frontiers in Psychology, 12, 661427. https://doi.org/10.3389/fpsyg.2021.661427

Moretti, E. (2007) Crime and the cost of criminal justice, in C. Belfield & H. Levin (Eds.), The Price We Pay, Washington, DC: Brookings Institution.

Morgon Banks, L., & Polack, S. (2015). The Economic Costs of Exclusion and Gains of Inclusion of People with Disabilities: Evidence from Low and Middle Income Countries. https://www.iapb.org/wp-content/uploads/CBM_Costs-of-Exclusion-and-Gains-of-InclusionReport_2015.pdf.

Nordhaus, W. D., & Tobin, J. (1973) The Measurement of Economic and Social Performance, in M. Moss (Ed.), Is Growth Obsolete?. New York, NY: NBER. 509-564.

Ozel, E., Ganesan, M. Z., Daud, A. K. M., Darusalam, G. B., & Ali, N. A. N. (2018). Critical issue: Teacher training into inclusive education. Advanced Science Letters, 24(7), 5139-5142. https://doi.org/10.1166/asl.2018.11288

Qi, C., Yang, N., & Qi, C. (2023). An examination of the effects of family, school, and community resilience on high school students' resilience in China. Frontiers in Psychology, 14(Developmental Psychology), Article 1279577. https://doi.org/10.3389/fpsyg.2023.1279577

Robiyansah, I. E., Mudjito, & Murtadlo. (2020). The development of inclusive education management model: Practical guidelines for learning in inclusive school. Journal of Education and Learning (EduLearn), 14(1), 80-86.

Schultz, T. W. (1983) Investing in human capital. Investing in Human Capital. Budapest.

Smith, A. (1992) Wealth of Nations, Budapest: Közgazdasági és Jogi Könyvkiadó.

Szumski, G., Smogorzewska, J., & Karwowski, M. (2017). Academic achievement of students without special educational needs in inclusive classrooms: A meta-analysis. Educational Research Review, 21, 33-54. https://doi.org/10.1016/j.edurev.2017.02.004.

Turcsik, K., & Dunás-Varga, I. (2023). Methodological solutions in the vocational education of SEN and BTMN students. Opus et Educatio, 10(2), 200-205.

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DOI: https://doi.org/10.62754/joe.v3i4.3612

UNESCO (2020) Global Education Monitoring Report. UNESCO.

UNICEF (2012) The Right of Children with Disabilities to Education: A Rights-based Approach to Inclusive Education, Geneva, Switzerland: United Nations International Children's Emergency Fund.

UNICEF (2015) Elements of the Financial and Economic Costs of Disability to Households in South Africa. National Department of Social Development, Republic of South Africa. https://www.unicef.org/southafrica/reports/elements-financial-and-economic-costs-disability-households-south-africa

Vlcek, S., & Somerton, M. (2023). Collaborative engagement between stakeholders in the education of Australian students with disability: A scoping review. International Journal of Inclusive Education. Advance online publication. https://doi.org/10.1080/13603116.2023.2216693

Yu, S. (2023).The influence of mothers' educational level on children's comprehensive quality.Journal of Education, Humanities and Social Sciences (EPHHR), 8(1264).School of Foreign Studies, South China Normal University, Guangzhou, China.

Zhang, M., Hu, Y., & Hu, Y. (2023). The Influences of Socioeconomic Status on Parental Educational Expectations: Mediating and Moderating Effects. Sustainability, 15(12), Article 12308. https://doi.org/10.3390/su151612308