

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

Janusz Kirenko<sup>1</sup> and Piotr Alfred Gindrich<sup>2</sup>

<sup>1</sup>Faculty of Pedagogy and Psychology, Teacher Education and Health Education Department,  
Maria Curie-Skłodowska University, Lublin, Poland

<sup>2</sup>Faculty of Pedagogy and Psychology, Special Psychopedagogy and Special Sociopedagogy Department,  
Maria Curie-Skłodowska University, Lublin, Poland

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## CORRESPONDING AUTHOR:

Piotr Alfred Gindrich  
p.gindrich@poczta.umcs.lublin.pl

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## 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, & Onuiru, 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 opti-

mistic 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 (Slattery, 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, & Onuiriri, 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<sup>1</sup>. 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

<sup>1</sup> 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 student-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 Support 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 $\beta$	R <sup>2</sup> = .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:  $\chi^2(55) = 1199.68; p < .001$ . 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.

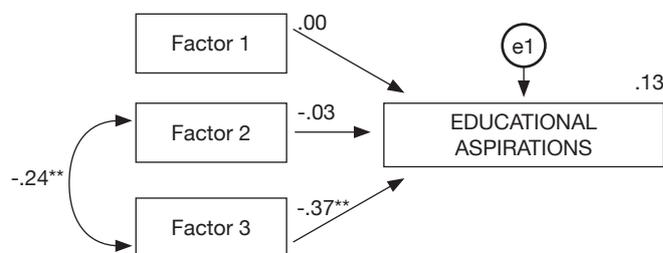


Figure 1. **The Path Analysis Model for the Educational Aspirations of Mothers of Children with Disabilities**  
 $\chi^2/df = 1.25; GFI = 1.00; AGFI = .98; RMSEA = .03$

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.

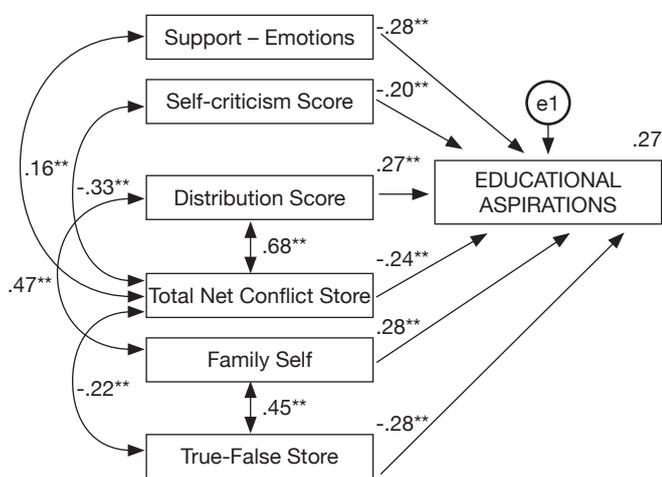


Figure 2. **The Specific Path Analysis Model for the Educational Aspirations of Mothers of Children with Disabilities**  
 $\chi^2/df = 2.10$ ;  $GFI = .99$ ;  $AGFI = .95$ ;  $RMSEA = .07$

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 $\beta$	R2 = .17 B	F (7.23) = 8.19 $t^\circ$	P < .001* 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 support	social self	-.15	-.17	-2.19	.030*
	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:  $\chi^2(105) = 1806.81$ ;  $p < .001$ . 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).

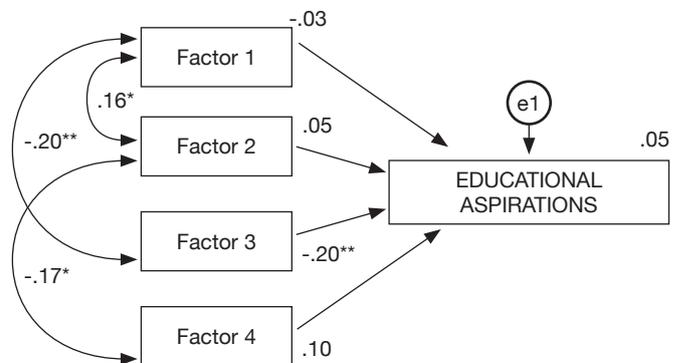


Figure 3. **The Path Analysis Model for the Educational Aspirations of Fathers of Children with Disabilities**  
 $\chi^2/df = .59$ ;  $GFI = 1.00$ ;  $AGFI = .98$ ;  $RMSEA = .00$

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.

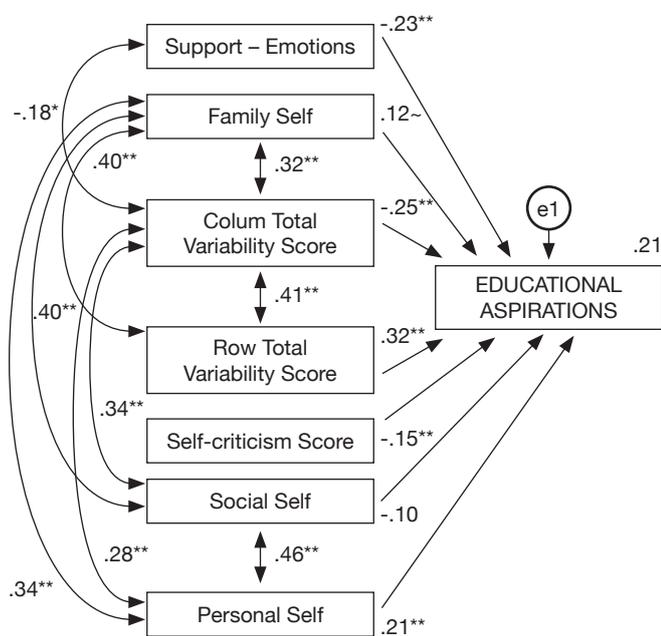


Figure 4. The specific path analysis model for the educational aspirations of fathers of children with disabilities  
 $\chi^2/df = 1.28$ ; GFI = .99; AGFI = .96; RMSEA = .03

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.

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