Cooperation Between Parents and Teachers in the Context of Applied Forms of Cooperation

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ABSTRACT

Aim. It is possible to carry out the development of family-school relations through various forms of cooperation, both traditional and innovative. This paper presents the results of research aimed at identifying the forms of family-school cooperation applied, with an emphasis on the primary level of education. The research aimed to find out the preferred forms of cooperation between parents and teachers and also to determine whether there is a statistically significant association between parents' education and the forms of cooperation used.

Methods. The research instrument was a questionnaire of our construction designed for parents of children in primary education. We statistically evaluated the research findings using descriptive statistics methods and statistical method called Ordinal logistic regression analysis. Subsequently, we tested the reliability and validity (internal consistency) of the questionnaire by Cronbach's α (coefficient alpha).

Results. Our research has shown that the most used form of cooperation between family and school is still the parents' meeting, as the most traditional form of cooperation. Parents do not often use innovative forms of cooperation (open classes, extracurricular activities organised by the school or suggestion boxes for parents).

Communication between parents and teachers through digital technologies is widely used to the detriment of face-to-face communication. At the same time, we found that parents' education has not a statistically significant influence on the preferred and used forms of cooperation.

Conclusion. Regardless of the form of cooperation, any contact between parents and teachers helps to build and shape efficient cooperation. The family-school relationship determines the nature of this cooperation, as well as the expectations of both parties for the education of the pupil. We see active family-school cooperation in the active involvement of parents in school and extracurricular activities.

Keywords: parents, parents' education, teacher, cooperation, forms of co-working, questionnaire

Introduction

Issues of family-school cooperation often receive wide scientific and professional attention in educational theory and practice. It is an issue that is, so to speak, „old" in the local and foreign literature, but it is still topical because it is implemented in the interest of the child—pupil.

The interrelations between family and school are determined by the current societal conditions, whether political, economic or socio-cultural. We can state that after 1989, interest in building family-school relations increased, and family-school relations began to change. In our Slovak conditions before 1989, it was characteristic that parents did not interfere in the school's running, nor did the school require them to do so. Gradually, society began to promote the opinion that parents should not be only passive observers of school activities but should help and cooperate with the school. Since the 1990s, there has been a trend towards parental involvement in the education system, which has been the result of many legislative changes. The state policies of individual countries specifically provide for the representation of parents in the governing and consultative bodies of schools, through which they can express their views on various aspects of school functioning (Beňo, et al., 2006; Škvarková, 2010).

According to Monika Miňová (2017), today, we can talk about a different view of cooperation in terms of its meaning. Parents appreciate the marked influence of the school on the child's development. The school also appreciates the importance of the family environment in the child's development. The child's upbringing is understood as an interactive construct involving the family, the school, and the broader social environment. Everyday interactions occur between the actors of the interactive construct, and the success of these interactions influences the building of relationships. According to Matej Beňo et al. (2006), the above trend is a consequence of the growth of the need for education, culture, scientificity, as well as technological maturity in society. Mária Potočárová and Juraj Vančo (2012) add that the changes in the view of co-

operation can also be called a transition from the traditional model (parent as a „client") to the current model (parent as a „partner"). According to the authors, the partnership between schools and parents is characterised primarily by the fact that parents consider themselves competent enough to educate their children. They share powers of influence over the child and delegate some educational tasks to the school.

The Importance of Building Relationships Between Family and School

As Gregory Flynn (2007) notes, although we have been writing about cooperation for decades, we still seem to be under-informed about the benefits of building family-school partnerships. We see the importance of cooperation and the active participation of parents in cooperation in that it improves the children's behaviour and positively influences their success in the school environment; it also allows for early intervention (Gulevska, 2008). At the same time, this cooperation identifies the child's special needs and facilitates the child's inclusion in school (Ustohalová, 2008). Anna Błasiak (2017) emphasises that the cooperation of teachers and parents is an essential element in the formation and development of specific skills of pupils, which have primarily social and interpersonal character. Relationships between teachers and parents are part of school life, representing many positive aspects for the pupil's development. Last but not least, they also influence the teachers and the parents.

The rapid and dynamic development of culture and society indicates that neither the family nor the school can perform their functions well without close, systematic and organised cooperation (Ordon & Gębora, 2017). The child—pupil is the subject that creates interpersonal relationships between parents and teachers. Both environments should be thoroughly familiar with each other's expectations for child development (Kowolik, 2018).

On the one hand, some teachers carry out their professional activities routinely and thus see cooperation primarily as an obligation rather than a partnership for a better quality of education. Society expects that teachers will be open to their surroundings and the broader community and, at the same time, they will continually increase parental involvement in school activities. However, school reality shows that teachers often „consciously guard their position and keep parents at a safe distance from the school" (Cankar et al., 2012, p. 47). On the other hand, Robert Čapek (2013) mentions that „neither parents are bursting with ideas and initiative. They mainly focus on the smooth running of their children's attendance at school" (p. 14). Potočárová and Vančo (2012) also point to the ambivalent attitude of parents towards school. According to the authors, on the one hand, parents show great trust towards the school and teachers, as they rely on their help in educating their children. On the other hand, parents become the biggest critics and negative judges of the work of the school and teachers.

Teachers and parents of pupils equally determine the ability of family and school to cooperate. As Tatiana Slezáková (2012) states: „Parents should feel welcome in the school environment because only the agreement of both sides will provide their unified impact on the child" (p. 104). According to Maria Kocór (2018), if the school is not open to partnership with the pupils' families and it does not allow them to act autonomously and influence the school events, it will still be only a sad duty. In the same way, both the school and the parents must see the importance of cooperation with the school. The path to parent-teacher partnership is not easy. It passes through many levels and depends on the approach of both sides in the child's education.

The relationship between teachers and parents determines the nature as well as the forms of cooperation, but also the expectations of both parties for the education of the child. Families and schools have at their disposal a wide range of different forms of cooperation (from individual and collective traditional ways to many innovative forms). They use face-to-face meetings, written communication, communication through digital technologies, family visits, suggestion boxes, parent corners, school magazines, leaflets, videos, calendars, open classes, open days, various cultural and sporting events, simulations of the school day—a parent being in the position of a child, organisation of lectures and discussions, and others. According to the findings of Danuta Opozda (2017), the most common forms of cooperation include individual interviews, tripartite meetings (child-parent-teacher, collective-traditional forms, parent meetings, family support, parent councils, electronic and telephone contacts, environmental events and various thematic workshops). However, he adds, some do not meet the elements of cooperation because they have a unidirectional effect. Jana Kropáčková (2017) found that parents more often prefer informal types of co-operation with the school, such as regular conversations with the teacher, occasional meetings with other parents, and parental involvement in school events. As stated by Ulrich Beck (2015), whether these are direct or indirect forms of interaction between parents and teachers, any contact helps to build and shape efficient cooperation.

Methodology of Research

Background of Research

In our research, we focused on finding out the forms of cooperation used between parents and teachers at the primary education level. In the research, we surveyed:
– Which forms of cooperation are used in primary education?
– What is the frequency of use of different forms of cooperation?
– Are traditional or innovative forms of cooperation predominant?
– Does parents' education influence the forms of cooperation used?

Based on the theoretical background mentioned above, we investigated which forms of cooperation parents use more often, i.e. whether they prefer traditional forms of cooperation (parents' meetings) or are interested in innovative forms of cooperation (open classes, extracurricular activities organised by the school, suggestion boxes for parents, communication through digital technologies).

The Aim of the Research

The research aimed to determine the forms of cooperation used in the current educational practice of schools. We wanted to find out whether there is a statistically significant relationship between parents' education and the preferred forms of cooperation at the primary level of education. For this purpose, we investigated whether parents' education has an effect on the used forms of parent-teacher cooperation.

Research Methods

We used a non-standardised questionnaire (a questionnaire of our construction) to obtain the research data. We used rho-equivalent reliability, referred to as Cronbach's α (coefficient alpha), to determine the internal consistency of the questionnaire. The value of Cronbach's α for the questionnaire is $0.6941 \doteq 0.7$, and this decimal value determines the sufficient reliability of the questionnaire (research instrument's validity and reliability).

We obtained the statistical analysis of the research data using the SPSS Statistics program 26. To make the results more transparent, we used tables. The statistical analysis aimed to determine whether the independent variable (education) had a statistically significant effect on our dependent variable (participation in selected forms of contact with the school).

Ordinal logistic regression analysis was the central method of statistical analysis of the results. It aims to predict the value of one variable for a given value of the other variable, i.e. this model estimates a probability measure. Nominal, ordinal and continuous variables can serve as predictors (Liu & Koirala, 2012). In statistical analysis, it is necessary to determine the sufficient suitability of the model through *Model Fitting Information*, which includes the values of the maximum likelihood estimator of the parameter (-2 Log Likelihood), the difference between the observed and the expected frequencies (Chi-Square), the degrees of freedom, so how many numbers in your grid are actually independent (df). The value of statistical significance (Sig — significance) shows how the chosen model fits our research data (a p-value less than 0,05 is an appropriate finding). In *Goodness-of-Fit*, two goodness-of-fit tests rejecting the null hypothesis, Pearson and Deviance, are used.

They equally determine the final significance level to confirm the model's suitability, with the appropriate p-value exceeding the set significance level of 0,05 (Marquier, 2019).

We also rely on *Pseudo R-Square*, which determines the effect of the independent variables on the dependent variable through the proportion of variance. We use the values of the coefficient of determination—Cox and Snell, Nagelkerke and McFadden, while Paul Allison (2013) recommends starting from the Cox and Snell or McFadden value to predict the variability proportion.

Test of Parallel Lines[a] is a test of parallel lines because the null hypothesis states that the slope coefficients in the model are the same across response categories (and lines with the same slope are parallel). The main assumption of the ordinal regression is checked, and we want it to be greater than 0,05 (Marquier, 2019). In the last step of interpreting the logistic regression results, we focus on analysing Parameter Estimates in which the significance value is less than or equal to 0,05. Threshold represents the response variable in the ordered logistic regression. An essential aspect in Parameters is Location, which analyses the statistical significance of the result for the specified variable through various values: Estimate (logit regression coefficients); Std. Error (standard errors of the individual regression coefficients); Wald (Wald chi-square test that tests the null hypothesis that the estimate equals 0); Upper and Lower Bounds (bounds for the confidence limit); and others. We also determined the Confidence Interval (CI) for each Parameter Estimate for an individual regression coefficient (Bruin, 2006).

Sample of Research

The research sample consisted of 320 parents (n = 320) from different regions of Slovakia who have at least one child of younger school age. The respondents were mostly (62.5 %) in middle adulthood (32-42 years), most of the respondents (68.4 %) were married, and most of the respondents were mothers (70 %).

We differentiated the research sample concerning the research objectives and research question according to the *respondents' achieved education:* respondents with a complete secondary education had the highest representation (37.2 %), respondents with a university education of the second degree had a similar representation (31.9 %), and parents with an incomplete secondary education represented 17.8 %. Parents with a university education of the third degree (3.1 %) and primary education (0.9 %) were minimally represented in the research sample.

Results of Research

In the context of the above research aims and questions, we investigated whether parents' education determines the use of different forms of cooperation with the school. We analysed and compared the research data concerning the achieved education of parents to identify statistically significant differences in the respondents' responses.

Before we mapped the activity of parents in different forms of contact with the school, we found out which *forms of cooperation* are used in schools or which forms are available to parents. We were interested in whether schools use more traditional forms of cooperation or whether they also apply innovative forms.

As presented in Table 1, parents' meetings (95 %), individual consultations (81.60 % by phone or 89.70 % in person), extracurricular activities (74.4 %) and virtual communication (94.70 %) are currently among the most frequent forms of family-school cooperation. More than half of the parents (56.30 %) confirmed that the school organises open days, and they have the opportunity to serve on advisory or supervisory bodies of the school (78.10 %). A less positive finding was that almost two-thirds of the respondents (70.30 %) missed the parents' corner or tea room as a space for more confidential conversation with teachers.

Table 1

Forms of cooperation organised by the school

Forms of Cooperation	organised		I do not know		not organised	
	N	%	N	%	N	%
parents' meetings	304	*95.00*	9	2.80	7	2.20
open classes	100	31.30	120	37.50	100	31.30
open days	180	*56.30*	83	25.90	57	17.80
individual consultation (by phone)	261	*81.60*	31	9.70	28	8.80
individual consultation (in person)	287	*89.70*	20	6.30	13	4.10
participation in school bodies	250	*78.10*	63	19.70	7	2.20
discussions and lectures for parents	103	32.20	96	30.00	121	37.80
extracurricular activities	238	74.40	44	13.80	38	11.90
parents' corner, tea room	20	6.30	75	23.40	225	*70.30*
suggestion box for parents	68	21.30	123	38.40	129	40.30
communication via digital platforms	303	*94.70*	7	2.20	10	3.10

Source. Own research.

Our research intended to identify the preferred forms of cooperation between parents and the school concerning parents' education. We investigated the frequency of their participation in the parents' meetings as the most traditional form of cooperation. At the same time, we investigated parents' interest in other forms of cooperation, which we perceive as newer and innovative: open classes, extracurricular activities organised by the school, suggestion boxes for parents, and communication

through digital technologies. For all forms of cooperation, we looked to see if there were statistically significant differences in respondents' answers concerning their achieved education.

A long-used form of family-school cooperation is the *parents' meeting*. As we can see in Table 2, it still has its tradition today. It is always attended by 64.06 % of parents, often by 21.56 %. We can conclude that most parents (85.6 %) are interested in participating in the parents' meetings. Parents with a university education of the second degree (25.94 %) and parents with a complete secondary education (20.63 %) regularly, i.e. always participate in the parents' meetings. At the same time, this group of parents often (9.38 %) participates in the parents' meetings. We can state that the parents' meeting is a traditionally used form of cooperation among the parental public. Only 2.50 % of parents do not show interest in it.

Table 2

Participation in parents' meetings by parents' education

form/education	never		seldom		I don't know		often		always	
	N	%	N	%	N	%	N	%	N	%
incomplete secondary	1	0.31	12	3.75	1	0.31	15	4.69	28	8.75
complete secondary	5	1.56	17	5.31	1	0.31	30	*9.38*	66	*20.63*
university 1st degree	0	0.00	1	0.31	0	0.00	7	2.19	21	6.56
university 2nd degree	2	0.63	1	0.31	2	0.63	14	4.38	83	*25.94*
university 3rd degree	0	0.00	1	0.31	0	0.00	3	0.94	6	1.88
basic	0	0.00	2	0.63	0	0.00	0	0.00	1	0.31
Total	*8*	*2.50*	*34*	*10.63*	*4*	*1.25*	*69*	*21.56*	*205*	*64.06*

Source. Own research.

As it turned out, the traditional form of family-school cooperation continues to be the parents' meeting, which is of the most significant importance for parents with a complete secondary education and a complete university education.

Based on the descriptive analysis, we can conclude that the parent meeting is an established form of family-school cooperation even today. We aimed to find out whether parents' educational attainment has a statistically significant effect on their participation in parent meetings. The model meets the Goodness-of-Fit assumption (in both Pearson 0.467 and Deviance 0.334 tests), with evidence of high significance ($p > 0.05$). Based on statistical analyses (Pseudo R-Square) that describe the effect of independent variables on the dependent variable, we assume a McFadden value (0.047). The latter verifies a 4,7 % improvement in predicting the outcome variable (attendance at parent meetings) based on the predictor (education). We can confirm that parents' education predicts 4,7 % of the variability in attendance at parent meetings.

We met all assumptions for ordinal analysis and focused on a more detailed analysis of associations between these variables. Although the descriptive analysis indicated a differential parental interest in the parent meetings regarding their education, based

on the Parameter Estimates in Table 3, all education categories' p-values (significance) are more significant than 0.05. For this reason, parents' education does not significantly affect their participation in the parent meetings.

Table 3

Parameter Estimates—form „parents' meeting"

95 % Confidence Interval form/education		Esti-mate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[parents' meeting = 1,00]	-3.732	.722	26.690	1	.000	-5.148	-2.316
	[parents' meeting = 2,00]	-1.898	.646	8.627	1	.003	-3.165	-.632
	[parents' meeting = 3,00]	-1.785	.645	7.670	1	.006	-3.049	-.522
	[parents' meeting = 4,00]	-.492	.634	.601	1	.438	-1.735	.752
Location	[parents' education A =1,00]	-1.810	1,222	2.192	1	.139	-4.206	.586
	[parents' education B =2,00]	-.554	.681	.663	1	.415	-1.889	.780
	[parents' education C =3,00]	-.305	.658	.214	1	.643	-1.594	.985
	[parents' education D =4,00]	.552	.760	.528	1	.467	-.937	2.041
	[parents' education E =5,00]	.995	.683	2.123	1	.145	-.344	2.334
	[parents' education F =6,00]	0[a]	.	.	0	.	.	.

Note. Education A (basic), education B (incomplete secondary), education C (complete secondary), education D (university 1st degree), education E (university 2nd degree), education F (university 3rd degree).

Source. Own research.

Schools are increasingly interested in presenting their activities externally to the parental public. They do it through *„open classes",* which allow parents to participate in the teaching process. For this reason, we investigated their participation in the „open classes". However, it should be noted, based on the data from Table 1, that schools organise „open classes" only to a small extent (31.30 %). Table 4 presents our findings on parents' participation in this form of cooperation differentiated concerning their education.

Table 4

Attendance at open classes by parents' education

form/education	never		seldom		I don't know		often		always	
	N	%	N	%	N	%	N	%	N	%
incomplete secondary	32	10.00	12	1.88	6	1.88	6	1.88	7	2.19
complete secondary	59	18.44	17	3.75	18	5.63	10	3.13	20	*6.25*
university 1st degree	15	4.69	1	0.31	7	2.19	3	0.94	3	0.94
university 2nd degree	50	15.63	1	1.56	33	10.31	6	1.88	8	2.50
university 3rd degree	7	2.19	1	0.00	0	0.00	0	0.00	3	0.94
basic	1	0.31	2	0.00	0	0.00	0	0.00	2	0.63
Total	*164*	*51.25*	*34*	*7.50*	*64*	*20.0*	*25*	*7.81*	*43*	*13.44*

Source. Own research.

The results presented in Table 4 show little parental interest in „open classes". Only 13.44 % of all parents attend regularly (always), 7.81 % attend frequently, but up to 51.25 % have never attended open classes. When examining the impact of parents' education on their participation in open classes, we found the most significant interest among parents with a complete secondary education (6.25 %).

Efforts to create an open school, through the involvement of parents in the educational process, are manifested (although to a lesser extent so far) in the organisation of „open classes" for the parental public. Therefore, we investigated whether parents' interest in participating in „open classes" determines their educational attainment. When examining the value of the first variable (education) for the second value (a form of cooperation — open classes), we identified that the model is not statistically significant (the evidence is in the high significance value of p=0,577). The model also does not meet the Goodness-of-Fit assumption (p<0,05; Pearson 0.012; Deviance 0.008). Looking at the Pseudo R-Squared values, the above model explains only 0,4 % of the variability in participation in „open classes" (we rely on the low McFadden value of 0.004).

Table 5 shows that the log-likelihood value is virtually zero, implying that this form of cooperation („open classes") does not meet the significance level. The Test of Parallel Lines[a] reveals no point in interpreting further statistical results as we can confirm that education has no significant association with parents' participation in open classes.

Table 5

Test of Parallel Lines[a]—form „open classes"

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	94.157			
General	.000[b]	94.157	15	,000

Source. Own research.

From the daily practice of our schools, we can see that *extracurricular activities organised by the school* have often become realised forms of cooperation between the family and the school. We are referring to cultural and sporting events for parents (or grandparents) and children, as well as creative and other activities. Table 1 shows that up to 74.4 % of schools organise this form of cooperation, but Table 6 shows a lower parental interest (18.13 % always participate, 11.56 % of parents often participate). Thus, we can conclude that only 29.69 % of parents are seriously interested in these forms of cooperation, while 35.94 % of parents never participate. We present a more detailed analysis of the results concerning parents' education in Table 6.

Table 6

Participation in extracurricular school activities by parents' education

form/education	never		seldom		I don't know		often		always	
	N	%	N	%	N	%	N	%	N	%
incomplete secondary	31	9.69	8	2.50	2	0.63	3	0.94	13	4.06
complete secondary	46	14.38	26	8.13	16	5.00	6	1.88	25	*7.81*
university 1st degree	7	2.19	9	2.81	6	1.88	6	1.88	1	0.31
university 2nd degree	27	8.44	23	7.19	18	5.63	18	*5.63*	16	*5.00*
university 3rd degree	3	0.94	1	0.31	0	0.00	4	1.25	2	0.63
basic	1	0.31	1	0.31	0	0.00	0	0.00	1	0.31
Total	*115*	*35.94*	*68*	*21.25*	*42*	*13.13*	*37*	*11.56*	*58*	*18.13*

Source. Own research.

According to our findings in Table 6, we can conclude that parents with a complete secondary education (7.81 %) and parents with a university education of the second degree II always participate in extracurricular activities. This group of parents also expressed that they often (5.63 %) participate in events organised by the school. We can see that the least interest in extracurricular activities of the school is among parents with secondary education (both complete and incomplete).

We can conclude that parents with a complete university education (university education of the second degree) showed the greatest interest in extracurricular activities.

Parents' participation in this form of cooperation varies, and we wanted to determine whether educational attainment is a determinant. The Fitting Information Model shows that the significance value (p=0.184) is not sufficient to detect the value of the first variable (education) for the second value (a form of cooperation—extracurricular activities). Since in Pearson and Deviance tests, the p-value is less than 0.05 (Pearson 0.001; Deviance 0.000), it also does not meet the Goodness-of-Fit, which determines the fit of the model, i.e. how the statistical model fits the observed data. Subsequently, we examined the coefficient of determination (Pseudo R-Square; McFadden 0.008), which could only confirm 0.8 % of the variability in participation in extracurricular activities.

As detected by the Test of Parallel Lines[a] (Table 7), the proportional probability assumption shows that the significance value is zero (0.000). The above findings indicate that parents' education is not statistically significantly related to their participation in extracurricular activities.

Table 7

Test of Parallel Lines[a]—form „extracurricular activities"

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	111.668			
General	.000[b]	111.668	15	*.000*

Source. Own research.

We also explored parental interest in the *suggestion box* as one of the newer forms of family-school cooperation. According to the results from Table 1, only 21.30 % of schools use this form of communication with parents, but at the same time, 38.4 % of parents do not know whether the school has a suggestion box. We can assume that there is poor awareness among parents regarding the possibility of using a „suggestion box".

The data in Table 8 show that as many as 67.19 % of parents do not use the „suggestion box" as an opportunity to present their views to the school. Only a small group of parents (5.63 % always, 5.31 % often) use this anonymous way of expressing their opinions. They probably prefer to share their views in person, e.g. during the parents' meetings or individual consultations. We present a more detailed analysis of the findings concerning parents' education in Table 8.

Table 8

Use of „suggestion boxes for parents" by parents' education

form/education	never		seldom		I don't know		often		always	
	N	%	N	%	N	%	N	%	N	%
incomplete secondary	37	11.56	4	1.25	5	1.56	3	0.94	8	*2.50*
complete secondary	85	26.56	4	1.25	18	5.63	5	1.56	6	1.88
university 1st degree	20	6.25	4	1.25	3	0.94	1	0.31	1	0.31
university 2nd degree	65	20.31	2	0.63	27	8.44	6	*1.88*	2	0.63
university 3rd degree	7	2.19	1	0.31	1	0.31	1	0.31	0	0.00
basic	1	0.31	0	0.00	1	0.31	1	0.31	1	0.31
Total	*215*	*67.19*	*15*	*4.69*	*55*	*17.19*	*17*	*5.31*	*18*	*5.63*

Source. Own research.

The data in Table 8 presented, that parents with incomplete secondary education (2.50 % always) and parents with a university education of the second degree (1.88 % often) are the most frequent contributors to the suggestion box. Parents with a complete secondary education showed the least interest (26.56 %).

Based on descriptive statistics, our findings suggest that communication through a „suggestion box" is not an attractive form of cooperation for many parents. Nevertheless, we attempted to differentiate parental interest based on education. The model we used does not reach statistical significance (p=0.527). The applied Pearson (p=0.032) and Deviance (p=0.037) tests show that the model is not suitable for our observed data. Similarly, the Pseudo R-Square coefficient (McFadden 0.006) confirms only 0.6 % of the variability of using the „suggestion box".

The Test of Parallel Lines[a], presented in Table 9, reveals a low level of statistical significance (p=0.037), suggesting that parents' education does not influence their interest in using the „suggestion box".

Table 9

Test of Parallel Lines[a] — form „suggestion box"

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	86.429			
General	60.367	26.062	15	*.037*

Source. Own research.

Communication between parents and teachers through *digital technologies* is now a common practice in today's schools with all its advantages (speed, flexibility) and disadvantages (lack of personal contact, risk of misunderstandings). The data from Table 1 confirmed this tendency. Parents reported that up to 94.70 % of primary schools create space for communication through digital platforms (EduPage, e-mail, Facebook, and various communication applications).

From Table 10, it is evident that digital technology is a prevalent mode of communication with the teacher among parents. More than half of the parents (53.13 %) always communicate with the teacher through digital platforms, 25.94 % frequently, while only 5 % of the parents do not use this mode of communication or sometimes (13.44 %). A more detailed analysis of the findings concerning parents' education is presented in Table 10.

Table 10

Use of communication technologies by parental education

form/education	never N	never %	seldom N	seldom %	I don't know N	I don't know %	often N	often %	always N	always %
incomplete secondary	5	1.56	14	4.38	3	0.94	15	4.69	20	6.25
complete secondary	8	2.50	19	5.94	0	0.00	33	*10.31*	59	*18.44*
university 1st degree	1	0.31	3	0.94	0	0.00	8	2.50	17	5.31
university 2nd degree	1	0.31	6	1.88	4	1.25	2	7.50	67	*20.94*
university 3rd degree	0	0.00	1	0.31	1	0.31	2	0.63	6	1.88
basic	1	0.31	0	0.00	0	0.00	1	0.31	1	0.31
Total	*16*	*5.00*	*43*	*13.44*	*8*	*2.50*	*83*	*25.94*	*170*	*53.13*

Source. Own research.

Table 10 shows that the highest use of communication technology is among parents with a university education of the second degree (20.94 %) and parents with a complete secondary education (18.44 %), but digital communication is also common among this group of parents (10.31 %).

The digitalisation of everyday life also enters the life of the family and the school, as confirmed by the above descriptive analysis. When statistically validating the findings concerning parents' education, we found that the model meets all the prerequisites necessary for detecting statistical significance, i.e. it achieves a Final score below the established significance level (p=0.001). The achieved p-values of the Pearson

(p=0.385) and Deviance (p=0.220) tests confirm the model's goodness of fit. Through Pseudo R-Square and the calculated McFadden value (0.028), we revealed that education explains 2.8 % of the variability in participation in communication through digital platforms. The Test of Parallel Lines[a] presents an appropriate level of statistical significance (p=0.001). Therefore, we focused on other parameters of investigation that approximate the statistical dependence between the variables identified.

The results presented in Table 11 show that the significant values are higher than the set significance level (p=0.05) in all of the respondents' educational categories. The above findings indicate that educational attainment does not significantly influence parents' interest in digital communication with their child's teachers.

Table 11

Parameter Estimates — form „digital communication"

95 % Confidence Interval form/education		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[digital communication = 1,00]	-3.336	.670	24.777	1	.000	-4.649	-2.022
	[digital communication = 2,00]	-1.832	.634	8.347	1	.004	-3.074	-.589
	[digital communication = 3,00]	-1.665	.632	6.940	1	.008	-2.904	-.426
	[digital communication = 4,00]	-.399	.625	.408	1	.523	-1.623	.825
Location	[parents' education A =1,00]	-1.370	1.211	1.280	1	*.258*	-3.743	1.003
	[parents' education B =2,00]	-1.084	.670	2.620	1	*.105*	-2.397	.229
	[parents' education C =3,00]	-.451	.647	.486	1	*.486*	-1.720	.818
	[parents' education D =4,00]	-.018	.723	.001	1	*.980*	-1.436	1.399
	[parents' education E =5,00]	.296	.657	.202	1	*.653*	-.992	1.584
	[parents' education F =6,00]	0[a]	.	.	0	.	.	.

Note. Explanations: education A (basic), education B (incomplete secondary), education C (complete secondary), education D (university 1st degree), education E (university 2nd degree), education F (university 3rd degree).
Source. Own research.

Discussion and Conclusions

The issue of developing family-school relationships encompasses a complex of topics ranging from its importance through the determinants and barriers to cooperation to the forms in which the family-school partnership develops. Our scientific and research interest centred on the forms of cooperation and parents' education as one of the determinants of parents-teachers mutual cooperation.

We aimed to find out which forms of cooperation are preferred by parents at the primary level of education and whether there is a statistically significant association between parents' education and the forms of cooperation used. We analysed the preference and frequency of use of selected forms of cooperation: parents' meetings,

open classes, extracurricular activities, suggestion boxes and communication through digital platforms.

We found that while the parents' meeting, as a traditional form, is the most frequently used form of cooperation, innovative forms of cooperation (e.g. open classes, suggestion boxes) are little used by parents. On the other hand, the use of digital technologies for cooperation with the teacher and the school is rising, while direct communication is taking a back seat. Tomáš Turzák, Viera Kurincová (2022) reached similar results. They found that the classical proven forms of cooperation have been joined by media, namely e-mail, Facebook, phone calls, video calls and Internet communication tools (EduPage, Whatsapp, Viber and others). In the foreign literature, our findings correspond with those of Garry Hornby and Ian Blackwell (2018), and Paola Dusi (2020). According to them, social media is a new opportunity for family and school communication.

As Hornby (2011) warns, with modern technologies come several difficulties. Many parents contact the teacher during the working day and lesson time, at the same time expecting the teacher to deal with their „emergencies" urgently and without constraint. At the same time, contacting the teachers during their free time, set aside for family and personal interests, is considered an undesirable manifestation of parental behaviour.

Our results confirmed that many teachers and parents prefer the traditionally established forms of personal contact and that the parents' meeting continues to have a deep-rooted tradition as a form of family-school cooperation. These findings correspond with the results of Potočárová, Vančo (2012), according to which parents most often use the parents' meetings, while unofficial meetings with teachers, although popular, are less preferred due to the time commitment of parents.

However, as Izabela Nadolnik (2014) mentions, even the most traditional form of family-school contact, such as the parents' meeting, can be innovated. The teacher can send invitations to parents, where they will find a meeting schedule and a list of topics for discussion. This information will allow parents to prepare, and they can also think through the different issues they consider relevant. The teacher can also modify the space in which the parents' meeting will take place. According to Kateřina Trnková (2004), a limiting element of cooperation is the persistent traditionalism determining the ideas of the school as a closed institution, but also the preconceptions of the teacher as a non-communicating professional.

Our research findings revealed that less formal forms of cooperation include after-school events organised by the school. Although most schools organise them, parental interest is only average. Even 35.94 % of parents have never participated in them. According to Hornby (2011), schools should use activities to encourage parents to cooperate. It is informal meetings with parents that are a helpful way to „break down barriers" in communication. We agree with Ekaterina Alekseevna Seljukova et al. (2022) that schools should actively involve parents in all classroom and school activities.

When examining the association between parents' education and forms of cooperation, we did not find a statistically significant effect of the independent variable on the dependent variable, i.e. parents' education does not act as a determinant of family-school cooperation. Our research findings suggest that parents' education as an indicator of family socioeconomic status does not impact the forms of cooperation used with primary school teachers. Nevertheless, we can assume that other characteristics of parents (socioeconomic and sociocultural), acting in a complex way, influence the building of the relationship between parents and teachers. In this context, the need arises to investigate the determinants of cooperation in their interrelated associations.

At the same time, the relationship between parents and teachers is affected by many current changes in the field of school education, in the life of contemporary families, changes in the development of technology and other factors which affect the level and success of cooperation between families and schools.

Acknowledgements

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