

THE EFFECT OF PARENTAL EDUCATION AND PARENTAL READING BEHAVIOUR ON FAMILY CULTURAL CAPITAL OF LOWER AND UPPER SECONDARY SCHOOL STUDENTS

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Abstract

The aim of the research was to analyse the effects of family cultural capital on reading behaviour of the selected group of lower secondary and upper secondary school students in Slovakia. Based on the results of the international testing called PIRLS (2016) and PISA (2018) the school children in Slovakia achieved low results. Therefore, the selected aspects of family cultural capital were analysed to find out the extent of effect it has on the reading behaviour of the selected sample of the students in Slovakia. Specifically, the research was focused on the several selected factors, as follows: family trips, cinema, theatre shows, galleries and concerts attendance, family crafts, parental education, and parental reading behaviour. The sample was selected based on the age of the respondents and their school affiliation. Geographically the random sample was selected from the students of Nitra region in Slovakia. Although the data were collected about both parents of each student, the effect of mother's reading behaviour appeared to have greater significance. Apparently, the number of books in the family library had some effect on reading behaviour of the children in the family, too. The results presented the importance of family environment in the process of reading behaviour development of the selected groups of students.

Keywords: cultural capital, reading behaviour, mimic model, metric invariance.

Introduction

Currently, reading comprehension is one of the essential skills needed in practical life. High emphasis should be paid to develop the reading skills in the school curricula. It is important to be able to read and understand the text and process information correctly. As Helšusová (2012) suggested, reading comprehension and text processing is one of the essential conditions to achieve successful life in nowadays' society. The importance of reading comprehension development and how people approach information processing lays in the early stage of family life and early education at schools. Considering socialization, it is crucial for a child to see a positive example of reading from their own parents (Helšusová, 2012). Štrbová (2016) and Selická (2018) emphasized the theme of human capital and culture of poverty in their research among poor Roma communities within Slovakia. Their research presented the results of very poor learning achievements due to low exposure to books and negative parental reading behaviour. Apparently, when the children are exposed to the books and see a positive example of parental reading behaviour, they become successful readers right from the beginning of their schooling. Such children also achieve better academic results. Generally, the research of children's reading skills development has been very often focused on two different aspects: the first is measuring of the general reading performance, most often the international PISA

testing is used. The second aspect is to research the activities and attitudes related to reading in family environment. To contribute a wider view on the research of problems of reading and its development in school age, the main emphasis of this research was to analyse the parental education, number of books at home libraries, the time spent with children and the type of the school their children attended.

Theoretical Background

French philosopher Louis Pierre Althusser pointed out the problem of reproduction of social relationships in the system of capitalistic production. As Althusser (1970) discussed the institution of schools as an organization, where economical relationship is link to capitalistic society. A very similar opinion was shared by Bowles and Gintis (1986). Although they reflected American society mainly, they both pointed out that the sources of educational inequalities were most probably rooted in economical background. Based on their assumptions capitalistic society emphasized not only production of profit, goods, and services, but also self-reproduction. Specifically, their assumptions were built on the cycle of social reproduction, where the off-springs of the working class become a part of the same class and the off-springs of the higher class become a part of a higher class. Consequently, the possessions of cultural capital transmit from one generation to the other in the same shapes and under the same conditions. All three authors considered the institution of school as the main factor of reproduction processes within the educational structures of society as well as societal employment structures.

Considerably different was the theory of an American sociologist Melvine Kohn (2009) who assumed that the family values and the types of parental occupations were the main factors of social structure reproduction. Furthermore, he considered values to be the main sociological issue because it is the values, he assumed, that connected social status and behaviour. Kohn's book *Class and Conformity*, he stated that people who worked in free conditions emphasizing free decisions, most probably emphasized the same values in forming behaviour of their children. As opposed to such people who work in strict conditions, suppressing free decisions would most probably transmit values of conformity on their children (Kohn, 2009). Considering the values parents appreciated their formed behaviours and their relationships to children. The sources, Kohn suggested, were rooted in their working experience and the type of occupation.

The key notion of Pierre Bourdieu's theory of cultural capital reproduction oscillated around the cultural activities of parents, and academic achievements of their children. Generally, cultural capital is the cultural quality of the environment where the child grew up, it is the knowledge and behaviours that children acquired in family environment. As opposed to economical notion of capital Bourdieu referred the notion of capital to transmissible parental practices, all practices that children accumulated and then utilized at school and later in life. Bourdieu argued that the children from a higher class have a different cultural capital than the children from a working class. Through family socialisation children from higher class learn how to use appropriate language phrases even before they enter a school, they also carry certain cultural knowledge, thus, they come to school prepared and ready to enhance. School environment usually appreciates such benefits as cultural knowledge and certain expected type of behaviour. Generally, such children have better starting position; they are better equipped in sense of culture and life in society. Furthermore, when such children visit theatres, cinemas, are exposed to literature and reading, they travel and learn about different places, they are more prepared for the school environment and achieve better studying results, and they are more successful than the children from working class. Cultural capital is tied with personality, it is not possible to lose it or get rid of it. Similarly to any other capital, it is possible to reproduce itself. Possibly, Bourdieu in his theory considers cultural capital to be one of the crucial factors related to the educational differences in society.

Research Problem and Research Purpose

Currently, it is essential to teach children how to work effectively in the information-based society. Developing reading comprehension may help children later on in their personal as well as professional lives. Generally, a positive reading behaviour is rooted in family life. It is the family environment where the child is most likely exposed to reading as an important value. Therefore, it is essential to find out the living conditions of children and parental reading behaviour (Helšusová, 2012). By finding out more about children and their family environment, it is possible to identify such children who might need more support and attention.

As opposed to the other OECD countries where the average value was 487 points, the Slovak students achieved 458 points in reading comprehension PISA testing in the year 2018. The results obtained from the Slovak students showed under average results (Results of the Slovak students in the international Study by OECD, 2019). Obviously, there are several reasons for such negative results. The essential factors influencing reading behaviour is the school system but also the family environment. Family cultural capital was considered to be one of the crucial factors having an effect on reading behaviour of children in a family. Therefore, the hypotheses of the research were formulated as follows:

- H₁ Level of parental education has a positive effect on family cultural capital.
- H₂ Parental reading behaviour has a positive effect on family cultural capital.

Research Methodology

General Background

The aim of the research was to design a MIMIC model. The model consisted of the data about parental education, intensity of reading and number of books in family library. These were the data collected for the purpose of further research analyses. The effects of parental reading behaviour on family cultural capital were analysed in the research. The selected respondents were asked to fill in the structured questionnaires. The data were distributed to the students personally, then collected after 45 minutes, and were kept confidential. The data collection was designed by a group of sociologists in March 2019 and processed and analysed in August and September 2019. Schools were selected by the researchers of the APVV project called Reading comprehension development in a foreign language and mother tongue. The questionnaire consisted of closed questions where respondents were asked to choose from a fixed number of options. The questionnaire provided the information about the three main elements that were assumed to have the greatest effect on reading behaviour: 1) parental education, 2) parental reading behaviour, and 3) family attendance of various cultural activities. To achieve the research aims the following groups of respondents were selected:

1) students of secondary grammar schools, 2) students of secondary vocational schools, and 3) students of lower secondary schools. For getting a wider knowledge of the respondents it is important to describe the Slovak school system and the types of schools that were selected. In Slovakia, secondary grammar schools mostly provide high quality education. Usually those students who tend to continue in their studies at universities and colleges desire to study at such schools. Secondary grammar schools are academically demanding. On the contrary, the students of the secondary vocational schools are schools with lower educational standards. Usually students with lower academic achievements apply to study at such vocational schools. Therefore, the differences in the family cultural capital, family reading behaviour and level of parental education of the two different groups of students were expected to be different. However, the lower secondary schools in Slovakia are compulsory for all but handicapped or

impaired children, for those from working class families as well as those from higher class families. Most of them are public. Academically, there are not many differences among those schools; the syllabus is the same for all lower secondary schools.

Sample

Three groups of respondents participated in the research. They were all from the Nitra region from Slovakia. They were the students of lower secondary schools aged 12 -13, and secondary grammar schools aged 16 -17. The total number of randomly selected respondents was 716 students. The students of lower secondary schools were marked ZŠ – 7, the groups of the secondary grammar schools were marked SŠ – G and the students from the secondary vocational schools were marked SŠ-SOU. The biggest group (36%) was the group of students from the secondary vocational schools, slightly smaller group (34%) was the group of secondary grammar schools, and the smallest was the group of the lower secondary students (30 %). The number of female students was higher than those of male students: female students 59 %. Generally, more female students studied at the secondary grammar schools in the Nitra region in the school year of 2018/2019 as the Statistical Office of the Slovak Republic, confirmed. 66% of the students came from villages up to 5 000 inhabitants. 53 % of inhabitants lived in towns and cities in the year 2017. (Podmanická et al., 2018)

Table 1
Research sample

General characteristics	SŠ-G		SŠ-SOU		ZŠ-7		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Female	149	69	147	57	124	51	420	59
Male	67	31	109	42	119	49	295	41
Residence								
City	112	52	83	32	37	15	232	32
Village	102	47	167	65	202	83	471	66
NA	2	1	7	3	4	2	13	2

NA –not answered

Instrument and Procedures

The research tool was the questionnaire designed by Helšusová (2012), originally designed for conducting research on children and their reading skills development. The questionnaire contained 29 questions about socio-demographic characteristics of the respondents as well as the data about parental education, and parental reading behaviour. The 4-point Likert's scale was used to gather data about 1) Parental reading behaviour, 2) Number of books in family library, and 3) Intensity of cultural family attendance. The scale was the following: 0 = never; 1 = 1-2 times a month, 2 = 1-2 times a week, 3 = every day; books in library: 0 = several books/up to 10, 1 = 1 shelf/10-20 books, 3 = many/up to 100, 4 = more than 100.

As explained, the following essential categories were suggested to define family cultural capital, first was the category of cultural attendance and the second was family trips. Cultural attendance was described as attendance of theatre shows, galleries, and classical music concerts. Moreover, the category of Family cultural capital was designed as a one-dimensional construct

consisting of 6 indicators: *family trips, attendance of theatre, cinema, gallery, concert, family, crafts*. The scale for family cultural attendance was the following: 0 = never, 1 = 1-2 times a month, 2 = 1-2 times a week, 3 = every day.

Data Analysis

Kruskal-Wallis test (KW-test) was used to compare the frequency of time spent together as a family attending cultural events, parental education, reading behaviour and the number of books in family library between groups. In case of statistically significant results the Wilcoxonrank sum test and Benjamini-Hochberg correction test (Benjamini& Hochberg, 1995) was used to find out about statistically significant differences between the pairs of the selected groups.

As expected, it was insufficient to use only confirmation factor analysis (CFA) because the research was conducted on three different groups. Reasonably multi-group confirmatory factor analysis MGCFA was used to measure invariance. Within the analysis of MGCFA theoretical model was compared with the selected structure in two or more of the groups. The model provided measurement invariance when configural, metric, scalar or error variance invariance were present (Milfont& Fischer, 2010). Jöreskog's approach to testing (1993) measurement invariance was based on designing a hierarchical structure of immersed models with decreasing number of selected values. Every subsequent model was immersed into the preceding model, and the measurement invariance model became tighter every time. For the purpose of the research, MGCFA was gradually considered to be the universal testing model (Steenkamp & Baumgartner, 1998).

Generally, essential structure of a model is invariant when a construct is interpreted in a conceptually similar manner by different groups of respondents, thus, such model is called configural invariance. A different type of invariance is that type of invariance when factor loadings are similar, when intensity among the individual items of the scale and the construct is the same in all groups. It is called metric invariance (Millsap, 2001). Scalar or intercept invariance is a strong factorial equivalence of item intercepts. Moreover, when the respondents of the research are to compare average latent variables among groups, it is the last condition that must be kept. The respondents scoring the same in the latent variable score the same when the observed variable is measured disregarding group affiliation. The last fourth type of invariance is error variance invariance when the same level of measurement error is present for each item between groups (Milfont & Fischer, 2010).

For measuring degree of association between family cultural capital (KKR) and parental reading behaviour, parental education and number of books in family library, a multiple indicators multiple causes (MIMIC) model was used. MIMIC model is a specific type of structural equation model (SEM) which models relationships between observed covariates and latent variable. In this research the latent trait in the MIMIC model was the family cultural attendance and family time spent together on family trips or doing creative crafts. They all contained family cultural capital construct. The individual items of family cultural capital were the indicators of latent variable, the variable of family cultural capital.

Apparently, the model consists of two parts. The first part represents the measurement model, one latent underlies variable of responses to the categorical variables relating to the KKR (see the bottom part of the Graph 1). The measurement model relates one unobserved latent construct and observed manifested items of KKR, the arrows direct to the latent variable of the KKR items. The second part of the model represents the regression model, an analogy to multivariate regression and one latent dependent variable and several independent variables - covariates – see the upper part of the Graph 1. The regression model manifests the relationship between the selected covariates and non-observed latent construct; the arrows are directed from covariates to the latent variable.

MIMIC model refers to the assumptions of the latent variable, for the purpose of this research study called KKR, in relationship with the explanatory variables. Moreover, they refer to the possibility to evaluate each of the indicated variables, considering the covariates. The results of this research contain the following covariates: mother`s highest achieved education, father`s highest achieved education, frequency of reading time of mother, frequency of reading time of father, and the number of books in family library.

Furthermore, to verify the quality of the model several criteria were utilised. Chi-square goodness of fit test was used to test differences between the observed data and model prediction. Although there are cases when the selected model is suitable, testing by the chi-square test may reject the hypothesis even in the cases of a large group of samples (Barrett, 2007). For the purpose of this research four main fit indices were used: 1) comparative fit index (CFI), the values higher or equal to .95 suggest adequate fit (Hu & Bentler 1999), 2) Tucker-Lewis Index (TLI) is in consistency with CFI (Schumacher & Lomax, 2004), 3) A root means squared error of approximation (RMSEA), values lower than .08 indicate adequate fit and values lower than .05 indicate excellent fit (Browne & Cudeck, 1992); and 4) standardized root mean square residual (SRMR) values lower than .08 suggest good model fit to the data (Hu & Bentler, 1999). The results were processed by the programme R (R Core Team, 2018) through the means of the libraries *lavaan* (Rosseel, 2012), *lavaan Plot* (Lishinski, 2018), *sem* (Fox et. al, 2017) and *ggplot2* (Wickham, 2016).

Research Results

The characteristics of the three selected groups of the participants also vary in the educational level achieved by parents. Table 2 displays parental education in all 3 groups of respondents. The data obtained from the Kruskal-Wallis test showed that neither education of mothers ($H(2) = 36.56, p < .001$) nor fathers ($H(2) = 58.25, p < .001$) was the same in all three groups. The results obtained from the Wilcoxon rank sum test and the Benjamini-Hochberg correction showed significantly higher parental education in the group of secondary grammar school students. 48% from the group of parents graduated from universities. Parents of the secondary vocational school students 19% from the group of mothers graduated from the university, and 14% of the fathers graduated from universities. Considering the parents of the lower secondary school students, 25% of the mothers and 18 % of the fathers graduated universities. The education of the fathers in the group ZS-7 is higher than the education in the group SS-SOU ($p = .018$). However, the results showed no statistically significant difference in the results of the education of mothers ($p = .098$).

Table 2
Parental education

	SŠ-G		SŠ-SOU		ZŠ-7		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Mother								
Primary	1	0	1	0	5	2	7	1
Secondary	103	48	191	75	121	50	415	58
University	103	48	49	19	61	25	213	30
Unknown	8	4	13	5	54	22	75	11
KW-test	$H(2) = 36.56, p < .001$							
Mean Ranks	333 ^a		254 ^b		276 ^b			
Father								
Primary	2	1	3	1	3	1	8	1
Secondary	96	46	190	76	120	50	406	58
University	102	48	35	14	44	18	181	26
Unknown	11	5	23	9	72	30	106	15
KW-test	$H(2) = 58.25, p < .001$							
Mean Ranks	343 ^a		245 ^c		275 ^b			

Table 3 shows the data collected from the Kruskal-Wallis test about parental reading behaviour and the number of books in family library. Reading behaviour of the mothers ($H(2) = 12.85, p = .002$) and the fathers ($H(2) = 12.20, p = .002$) differed in all 3 groups. Significantly highest values appeared in the group of the secondary grammar school students ($p < .001$). There were no significant differences found in the groups of lower secondary and secondary vocational schools; neither the fathers ($p = .731$), nor the mothers ($p = .196$). However, reading behaviour of the mothers of the secondary grammar school students showed higher values of 56 % and the values of the fathers it was 10 % less. The data showed that two fifths of the mothers of the secondary vocational schools and the lower secondary schools read on daily basis. Although the data about the reading behaviour of the fathers showed approximately 10 % lower compared to the mothers in all the selected groups, 27 % of the students of the secondary vocational schools revealed that their fathers do not read at all. In the groups of the lower secondary school students it was 21% and secondary grammar school it was 12 % of the students.

Regarding number of books in family library, the Kruskal-Wallis test showed significant differences ($H(2) = 40.08, p < .001$) in all groups. The parents of the secondary grammar school students possessed the highest number of books ($p < .001$); students marked at least 20 books in the libraries of 84%. However, there was no statistically significant difference in the group of the lower secondary schools and the secondary vocational schools ($p = .970$), it was 61% of libraries containing at least 20 books.

Table 3
Parental reading behaviour and number of books in family library

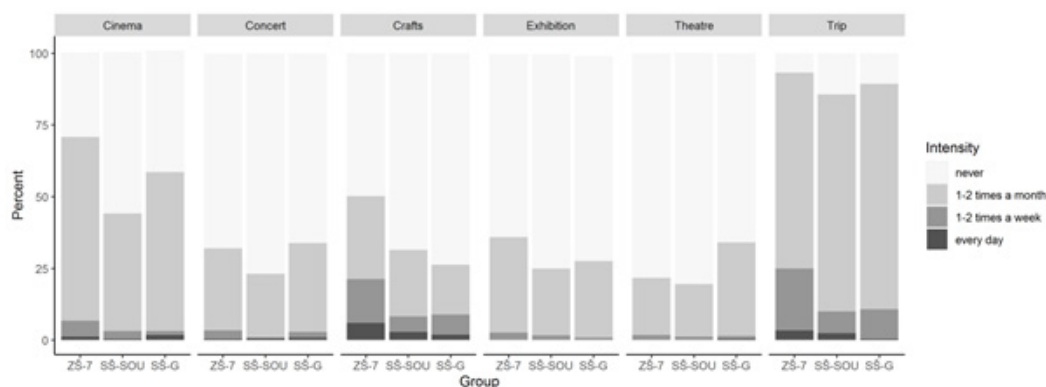
	SŠ-G		SŠ-SOU		ZŠ-7		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Mother								
Every day	118	56	99	40	99	42	316	46
1-2 times a week	57	27	83	34	87	37	227	33
1-2 times a month	23	11	32	13	32	14	87	12
Never	13	6	34	14	16	7	63	9
KW-test	H(2) = 12.85, <i>p</i> = .002							
Mean Ranks	307 ^a		253 ^b		283 ^b			

	SŠ-G		SŠ-SOU		ZŠ-7		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Father								
Everyday	97	46	75	32	69	31	241	36
1-2 times a week	55	26	63	27	69	31	187	28
1-2 times a month	33	16	31	13	39	17	103	15
Never	25	12	63	27	49	21	137	21
KW-test	H(2) = 12.20, <i>p</i> = .002							
Mean Ranks	305 ^a		253 ^b		268 ^b			

	SŠ-G		SŠ-SOU		ZŠ-7		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Home library								
Several (up to 10)	9	4	36	14	32	13	77	11
One shelf (10-20)	26	12	65	25	68	29	159	22
Many (more than 20)	96	45	105	41	85	36	286	40
More than 100	82	39	50	20	53	22	185	26
KW-test	H(2) = 40.08, <i>p</i> < .001							
Mean Ranks	342 ^a		253 ^b		259 ^b			

Apparently, intensity of family cultural enhancement is displayed in the Figure 1. Although the results of the Kruskal-Wallis test showed there was no significant difference in the selected groups in the items of gallery and concert attendance ranging from 25 – 36% for the intensity of 1-2 per a month, the other four items differed significantly. Cinema attendance (71%, 1-2 times a month), family trips (25%, 1-2 times a week) and family crafts (22%, 1-2 times a week) were more often displayed in the groups of younger students, of the lower secondary schools. The results showed higher theatre attendance (71%, 1-2 times a month) within the group of the secondary grammar schools. Moreover, the students of the secondary vocational schools showed no highest values in any of the selected groups. However, as the results showed the lowest values of intensity in the item of cinema attendance (44%, 1-2 times a month).

Figure 1
Intensity of family cultural attendance



Out of 6 activities items/activities suggested in the questionnaire it was the family trips that students marked most often, 89%, 1-2 times a month. The second most frequent marked activity was cinema attendance, 57%, 1-2 times a month, and the third was family crafts, 36%, 1-2 times a month. On the other hand, the least marked activity was theatre attendance (25%), concerts (29%) and galleries (30%).

Table 4
Kruskal-Wallis test for family activities

Activities	KW-test		Mean Ranks		
	H(2)	P	ZŠ-7	SŠ-SOU	SŠ-G
Trip	20.88	<.001	322 ^a	267 ^b	271 ^b
Theatre	9.81	.007	277 ^b	269 ^b	305 ^a
Cinema	26.67	<.001	329 ^a	261 ^c	283 ^b
Exhibition	3.22	.200	-	-	-
Concert	4.26	.119	-	-	-
Crafts	31.81	<.001	336 ^a	275 ^b	253 ^b

For the purpose of this research, the method of CFA in each of the selected groups of respondents was used to verify if suggested one-factorial model fit the empirical data. As the results showed coherence of the model and data in all three selected groups was excellent. Family cultural capital construct was one-dimensional construct.

To specify, the results were the following:

- 1) ZŠ-7/Lower secondary school students $\chi^2(9) = 4.78, p = .853, \chi^2/df = 0.53, RMSEA < .001, SRMR = .05, CFI = 1$;
- 2) SŠ-SOU/Secondary vocational school students $\chi^2(9) = 7.92, p = .593, \chi^2/df = 0.88, RMSEA < .01, SRMR = .05, CFI = 1.00$

- 3) SŠ-G/Secondary grammar school students $\chi^2 (9) = 1.92, p = .993, \chi^2/df = 0.21, RMSEA < .01, SRMR = .03, CFI = 1.00.$

Furthermore, the coherence of one-factorial model was verified through MGCFA. For the purpose of the research, 3 different models were designed Model 1, Model 2, and Model 3. Coherence of the suggested structures was verified through Model 1 Fit indexes confirmed coherence of the factorial structure in all 3 groups as displayed in the bottom part of Figure 2. Confirmation of configural invariance enabled the further research testing if the factor loadings are equivalent across groups, specifically, verification of metric invariance or pattern invariance followed (Millsup, 2001). The values of fit indexes reached satisfactory levels in the Model 2 and chi-square difference statistic ($\Delta \chi^2$) reached statistically non-significant values ($p = .368$). Scalar invariance/intercepts of items were tested using Model 3. Fit indexes reached unsatisfactory levels and the statistically significant results of chi-square differences statistic leading to the conclusion about the average latent variable which was not the same in all the groups, thus, scalar invariance was not reported for the model.

As expected, scalar invariance was not reported based on the results of the Kruskal-Wallis test. The mean value of the latent variable was not the same in all groups. The highest level of KKR was measured in the group of the lower secondary school students. Considering the possibility to analyse the effects of covariates and family cultural capital for all the respondents at the same time, it was essential that the metric invariance was reported.

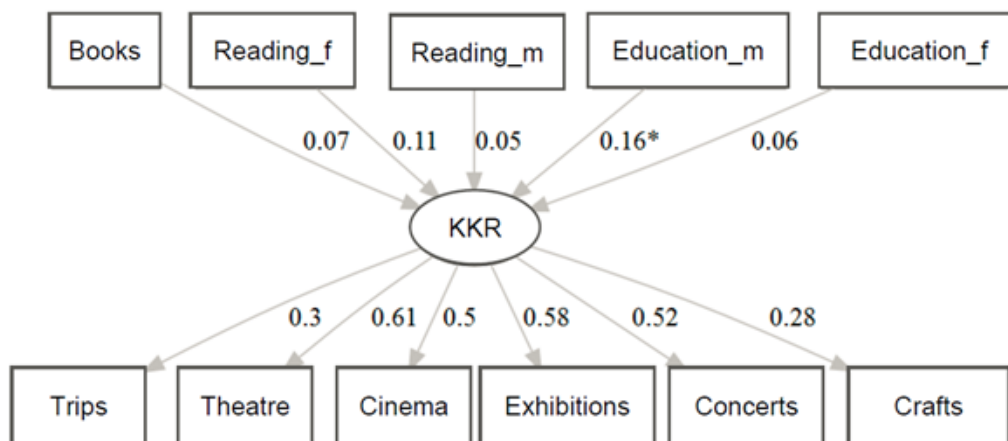
Table 5

Fit indices for invariance tests

Model	χ^2 (df)	χ^2/df	RMSEA (90%CI)	SRMR	$\Delta \chi^2$ (Δdf)	CFI (ΔCFI)	Comparison	Decision
Model 1:	15.90		.016		-	.966		
Full configural invariance	(27)	.59	(.000 - .060)	.040	(-)	(-)	-	Accept
Model 2:	26.77		.058		10.87	.928		
Full metric invariance	(37)	.72	(.038 - .083)	.094	(10)	(.038)	Model 2 vs. Model 1	Accept
Model 3:	69.43		.038		42.66	.763		
Full scalar invariance	(47)	1.47	(.000 - .060)	.098	(10)	(.165)	Model 3 vs. Model 2	Reject

As displayed, the MIMIC model consists of the following measured items: father's and mother's education, their reading behaviour (intensity of reading) and the number of books in family library. The main attention was paid on parental reading behaviour and its effects on family cultural capital. The measured variables were marked in the square lining and latent in the oval lining. The effect was marked by arrows. Next to the variables, the values were marked as predictions of the provided parameter. Apparently, out of all covariates the mother's education had the most significant effect on family cultural capital ($p = .032$). Also, the results of the regression coefficient displayed in Figure 1 showed a positive effect of education of mothers on family cultural capital. Although the other values obtained from the regression coefficient were also positive, though statistically insignificant: father's education ($p = .488$), mother's intensity of reading ($p = .502$), and the number of books in family library ($p = .826$), it showed lower levels of effect.

Figure 2
Path diagram of model Multiple Indicator Multiple Causes



The path diagram refers to the effects of parental education and parental reading behaviour on family cultural capital. Selected activities/items presented in the bottom part of Figure 2 indicate latent construct, family cultural capital; the upper part indicates covariates, the values of regression coefficients in the regression model referring to latent dependent variable. Reading behaviour of father and reading behaviour of mother, *Reading_f* and *Reading_m* were coded as follows: 0 – never, 1 = 1-2 times a month, 2 = 1-2 times a week, 3 = every day. Parental education *Education_f* and *Education_m* were coded as follows: 0 = primary school, 1 = secondary school, 2 = accomplished university/college. Number of books in family library was coded as follows: 0 = several (up to 10), 1 = one shelf (10-20), 2 = many (more than 20), 3 = over 100.

Fit indices for the final model were the following $\chi^2(34) = 29.70$, $p = .679$, $\chi^2/df = 0.87$, $RMSEA < .01$, $SRMR = .03$, $CFI = .99$. Cronbach alpha inner consistency coefficient was calculated .60 which was lower than suggested value of .70 (Nunally, 1978).

Discussion

Although there have been many sociological and pedagogical research studies emphasising importance of family cultural capital in the process of children's education, a small number of such studies has analysed the effects of parental education and parental reading behaviour in the educational process. Based on the empirical results, this research emphasised the importance of cultural capital in the process of reading literacy development and positive relationship to reading of 12 – 16- year old students. In the European socio-political conditions, many parents have an opportunity to get engaged in the process of education of their children. Thus, it is considered important to examine also parental reading behaviour. The British sociologist Reay (2010) emphasised crucial role of the economical capital in the family. However, the source of parental cultural capital is equally important and should be utilised to increase the educational level of children. In order to increase general academic results as well as the results in PISA and PIRLS tests in the future, it is crucial to identify such families with lower cultural capital and point attention to the children from such families.

The purpose of the research was to examine family environment, specifically, effects of parental reading behaviour and parental education on family cultural capital. This research had the ambition to contribute to the wide spectrum of examinations of reading behaviours.

Specifically, attention was paid to parental behaviour and how family spends time together doing crafts or attending cultural events, thus, how they transmit cultural capital to their off-springs. In this research, family cultural capital is defined by several activities/items; it is family cultural attendance, specifically, theatre, cinema, concert, gallery, and family activities, specifically, doing crafts together and going out for family trips. Moreover, one-dimensional construct of family cultural capital was developed for all examined groups. The results confirmed the theory by Bourdieu about positive effects of family cultural capital and parental education.

In addition, the key research results showed a high level of effect of parental education, specifically of mothers' education, on family cultural capital. Naturally, general higher education offers more opportunities for better paid jobs leading to higher standards of living. Furthermore, Ermish (2010) examined correlations between parental education and academic results of children and pointed out the importance of mother's and father's education and its impact on their children. He also found out that mother's education had greater impact on the education of daughters than the father's education. Similarly, the results of this research showed the importance of mother's education on the academic results of their children. A very similar research was conducted by Lapienienė and Mažeikienė (2015). The results oscillated around the effects of reading behaviour, social interaction on cultural capital, especially, the effects of social and educational factors on cultural capital (Lapienienė & Mažeikienė, 2015). The analyses of their research results revealed great significance of social and cultural family environment, especially, availability of books and cultural attendance, on reading behaviour of children. Moreover, in their research Myrbeg and Rosén (2009) pointed attention of academics on significance of education of parents on the studying results of their children. As examined, such parents tend to utilise their knowledge in much higher extent than parents with lower level of education, for creating educational environment for their children. The results presented in this research study made a great contribution to the topic of influential aspects of education on cultural capital. Additionally, the results showed great significance of family attendance of various cultural events leading to enhancement of cultural capital.

Also, the results of this research also showed stimulating aspects of parental reading behaviour on children's reading behaviour as was confirmed by the results obtained from PIRLS 2016 testing. Reading behaviour of children is related with parental reading behaviour and also availability of books at home (PIRLS, 2017). As illustrated in the research results family environment, especially parental roles, play a significant role in the process of children's education. Usually, the results obtained from a variety of international tests provide general information about the situation of schools in the country and the school system of education in the country. As provided in the research study, the results of this research presented how important it is to focus attention of pedagogical and sociological research on family environment.

Conclusions and Implications

Currently, the needs of modern society and the policy of education oscillate around the need to increase reading behaviour of children as well as their reading literacy. Generally, in order to increase successfulness in various international tests in the field of reading literacy, it is vital to find out information about parental education and parental reading behaviour and examine the impact they have on reading behaviour of children. As the results of this research illustrated, parental education and parental reading behaviour had a great effect on increasing family cultural capital, which significantly influenced academic results of the selected group of lower secondary and upper secondary school students.

The research results yielded great influence of parental education on the choice of secondary school for their children at the age of 14. As the research results showed, parents of the secondary grammar school students accomplished significantly higher education than those

from the other 2 groups of students. Parents of the secondary grammar school students had a greater number of books in family library and showed significantly better example of reading to their children. The research results yielded the crucial data about significant influence of mother's education. Furthermore, father's education, reading behaviour of parents and high intensity of family cultural attendance, and availability of books in the library had a significant influence on the extent of children's cultural capital.

To sum up, the highest values of cultural capital were indicated in the group of the youngest students/lower secondary school 12-13 year old students, lower was observed in the group of secondary school students/16-17 years old, and the lowest was observed in the group of secondary vocational school students. The research yielded expected results as the younger students spend their free time more often with their parents who in this sense have a greater effect on their choices.

The results about parental time investment and its influence on family cultural capital was the main contribution of this research to the growing field of reading behaviour of children. The research results confirmed the hypothesis about a great effect of parental education on the further education of children. In addition, the results also contributed to the studies of teachers' education. Regarding the aim of the teachers is reading behaviour enhancement of their students and their successfulness in academic life, then it is crucial to pay more attention to those children whose parents have a lower educational level and possess a low number of books in their family library. As the research results revealed, it is important to focus more on reading behaviour enhancement of children coming from lower social class. Moreover, the results contributed to the development of intervention programmes for reading literacy. Current research suggested a novel research question about interventions of new ways how to support missing cultural capital in society in the system of education in Slovakia. However, the real limitation of this research was small sample. Higher number of students coming from various regions of the country and various types of schools would bring more realistic research results. Also, it is important to examine socio-economic factors of family in the future research.

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