

FACTORS ASSOCIATED WITH PARENTAL NON-/PARTICIPATION IN CHILD-DEVELOPMENT RESEARCH

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Abstract:

Background: It is always a challenge to involve parents in child-development research, and there are a number of reasons why parents do not participate in such research. These include: inadequate invitations to take part, lack of time or long-term absence of the parent, the character of the study, problem behaviour occurring in the family, and parental involvement in the child's life. In many "family studies", it is often the case that only the mothers' opinions are represented, and, in fact, the need to recruit fathers in research has subsequently increased in recent years, as it can present different views to those only including mothers. In terms of optimizing data collection as well as for interpreting and generalising the findings, it is crucial to know whether children whose parents participate in research differ in important characteristics from those whose parents do not participate. Adults who volunteer to take part in research, have been found to have some specific characteristics, some of which have a socio-demographic basis. The present study provides the potential reasons and the differences between the children of participating and non-participating parents.

Aim: The aim of this study was to uncover the above differences with respect to (1) socio-demographic indicators; such as gender and the financial situation of the family, (2) health-risk behaviour (alcohol use, smoking, drunkenness) and problem behaviour, (3) parental processes (parental disclosure, solicitation, knowledge, monitoring/rules-setting) and parent-child relationships (companionship, conflict, intimate disclosure, affection, reassurance of worth, satisfaction, antagonism, punishment and relative power). This research also aims to identify what might increase the probability of parental participation in child development research. In general, it can be hypothesised that mothers are more likely to respond. With regards to the gender of the child, it is expected that there would be a higher rate of response from the parent of the same sex as the child. Parents with a higher socio-economic status are also hypothesized to be more likely to participate in the research. Parents who care about the activities of their child and show the positive aspects of the parent-child relationship are also hypothesized to be more involved in child development research. On the other hand, parents with problems occurring in their family might be hindered in providing any personal information.

Methods: The research sample consisted of 810 early adolescents from Slovakia (mean age= 12.78, SD=.72), 49.9% were girls. The children were administered a paper-pen questionnaire to monitor risky behaviour - alcohol use, drunkenness, smoking (Hibell et al, 2012), permitted smoking and alcohol use by parents; problematic behaviour; parental processes (Stattin & Kerr, 2000; subscales: child disclosure, parental solicitation, parental knowledge, parental monitoring/rules) and relationships (The Network of Relationships Social Provision Version, Furman & Buhrmester, 1985; subscales: companionship, conflict, antagonism, intimate disclosure, affection, reassurance of worth, satisfaction with relationship, punishment, relative power). A total of 401 mothers (51.88%

of all mothers whose children reported they lived with a mother or a step-mother) and 242 fathers (36.1% % of all fathers whose children reported they lived with a father or a step-father) were willing to participate in the research after sealed envelopes with questionnaires were delivered to them through their children. A chi-square test of independence and Mann-Whitney U test were used to analyse the data in SPSS 21.

Results: Just over half of the mothers and one third of the fathers asked to participate in this research were willing to do so. According to the results, fathers were more likely to participate if their daughter was in the research rather than their son, χ^2 (1, n=669)=6,38, p=0,012, phi=-0,101. There were no significant differences found in the perception of the family's financial situation between the children of participating and non-participating parents (mothers: U=64402, Z=-1.166, p=.24; fathers: U=43783, Z=-0.065, p=.95). However, there were significant differences in school achievement (mothers: U=57697.5, Z=-4.002, p<.001; fathers: U=35036, Z=-4.566, p<.001), problem behaviour (mothers: U=54604.5, Z=-3.554, p<.001; fathers: U=32719.5, Z=-4.615, p<.001), maternal punishment (U=52816.5, Z=-2.589, p<.05) and the relative power of the father (U=28470, Z=-1.980, p<.05), with higher scores in children whose mother/father did not participate in the research. Furthermore, there was a difference in parental knowledge (mothers: U=55343, Z=-2.345, p<.05) and monitoring/setting rules (fathers: U=35239.5, Z=-2.120, p<.05) with a higher score in children whose mothers/fathers were involved in the research. The other variables did not show significant differences.

Conclusions: There is little known about the differences between the children of parents or parents themselves who participate in research and those who do not. The current results show that important indicators of parental participation in research appear to be: better school achievement of their child, better parental knowledge and a greater level of monitoring. In addition, less problematic and health-risk behaviour, lower maternal punishment and the lower relative power of the father might increase the probability of parental participation in research. These findings highlight the trend that the parents of less problematic children with more appropriate forms of parenting and parent-child relationships are more likely to participate in research. These findings need to be taken into account when interpreting the results related to parental data. Similarly, these findings may be useful in the process of increasing the probability of parental participation in research.

Keywords:

Problem behaviour. Risk behaviour. Parental processes. Early adolescents. Parents.

Introduction

Involving parents in the child development research of their child is always a challenge. The reasons why parents do not participate in such research vary. It might be an inadequate invitation to take part, lack of time or long-term absence of the parent. There is also the character of the study to consider (laboratory-based ones are more likely to be refused), more than one data collection point and unknown researcher to the potential participants (Woollett, White, & Lyon, 1982). However, it is crucial for future research to find adequate ways to involve parents in health research (Shen, 2017). Many “family studies” have only presented the opinion of mothers and the need for recruiting fathers in research has subsequently increased in recent years. Interviewing fathers can present different views (Macfadyen, Swallow, Santacroce, & Lambert, 2011) and undoubtedly, fathers also have an important role in influencing child development in both positive and negative ways (Phares, 1995). In order to increase the response rate of parents in data collection, it is essential to identify the factors associated with parental involvement in the research of their children. On one hand, it could be associated with the health-risk behaviour or problem behaviour of the child while on the other hand, it could be the parental engagement in the child's life and the interest in the child's activities which might play a role in the willingness to fill in a questionnaire. Parental involvement in a child's life in general means participation of parents in their social, emotional and academic development (Castro et al., 2015). Parental involvement in general has many positive outcomes. It is associated with better social skills, improved behaviour, better adaptation to school (Henderson & Mapp, 2002) and better academic achievement of the child (Castro et al., 2015). Parenting practices which involve the knowledge and monitoring of adolescents are often considered to be factors preventing substance use and its negative outcomes (Delforterie et al., 2016). Another

study related to parental involvement has shown that mothers had more knowledge about adolescents' peer relationships than fathers, that mothers reported the most peer-oriented activities with daughters, and that both mothers and fathers spent more time with adolescents belonging to their own sex (Updegraff, McHale, Crouter, & Kupanoff, 2001).

Little is known about the differences between the children of parents who participate in research and those who do not. However, the specific characteristics of adults who volunteer to take part in research have previously been investigated. They have been found to be lower in neuroticism and higher in conscientiousness, extraversion and agreeableness (Lönnqvist et al., 2007), better educated, more intelligent, higher in socio-economic status, more sociable, and more in need of social approval (Rosenthal & Rosnow, 1975) in comparison to non-volunteers. In Slovakia, university students who participated in the follow ups of a longitudinal study demonstrated less risky behaviour (smoking, alcohol consumption), were less extroverted and less open to experience than those who did not (Bavoľár & Bačíková, 2017).

Phares (1995) compared children who had received active parental consent to participate in research with those who had not. These children were less psychologically maladjusted than children who did not have active parental consent (Phares, 1995). It is also essential for the interpretation and generalisation of research results to address the differences in important characteristics between the children of parents who decided to participate in research and those who did not. Thus, the aim of this study was to explore the relationship between parental participation in research and (1) the child's gender, differences between the children of participating and non-participating parents in perceptions of the financial situation of the family, and (2) a child's alcohol use and smoking, parental alcohol use and smoking, permission to use alcohol and smoke by parents as well as in manifestations of problem behaviour and school achievement. The distinction between children whose parents participated and did not participate in research was also examined in (3) family processes and parent-child relationships. Socio-demographic data cannot be overlooked in such a research topic. It can be hypothesised that mothers in general are more likely to respond. It is also expected that there will be a higher rate of response from the parent of the same sex as the child. Parents with a higher socio-economic status are more likely to participate in the research. Parents who care about the activities of their child and show the positive aspects of the parent-child relationship are also hypothesized to be involved in child development research and in supplying the necessary information. However, parents with problems occurring in their family might be hindered in providing any personal information.

Methods

Procedure

The data was collected using paper-pen questionnaires from early adolescents in the seventh grade at primary schools in Slovakia in the school year 2017/2018. Prior to this, informed consent was obtained from the parents/legal representatives of all participants. 18 primary schools from all regions in Slovakia were included in the analyses in this study. In each school, pupils from all classes in the seventh grade participated in the study. The questionnaires were filled in during two school lessons in the presence of a trained research team member, without the presence of the teacher. The questionnaires were completed confidentially. The study obtained ethical approval from the university's ethics committee. Parents were informed about the research primarily through school websites, bulletin boards and information leaflets. They were also officially asked to participate in the research by the teachers during a parents meeting. The questionnaires were delivered in sealed envelopes to them through their children.

Sample

The sample size consisted of 810 early-adolescents (mean age=12.78; SD=.72; 49.9% girls). A total of 401 mothers (51.88% of all mothers whose children reported they lived with a mother or a step-mother) and 242 fathers (36.1% % of all fathers whose children reported they lived with a father or a step-father) were willing to participate in the research. With respect to geographical regions, 405 (50.5%) respondents live in West Slovakia, 250 (30.8%) live in East Slovakia and 151 (18.7%) respondents live in central Slovakia.

The children were administered questionnaires to monitor risky behaviour - alcohol use, drunkenness, smoking, permitted smoking and alcohol use by parents; problematic behaviour; parental processes (child disclosure, parental solicitation, parental knowledge, parental monitoring/rules) and relationships (companionship, conflict, antagonism, intimate disclosure, affection, reassurance of worth, satisfaction with relationship, punishment, relative power).

Measurements

The demographic part of the questionnaire contained items such as age and gender, living with mother/stepmother, father/stepfather in one household and school achievement (self-evaluation). The perception of the financial situation in the family was assessed through the comparison of the financial situation of other families in Slovakia (7- point scale, from much better to much worse).

Child's alcohol use and smoking

The prevalence of alcohol use and smoking cigarettes during the past 30 days was measured on a frequency scale with the options: not at all/ once/ twice-four times/ five times or more (Hibell et al, 2012). The answers were dichotomized in order to differentiate the sample between alcohol and cigarette users and non-users. In the case of alcohol, those who had only tried alcohol once were defined as non-users. Incidences of drunkenness (with symptoms such as unsteady walking, failing to speak properly, vomiting, not remembering what happened yesterday) were measured on a frequency scale with the options: never happened to me/ happened to me/ happened to me more than once/usually happens to me once a month/ usually happens to me once a week. Similarly, this item was dichotomized to “already happened to me – not happened to me”.

Permitted use of alcohol and smoking by parents

Permission/acceptance of alcohol use and smoking by parents was addressed by three statements: I have permission to smoke; I have permission to drink alcohol at home; I have permission to drink alcohol outside the house. The respondents used a 4-point response scale (never-always). The dichotomization was applied to these items as well (with permission to drink at home/ outside the house/smoke – without permission).

Parental alcohol use and smoking

Parental alcohol use, smoking and incidences of drunkenness from the perception of their children were measured by three questions with the responses yes/no: My mother/father: smokes cigarettes every day; drinks alcoholic drinks at least once a week; gets drunk at least once a month.

Manifestations of problem behaviour

Problem behaviour was measured on the basis of 19 items concerning selected forms of problem behaviour (trying to avoid school; classroom disturbance; swearing; cheating; refusal to meet

teacher requirements - negativity; damaging school property; fighting; physical harm, intimidation and bullying of classmates). The respondents had the opportunity to respond on a 5-point scale and express how often they had behaved in the manner described in the last 12 months. An index of problem behaviour was created by computing all 19 items.

Family processes

In order to measure parental monitoring behaviours and child disclosure, the measures developed by Stattin and Kerr (2000) were used. This measure includes three subscales: Monitoring/rules – active setting of rules regarding the child’s behaviour (e.g.: “Do you need to have your parents’ permission to stay out late on a weekday evening?”), solicitation – active behaviour of parents in terms of obtaining information about their child, (e.g.: „In the past month, how often have your parents talked with the parents of your friends? “) and disclosure-spontaneously confiding in parents about the child’s personal lives (e.g.: „How often do you tell your parents how you are doing at school, without them asking? “). A subscale of parental knowledge was also added which addresses the extent to which parents are informed about the free time activities of their child (e.g.: “Do your parents know who you are friends with? “). A five-point response scale was used for all items.

Parent-child relationships

In order to measure parent-child relationships, The Network of Relationships Social Provision Version (NRI-SPV, Furman & Buhrmester, 1985) was used. It consists of nine subscales with three items in each (companionship, conflict, intimate disclosure, affection, reassurance of worth, satisfaction, antagonism, punishment and relative power). The participants rated how much each feature occurred in each relationship using a five-point Likert scale from (1) “little or none to (5) “the most”). The scale scores are derived by averaging the items.

All of these measures have been shown to have acceptable internal consistencies (Cronbach alpha) which are reported in Table 1.

Table 1: Cronbach alpha values of individual subscales used in research

Scale/Subscales	Cronbach alpha	
Problem behaviour	.83	
Parental monitoring		
Knowledge	.80	
Solicitation	.67	
Disclosure	.70	
Monitoring/rules	.73	
The Network of Relationships Social Provision Version		
	mother	father
companionship	.72	.76
conflict	.75	.73
antagonism	.75	.73
intimate disclosure	.76	.74
affection	.75	.78
reassurance of worth	.68	.71
satisfaction	.85	.87
punishment	.77	.76
relative power	.73	.74

The descriptive statistics of the explored variables are reported in Table 2.

Table 2: Descriptive statistics of the explored variables

	Mean		SD		Median		
School achievement	2.12		.88		2		
Problem behaviour	1.37		.40		1.26		
Monitoring/rules	17.21		4.63		18		
Solicitation	15.78		3.87		16		
Disclosure	17.07		4.12		17		
Parental knowledge	27.26		5.58		28		
	mother	father	mother	father	mother	father	
Companionship	9.97	9.50	2.76	2.91	10	9	
Conflict	6.12	5.82	2.67	2.52	6	6	
Intimate disclosure	9.02	7.81	3.18	3.14	9	8	
Affection	12.21	11.73	2.28	2.65	12	12	
Reassurance of worth	10.77	10.31	2.34	2.55	11	10	
Satisfaction	12.21	11.62	2.55	2.97	12	12	
Antagonism	5.90	5.79	2.71	2.64	5	5	
Punishment	7.24	7.01	2.88	2.96	7	6	
Relative power	6.76	6.85	2.24	2.27	7	7	
Alcohol use (past 30 days)	not at all	once	twice-four times	five times or more			
	632 (79.7%)	109 (13.7%)	38 (4.8%)	14 (1.8%)			
Smoking (past 30 days)	748 (93.5%)	27 (3.4%)	9 (1.1%)	16 (2)			
Drunkenness	never happened to me	happened to me	happened to me more than once	usually happens to me once a month	usually happens to me once a week		
	757 (93.5%)	34 (4.3%)	8 (1%)	1 (0.1%)	1 (0.1%)		
Parental permission	never	sometimes	often	always			
Permission to smoke	713 (93.5%)	20 (2.5%)	15 (2%)	15 (2%)			
Permission to drink at home	675 (88.6)	61 (8%)	16 (2.1%)	10 (1.3%)			
Permission to drink outside	713 (93%)	27 (3.4%)	15 (2%)	12 (1.6%)			
Parental risk behaviour	yes	no					
Mother smokes cigarettes every day	77 (14.3)	461 (85.7%)					
Mother drinks alcoholic drinks at least once a week	23 (5%)	438 (95%)					
Mother gets drunk at least once a month	10 (1.5%)	648 (98.5%)					
Father smokes cigarettes every day	132 (22.3%)	461 (77.7%)					
Father drinks alcoholic drinks at least once a week	135 (23.6%)	438 (76.4%)					
Father gets drunk at least once a month	85 (11.6%)	648 (88.4%)					
Financial situation of the family with comparison to others	much better	better	a bit better	the same	a bit worse	worse	much worse
	65 (8.3%)	141 (17.9%)	216 (27.5%)	300 (38.2%)	50 (6.4%)	9 (1.1%)	5 (0.6%)

Statistical analyses

In order to address the aim of the research, a descriptive analysis, Chi-square test of independence and Mann-Whitney U test were performed in SPSS 21. Non-parametric tests were chosen due to the character of the variables (categorical), the abnormal distribution of the variables and unbalanced numbers of respondents in each of the two groups.

Results

Socio-demographic indicators

There were no significant differences found in the perception of the financial situation of the family between children of participating and non-participating parents (mothers: $U=64402$, $Z=-1.166$, $p=.24$; fathers: $U=43783$, $Z=-.065$, $p=.95$). A significant association was revealed between a father's participation in the research and the gender of the child, $\chi^2(1, n=669)=6.38$, $p=.012$, $\phi=-.101$. Fathers were more likely to participate when their daughter participated in the research rather than their son (Table 3).

Table 3: The association between father's participation in research and gender of the child

		gender			
		son	daughter	together	
Father's participation	yes	n	78	108	186
		% of participation fathers	41.9%	58.1%	100%
		% of son/daughter	23.3%	32.3%	27.8%
no	n	257	226	483	
		% of non-participating father	53.2%	46.8%	100%
		% of son/daughter	76.7%	67.7%	72.2%
Together	n	335	334	669	
		% of participating/ non-participating fathers	50.1%	49.9%	100%

Note. Number of respondents (n) reflects the number of those who replied to particular questions included in analyses

Problem behaviour and health-risk behaviour

There were significant differences found in school achievement and problem behaviour between children of participating and non-participating parents, with the small effect size (Table 4). Higher scores were found in the children of non-participating parents.

Table 4: Significant differences in the explored variables between children of participating and non-participating mothers and fathers

	Participating mothers		Non-participating mothers		U	Z	p	effect size
	Mean Rank	n	Mean Rank	n				
School achievement	344.65	289	407.04	477	57697.5	-4.002	<.001	.14
Problem behaviour	335.32	281	392.79	460	54604.5	-3.554	<.001	.16
Parental knowledge	385.75	275	348.26	449	55343	-2.345	<.05	.09
Punishment (mother)	329.49	278	369.88	429	52816.5	-2.589	<.05	.10
	Participating fathers		Non-participating fathers		U	Z	p	effect size
	Mean Rank	n	Mean Rank	n				
School achievement	281.87	186	353.51	480	35036	-4.566	<.001	.18
Problem behaviour	270.32	184	345.33	463	32719.5	-4.615	<.001	.18
Monitoring/rules	341.62	172	307.11	460	35239.5	-2.120	<.05	.08
Relative power (father)	258.44	160	287.97	398	28470	-1.980	<.05	.08

Note. one-tailed p-values are reported; number of respondents (n) reflects the number of those who replied to particular questions included in analyses

A significant association was found between a mother's participation in the research and permission of smoking by parents, $\chi^2(1, n=737) = 4.81, p=.028, \phi=.087$. The mothers of children who were not allowed to smoke were more likely to participate in the research (Table 5).

Table 5: The association between mother's participation in research and permission to smoke by parents

		Permission to smoke by parent			
		no	yes	together	
Mother's participation	yes	n	265	10	275
		% of participating mothers	96.4%	3.6%	100%
		% of permission/no permission to smoke	38.4%	21.3%	37.3%
	no	n	425	37	462
		% of non-participating mothers	92%	8%	100%
		% of permission/no permission to smoke	61.6%	78.7%	62.7%
together		n	690	47	737
		% of participating/ non-participating mothers	93.6%	6.4%	100%

Note. Number of respondents (n) reflects the number of those who replied to particular questions included in analyses

There were no significant differences or associations in other variables related to the health-risk behaviour of children or parents (frequency of alcohol use, smoking, drunkenness, parental permission to drink at home and outside the house).

Parental processes and relationships and participation in the research

However, there were significant differences with small effect size in parental knowledge between the children of participating and non-participating mothers and monitoring/rule-setting between the children of participating and non-participating fathers (Table 4). In both cases, higher parental knowledge and higher monitoring was reported by children of participating mothers/fathers in comparison to non-participating mothers/fathers.

Furthermore, the differences were significant, although still with the small effect size, with regard to punishment by the mother between the children of participating and non-participating mothers and relative power of the father between the children of participating and non-participating fathers (Table 4).

Higher scores were reported in the children of non-participating mothers/fathers in comparison to participating mothers/fathers. There were no significant differences found in other variables with regard to the explored parental processes and relationships (parental solicitation and disclosure, companionship, conflict, intimate disclosure, affection, reassurance of worth, satisfaction, antagonism).

Discussion

In this study, about half of all mothers whose children reported they lived with a mother or a step-mother and a third of all fathers whose children reported they lived with a father or a step-father agreed to participate in the research. As just over one third of fathers participated in the research, this contradicts the findings of previous studies showing that fathers are willing to participate when asked (Phares, 1995). Moreover, the current results indicate that fathers are more willing to participate when their daughter is involved in the research rather than their son. This contradicts Costigan and Coy (2001) who found neither differences with regards to the child's gender nor regarding the hypothesis about parents participating when of the same sex as the child. It is also inconsistent with the findings that the participation rates of mothers and fathers do not differ (Phares, 1995; Woollett, White, & Lyon, 1982). There are two explanations to be considered in these unexpected findings. The first one is the developmental period of participants - as older age groups were included in the other studies. The second explanation may be attributed to the cultural context. In some countries, mothers have more responsibility for adolescents' discipline, daily care, and recreational activities (Phares, Fields, & Kamboukos, 2009). In Slovakia, the role of mother as a primary caregiver and as a person who spends more time with adolescents is still present. Fathers may not have been interested in answering the questionnaire or may not have felt competent enough to answer questions about their children. This is in line with a further result which shows there is a lower probability of fathers participating in families where adolescents perceive their parenting as less appropriate. Even though there is evidence of adults with higher socio-economic status participating in research (Rosenthal & Rosnow, 1975), the current research found no significant differences in the perception of the family financial situation between the children of participating and non-participating parents. It is worth considering that other aspects of socio-economic status, not addressed in our study, might play a role here. Moreover, the importance of socio-economic status might have changed in recent decades.

The current study identified significant findings with regards to problem and health-risk behaviour; the mothers of children who were not allowed to smoke were more likely to be

involved in the research. The children of parents participating in the research demonstrated lower rates of problem behaviour and better school grades in comparison to the children of non-participating parents in the current study. Similarly, previous research findings have shown an association between active parental consent to participating in research and lower psychological maladjustment (Phares, 1995). No differences were found in the health-risk behaviour of parents or children in our study. Similarly, Phares (1995) found that there were no differences in paternal/maternal and student drinking behaviour between participating and non-participating fathers/mothers.

The current results have provided substantial support to findings related to parental processes and parent-child relationships. The children of participating mothers had higher rates in parental knowledge and children of participating fathers reported higher parental monitoring in comparison to non-participating mothers and fathers, respectively. Lower rates in maternal punishment and paternal relative power were found among children of participating mothers and fathers, respectively. These results indicate that more appropriate forms of parenting and parent-child relationships are more likely to be present in families where parents participate in research. This supports our assumption that parents who are perceived as more involved in a child's activities and life are more likely to participate in the research. It has been found that less optimal parenting environments were typical for fathers who did not participate in research (Costigan & Cox, 2011). In her study, Phares (1995) found there to be no differences in paternal/maternal parenting behaviour. The only difference found was that mothers who participated in the research were perceived as more intrusive by their children than mothers who did not participate. The children of participating fathers and mothers appeared not to differ from the children of non-participating fathers and mothers in her study. Unlike Phares (1995), the current results show that appropriate parenting is related to parental participation.

In summary, our assumptions were partially supported by the results. It was indeed found that mothers were more willing to participate in the research of their children. However, the gender of a child seemed to only be important for fathers who, in contrast to our hypothesis, were more likely to participate if their daughter was involved in the research rather than their son. The financial situation of the family, as one of many aspects of socio-economic status, was not found to play a significant role in parental participation. However, other aspects of socio-economic status should be addressed in future research. There were significant findings identified with regards to problem behaviour, school achievement and health-risk behaviour in the way that was expected. Within health-risk behaviour, only permission to smoke appeared to be significant in the non-participation of mothers. Parental involvement and the parent-child relationship also gained validity in the current investigation. Forms of parental involvement such as higher parental knowledge (in mothers) and higher parental monitoring (in fathers) were found to be significant in parental participation. Regarding the parent-child relationship, lower rates in maternal punishment and paternal relative power were found to be positively associated with parental participation. The contrast to previous findings and to our assumptions could be explained by the specific development period of respondents as well as by the cultural specifics of maternal/paternal role in upbringing as discussed.

Limitations

It is important to acknowledge the limitations of this study. Firstly, inaccuracies could have been caused by the self-reporting nature of the data and the child's perception of parental behaviour. However, the high relevance of self-perception is well documented in this kind of research (e.g.: Abar, Jackson, Colby, & Barnett, 2015; Maurizi, Gershoff, & Aber, 2012). Furthermore, children's reports of their parent's behaviour have been shown to be valid

indicators of parental functioning (Phares, 1995). Secondly, even though most of the used measures are standardized and widely used abroad, further validation of the methods in the population of Slovak early adolescents might improve their psychometric qualities. Finally, a longitudinal research design would be necessary to address the causality of the relationships, which is also possible to explore in future research.

Conclusions

Little is known about the differences between the children of parents or parents themselves who participate in research and those who do not. The results of the current study show that important indicators of parental participation in research appear to be better school achievement of their child, better parental knowledge and higher monitoring, as well as less problematic and health-risk behaviour, lower maternal punishment and lower relative power of the father. These findings highlight the trend that the parents of less problematic children with more appropriate forms of parenting and parent-child relationships are more likely to participate in research. These findings need to be taken into account when interpreting the results related to parental data. Similarly, these findings may be useful for the process of increasing the probability of parental participation in research.

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