

## GENDER DIFFERENCES IN BEHAVIOUR PROBLEMS OF CHILDREN IN PRESCHOOL AGE IN SLOVAKIA BASED ON TEACHERS' RATINGS

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*Study is the partial outcome of the research project VEGA 1/0684/19 Evaluation of behavioral interventions in education of children with autism spectrum disorders and other developmental disabilities*

**Abstract:** Problem behaviour is increasingly observed in preschool children. Its occurrence can negatively affect not only a child's pre-school education and readiness for further education, or develop into more serious behavioural disorders, but according to several studies, behavioural problems at an early age also affect an individual's educational attainment in adulthood. The proposed study presents the results of a nationwide survey in Slovakia, where, through a self-constructed questionnaire, pedagogical and professional staff of kindergartens in Slovakia (n=450) reflected on incidence, prevalence, symptoms, and gender differences in behaviour problems manifested among children of preschool age in the Slovak kindergartens.

**Keywords:** preschool age, behaviour problems, gender differences, teachers' ratings.

### 1 Theoretical perspective of behaviour problems in preschool children

The preschool period includes ages three to less than six years old. This is a period of significant growth and development as children's maturing physical, cognitive, and social skills give way to an increasing understanding of themselves and the world around them. Yet, this stage of development is also characterized by behavioural problems, as parents and teachers across cultures typically report relatively high rates of it (Campbell et al., 2000). Preschool age is characterized by a rapid development in all aspects of development. During this development, the presence of emotional and behavioural problems can happen to any child, although it must be said that it is not always easy to define the emotional or behavioural problems. But, at the same time, it is indisputable fact that due to the importance for the overall development of children, the study of psychopathological problems of preschool children has increased significantly both in terms of research and in terms of clinical treatment (Carter, 2010).

One of the most important objectives of preschool period is to prepare children for school. The transition from preschool to first grade requires children to adjust their behaviour according to the new environment and to negotiate new social relationships. The establishment of relationships with new teachers appears particularly important, as their quality forecasts children's subsequent academic and social development (Sabol et Pianta, 2012). Indeed, negative teacher-child relationships involving high levels of conflict predict limited school engagement, poor academic achievement, and problem behaviour (Doumen et al., 2008; Sabol et Pianta, 2012). Recognising that the early years of growth are critical in charting a child's later developmental trajectories, researchers have devoted heightened efforts to understand factors affecting child outcomes. For some preschoolers, we may encounter problem behaviours that go beyond their adaptation process in preschool. These can be problems such as tantrums, noncompliance, overactivity, destructive behaviour, property destruction, self-stimulatory behaviour, and according to Campbell (2006) difficulties in behaviour can be an indicator of emerging behaviour problems or an age-appropriate, short-lived manifestation of stress.

Behaviours characterized as problematic in the preschool years are typical during toddlerhood and decrease after age 3. For example, while some aggression can be expected among very young children, high and escalating rates of aggression in preschool children are atypical (Wakschlag et al., 2010). Similarly, noncompliant behaviour generally increases before preschool as an expression of increasing independence and decreases as preschoolers become adept at using alternate methods of negotiating for their desired goals. Atypical

noncompliance is accompanied with negative affect, is often resistant to redirection, and is intransigent (Wakschlag, et al., 2010). The emergence of problem behaviour can be influenced by a number of factors that need to be taken into account when developing a course of action to address it in order to prevent behavioural problems persisting later in life. Behaviour problems, such as severe temper tantrums, aggression, and pervasive noncompliance, affect an estimated 9% to 15% of preschool-aged children (Egger et Angold, 2006). There is almost an agreement among researchers on a classification of behaviour problems: in internalizing behaviour problems, defined as an overcontrol of emotion, which are expressed in intrapersonal manifestation, such as anxiety, depression, and withdrawal and externalizing problems, defined as an undercontrol of emotions, which are demonstrated in interpersonal manifestation, such as hyperactivity and aggression (Achenbach & Rescorla, 2000). Behaviour problems have often been conceptualised along two broad spectrums: (1) internalising problems which are expressed in intrapersonal manifestation, such as anxiety, depression, and withdrawal; and (2) externalising problems which are demonstrated in interpersonal manifestation, such as hyperactivity and aggression (Achenbach et Rescorla, 2000; Dearing et al., 2006).

It is not difficult to imagine that maladaptive behaviour is disruptive to and interferes with socially acceptable norms of conduct in one's life. While certain behaviour issues might seem typical of the early stage of development and many children who manifest behaviour problems in early childhood seem to outgrow them, many other children continue to battle with behavioural difficulties across multiple developmental periods. Maladaptive behaviour in early childhood can interfere with a child's later school performance. Previous research has documented that externalising behaviour problems in childhood linger into the elementary school years and beyond (Campbell et al., 2000; Miller-Lewis et al., 2006), and become even more severe in adolescence and adulthood (Bennett et Lipman, 1999; Loeber, 1991). Other evidence has further substantiated that children's early emergent problem behaviours can have long-lasting, negative repercussions that disrupt the other areas of their development, particularly psychological adjustment, and academic competence (Stacks, 2005).

#### 1.1 Gender differences in behaviour problems of preschool children

In the broader literature, gender is differentially related to mental health outcomes (Johnson et Whisman 2013; Tsorbatzoudis et al. 2013). Biological differences between males and females (e.g., hormones) are sometimes cited as an explanation for these differences (Matsuzaka et al. 2013). However, gender socialization also plays a significant role. For example, males are reinforced for aggressive behaviour (Kingsbury et Coplan 2012), making them more likely to develop externalizing problems. Females are reinforced for prioritizing the needs of others (Cox et al. 2010), which may put them at greater risk of developing internalizing problems. A recent meta-analysis of children (ranging from infancy to adolescence) demonstrated that girls are more likely to exhibit internalizing, while boys are more likely to exhibit externalizing symptoms (Chaplin et Aldao 2013).

Behavioural problems develop in the interplay between nature and nurture, with clear gender differences. According to Ermisch (2008) and Bertrand et Pan (2013), girls tend to have much fewer externalizing behavioural problems at school age than their male peers but are more likely to have internalizing problems. A survey carried out by Heckman (2008) shows that gender differences in, for instance, child rearing inputs may affect the way behavioural skills are acquired. A large stream of research stresses the biological or genetic (nature) reasons for behavioural problems and claims that, for example, the

development of female brains is different from male brains and that this may have consequences at an early age for the observed gender gap in behaviour.

Research has revealed gender differences in behaviour problems, especially in externalising behaviour. For instance, it has been reported that boys tend to demonstrate a significantly higher propensity to manifest externalising problems than girls (Prior et al., 1993). Particularly at school entry, boys experience as much as 10 times higher rates in externalising problems than girls, while the rates of internalising problems are similar for both genders, and these gender-related behaviour patterns tend to persist throughout childhood. The significant differences in developmental trajectories between boys and girls suggest the need to consider the child's gender as a critical characteristic accounting for the variations in externalising behavioural outcomes among children (Keane et Calkins, 2004). Gender differences in hyperactivity and conduct/peer problems were pronounced in teachers' ratings, but only moderate according to parents (Collishaw et al., 2009). Agreement between informants is, at best, moderate (De Los Reyes et al., 2009). The reasons for disagreement include reporter bias and measurement error (Collishaw et al., 2009). Questionnaire ratings can mask the contextual causes of gender differences in behaviour. In particular, because children's peer interactions are gender-segregated from an early age, boys' and girls' may differ in aggressiveness because of the particularly high rates of provocation amongst boys. Empirical support for this 'two cultures' model comes from a meta-analytic review that demonstrated that girls and boys behaved similarly when engaged in similar activities (Leaper et Smith, 2004).

The solutions for the abovementioned problem behaviours are also possible by improving the strategies of the preschool teachers for competing with the unfavourable situations and if the preschool teachers adopt the steps in the body of effective discipline approaches. Otherwise, it is inevitable that preschool education services delivered in a somehow unorganized manner through persons, institutions, or environment trigger challenging behaviours of the children. Accordingly, the process of preventing problem behaviours is not independent from the process of practicing effective strategies and positive discipline approaches (Aygün et al., 2014; Ellis, 2018).

## 2 Methods

According to various research findings there are gender differences on social skills, problem behaviour, academic skills (Abdi, 2010, Owens, 2016), behavioural compliance (Granić, 2007), seeking social support, problem solving, avoidant coping emotion expression (Chaplin et Aldao, 2013), artistic production and preference of preschoolers. Abdi (2010) investigated gender differences on social skills, problem behaviour and academic competences of kindergarten children. Results of his research with 610 parents and 228 teachers on 292 girls and 318 boys showed that even girls scored higher than boys on social skills, boys scored higher than girls on the externalizing and hyperactivity problem behaviour with no gender differences on internalizing. Kung et al. (2018) investigated the association between gender-typed play behaviour in early childhood and physical aggression in early adolescence. Masculine children exhibited significantly more physical aggression than control children or feminine children, and control children exhibited significantly more physical aggression than feminine children. However, results suggest that the degree of childhood gender-typed play behaviour independently predicts the degree of physical aggression at adolescence in boys and in girls.

Agreeing with Owens (2016) early behaviour problems predict outcomes more for boys than for girls. Which supports the need to address gender differences also in specific approaches in dealing with problem behaviours in preschool children already. Effective support to address problem behaviour needs to be targeted to the type and manifestation of problem behaviour, its causes, or environmental factors.

The research problem stated above has led to the formulation of following survey questions:

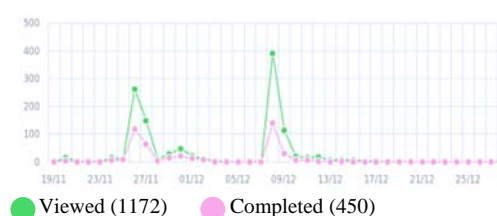
1. Is there any difference in behaviour problems prevalence between girls and boys in their preschool age?
2. What is the perception of behaviour problems in preschool children from the educational staff?
3. Is there any relationship between the seniority of the participants, education level of the participants, work position of the participants, and their view on behaviour problems in girls and boys of preschool age?

### 2.1 Materials and data collection

The survey idea and emergency raised from the project *VEGA 1/0684/19 Evaluation of behavioural interventions in education of children with autism spectrum disorders and other developmental disabilities*. One of the project partial goals was to examine current prevalence of behaviour problems in preschool children in Slovakia. For this intention we have created a questionnaire, which consisted of 31 items focused on basic demographic information such gender, education background, seniority, etc., but the main attention was given to the phenomenon of behaviour problems in preschoolers – its perception by teachers, cooperation with a family, with other institutions, education and information about the issue provided by the employer.

The online version of the questionnaire was created on the Survio® web page. Invitation with URL link was sent via e-mail to available e-mail addresses of all kindergartens in Slovakia. Moreover, we have used social media to advert this survey. The survey was available 26 days (20<sup>th</sup> November 2020 – 15<sup>th</sup> December 2020). The survey had 1172 visits, 722 full views, but of these it had 450 completions, which represents 38,4% successful return. The direct link on the social media was used by 44,4% of participants, 55,6% of participants reflected on the e-mail invitation to the survey completion. On the picture 1 is demonstrated the history of the survey's link visits. Obviously, the most reactions were after sending the e-mail invitations, respectively after the publication of the survey link on the social media.

Picture 1 History of survey's visits



### 2.2 Participants

The sample consisted of 450 (449 female and 1 male) kindergarten professionals from various Slovak regions (table 1). Most of the participants were preschool teachers (241) or principles of the kindergarten (188). The remaining participants were special education teachers (14) or paraprofessional (1). In terms of age, the largest group of participants was those aged 41 and over, accounting for 62.9% (283). This was followed by respondents aged between 31 and 40 years, at 21.9% (103). The smallest group was made up of respondents aged between 18 and 30 years, with 14.2% (64). The largest group of participants consisted of those with a length of practice of over 16 years. As many as 40.4% (182) of respondents had a master university degree and 18.9 % (85) of respondents had a bachelor's degree.

Table 1 Distribution of participation in terms of Slovak regions

REGION	N	%
Banská Bystrica	56	12,4%
Bratislava	54	12,0%
Košice	64	14,2%

Nitra	44	9,8%
Prešov	85	18,9%
Trenčín	56	12,4%
Trnava	46	10,2%
Žilina	45	10,0%

The distribution of participants in terms of regions was relatively equal. However, the Prešov region was represented most significantly. This may be due to the affiliation of the authors of the study, but also to the fact that this region is the most populated and has the largest number of kindergartens in Slovakia.

Table 2 Age distribution of children with whom the participants work

CHILDREN'S AGE	N	%
2,5 - 4 years	103	22,9%
4 - 5 years	69	15,3%
5 - 6 years	158	35,1%
3 - 6 years	115	25,6%
Children with postponed compulsory school attendance	5	1,1%

As many as 158 participants, representing 35.1%, work with children aged 5-6 years. Achenbach (2004) reports that problem behaviour is most pronounced in this period.

### 3 Results

Following tables represent survey findings where the correlations between a child's with problem behaviour and a teacher's seniority, education, age, and work position are demonstrated. The most significant survey findings are discussed more detailly in the section below.

Table 3 Opinions about the occurrence of problem behaviour in some of the children in their school class

OCCURENCE	N	%
yes	405	90,0%
no	45	10,0%

The table 3 shows that the 90% of participants (n=405) thinks that there is at least one child with problem behaviour in their classroom. This might be considered as alarming number. For instance, there was an international comparison of behaviour problems prevalence among preschool children where there were 24 countries included and the average prevalence was approx. 24% (Rescorla et al., 2011).

Table 4 Views on the prevalence of problem behaviour in terms of gender

GENDER	N	%
Boys	335	74,4%
Girls	11	2,4%
Both	104	23,1%

Boys are considered to have more likely problem behaviour than girls by their teachers in 335 participants (74,4%), 104 (23,1%) of participants say that the problem behaviour is present in both genders equally. As mentioned previously, boys tend to demonstrate a significantly higher propensity to manifest externalising problems than girls (e.g. Prior et al., 1993).

Table 5 Teacher's age correlated with a child's with behaviour problems gender

Child's gender/Teacher's age	Boys	Girls	Both	Total
18 – 30 years	50	2	12	<b>64</b>
31 – 40 years	73	2	28	<b>103</b>
41 – more years	212	7	64	<b>283</b>
<b>Total</b>	<b>335</b>	<b>11</b>	<b>104</b>	<b>450</b>

Out of 283 participants who were older than 41 years, as many as 212 claim that boys are having problem behaviour more often.

Table 6 Teacher's education correlated with a child's with behaviour problems gender

Child's gender/Teacher's education	Boys	Girls	Both	Total
University – 1 <sup>st</sup> level	62	1	22	<b>85</b>
University – 2 <sup>nd</sup> level	140	3	39	<b>182</b>
University – 3 <sup>rd</sup> level	5	0	2	<b>7</b>
High school – general focus	18	0	7	<b>25</b>
High school – focus on preschool education	110	7	34	<b>151</b>
<b>Total</b>	<b>335</b>	<b>11</b>	<b>104</b>	<b>450</b>

The master's degree held 182 participants, while 140 of them have agreed also that the problem behaviour is occurred more in boys.

Table 7 Teacher's work position correlated with a child's with behaviour problems gender

Child's gender/Teacher's position	Boys	Girls	Both	Total
Principal	137	5	46	<b>188</b>
Teacher	180	6	55	<b>241</b>
Special education teacher	11	0	3	<b>14</b>
Teacher's aid	7	0	0	<b>7</b>
<b>Total</b>	<b>335</b>	<b>11</b>	<b>104</b>	<b>450</b>

Regardless of the work position of the participants, most of them, 335 (74,4%) consider male gender as more problematic when it comes to their behaviours. Only 11 (2,4%) of them think that girls are having problem behaviour more often than boys.

Table 8 Length of a teacher's practice correlated with a child's with behaviour problems gender

Child's gender/Teacher's practice	Boys	Girls	Both	Total
0 – 5 years	72	2	17	<b>91</b>
6 – 10 years	42	1	15	<b>58</b>
11 – 15 years	34	0	11	<b>45</b>
16 – more years	187	8	61	<b>256</b>
<b>Total</b>	<b>335</b>	<b>11</b>	<b>104</b>	<b>450</b>

The study of Sezer (2012) is in the accordance with our findings which says that the more experienced teacher the more sensitive to possible abnormalities in the behaviour of his/her children he/she is. In our survey as many as 187 (73,1%) of 256 participants with their seniority more than 15 years perceive boys as more problematic when it comes to their behaviour.

### 4 Discussion

The relationships between preschool children and their teachers are an important component of the quality of the preschool experience. Teacher-child relationships take on a particular importance in the preschool settings. Preschool teachers are often the first significant non-family adult with whom the child forms an ongoing relationship. Preschool teachers play the role of both caregiver and educator. They are providing the child with his or her first group learning experience and setting the stage for the child's future success or failure in the school setting.

Problem behaviours in early childhood predict later problems in children's relationships with teachers and with peers. Evidence suggests that preschool teachers feel underprepared to handle children with challenging behaviour (Hemmeter et al., 2008). In

addition, there are indications of higher rates of expulsion at the preschool level than in K–12 education (Gilliam, 2005). In preschool settings, children with behavioural problems are likely to be served in classrooms with teachers with insufficient training and resources to address their needs using positive strategies, leading to harsher responses and increased exclusions (Scott et al., 2005).

Although the experienced teachers perceive students 'problematic behaviours as less problematic than novice teacher, problem behaviours is one of the factors effecting both experienced and novice teachers burnout levels (Sezer 2012). The fact that teachers have stated that they spend more time to overcome the problem behaviours displayed by the students in their classes than the time to teach such students (Little, 2005) is an indication that the problem behaviours of the students may result in burnout among such teachers.

Regarding behavioural expectations, few studies address the relationship between teacher perceptions of children and teachers' behaviours toward those children (Van Acker et Grant, 1996). The results of these studies suggest that teachers treat children more negatively when teachers perceive those children as having problem behaviours. The problem behaviours in these studies included aggression, hyperactivity, and lack of participation. The negative treatment by the teachers included giving more reprimands and commands, displaying more negative affect, and avoiding social interaction with the children.

Teacher-child relationships take on particular importance in preschool settings. Preschool teachers are often the first significant non-family adult with whom the child forms an ongoing relationship. Preschool teachers play the role of both caregiver and educator, providing the child with his or her first group learning experience and setting the stage for the child's future success or failure in the school setting. Despite the importance of this developmental period, the only extant research investigating the relationship between teachers' perceptions of preschool-aged children and teachers' behaviour toward those children were conducted by Dobbs et al. (2004) and Hagekull et Hammarberg (2004).

In studies in which the same rating instrument is used by parents and teachers the child is often perceived as having less severe problems by their teacher (Winsler et Wallace, 2002). Teachers' ratings of behaviour problems have been found to differ from ratings by parents and independent observers, especially concerning aggressive behaviours (Harden et al., 2000). However, on problems related to peer relations and problems interfering with academic functioning, teachers rated problems higher than parents. When children, aged 3-6 years, were observed in playgroups, the teachers' ratings of externalising behaviours corresponded better to observations than parents' ratings. On the other hand, parents' ratings were better predictors of the observed internalising behaviours of children. The agreement between teacher and parent ratings of problems is often modest. In a meta-analysis Achenbach et al. (1987) found a mean correlation of .32 for externalising problems and .21 for internalising problems. Teacher – parent agreement scores within the same range were found by Winsler et Wallace (2002). The mean correlations between teachers who saw the child in the same setting were consistently higher: .74 for externalising problems and .61 for internalising problems (Achenbach et al., 1987). It could be noted here that teachers' ratings of problem behaviours are a somewhat better predictor of later signs of disturbance than parents' ratings. Thus, it is important to include teachers' ratings of problems in research that concerns child development over time.

## 5 Conclusion

It is accepted that it is required to address the problem behaviours starting from the preschool period, and the need for making a realistic evaluation on the challenging behaviours comes to existence, as well. In fact, it is possible that preschool children exhibit incorrect or limited behaviours due to the

inadequacies in their balance coordination, limitations in their cognitive capacities, and deficiencies in their social skills. Addressing these behaviours directly as challenging behaviours causes an unrealistic evaluation on the children. Problem behaviours may originate from the uncertainties in the rules, inadequacies in the educational environment, and disruptions in the classroom management. Therefore, unfavourable behaviours, which continue their existence intensively even when the abovementioned conditions are improved and the impacts of the unfavourable stimulus at the background are minimized, might be an indicator of an inadequacy (Ellis, 2018).

Undergraduate teacher training focused more on specific behaviour problems in preschool children, provide knowledge from literature and workshops, as well as open and productive communication between the school and family might be one of the possible solutions. It is required to ensure that the strategies of teachers for competing with problem behaviours are positively improved and ensure them to adopt effective discipline approaches. In this process, the knowledge, skills, and experiences of preschool teachers in the dimension of classroom management should be improved.

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**Primary Paper Section: A**

**Secondary Paper Section: AM, AN**