# EXTERNALISING BEHAVIOUR PROBLEMS IN ADOLESCENCE PREDICTED BY PARENTAL MONITORING, PRACTICES AND ATTACHMENT: EXPLORING THE MODERATING ROLE OF GENDER

Received: Februrary, 2021. Accepted: January, 2023. UDK: 159.922.8

DOI: 10.3935/ljsr.v29i3.433

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#### Keywords:

parenting; externalising problems; gender

# **ABSTRACT**

Research suggests the differences between parenting boys and girls related to externalising behaviour problems. Self-reported measures were used on a sample of 507 Belgrade secondary school students (42.1% male) to examine the moderating effect of gender on the relationship of parental monitoring (the Scale of Parental Monitoring), parental attachment (the Inventory of Parents and Peer Attachment, IPPA), and parental practice (the Alabama Parenting Questionnaire) with externalising problems (aggressive and rule-breaking behaviour) (ASEBA, YSR). The

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research results show gender differences in rule-breaking behaviour, externalising problems and some parenting variables. Hierarchical regression analyses revealed significant predictors of aggressive behaviour, rule-breaking behaviour and externalising problems, whereby poor monitoring displayed the strongest relations with all of the criteria. The moderating effect of gender was identified in explaining the links between communication with the mother, positive parenting and trust in the father with rule-breaking behaviour. The research results were discussed in the context of the protective relationship in the father-son and mother-daughter dyads for rule-breaking behaviour. The practical implications of differentiation between the relevance of mothers' and fathers' parenting for adolescent adjustment in terms of gender are provided.

#### INTRODUCTION

Externalising problem behaviours are defined as undercontrolled behaviours which manifest as aggression, disruptiveness, defiance, hyperactivity and impulsivity (Achenbach and Edelbrock, 1978.). Externalising problems are the most common, maladaptive and persistent forms of childhood and adolescent problem behaviour with long-term negative psychosocial outcomes (Reef et al., 2010.). Adolescents with high levels of externalising problems in adolescence encounter both externalising and internalising problems in adulthood (Reef et al., 2010.). Even low levels of aggression and property offenses predict externalising problems in adulthood (Reef et al., 2010.). Some studies show that rule-breaking behaviour in adolescents predicts antisocial behaviour in adulthood only among males (Hofstra, Van der Ende and Verhulst, 2001.; Bongers et al. 2008.). The parenting and caregiving experience in general are recognized as one of the most important domains for explaining externalising problems. Research results indicate that low parental involvement (especially that of fathers), poor parental monitoring/supervision, insecure attachment, low parental support, parental conflict, child-parent conflict, exposure to violence, harsh discipline, corporal punishment, low positive parenting, residential mobility and positive parental attitudes to violence and parental criminal behaviour and alcohol/drug abuse are the most represented risk factors for externalising problems in the family domain (Deater-Deckard et al., 1998.; Deković, 1999.; Hawkins et al., 2000.). The research results based on self-reports from the individuals involved in the Cambridge Study in Delinquent Development (CSDD) show that adolescence-limited delinquents had less family risk factors compared to a subgroup of life-course-persistent individuals (Zara and Farrington, 2020.). Individuals with life-course-persistent trajectories were poorly supervised by their parents, harshly disciplined, physically neglected, and had a convicted parent, problematic sibling and disrupted family life. On the other side, those with adolescence-limited trajectories had reduced family risk factors while there were no differences involving other domains (Zara and Farrington, 2020.). This may indicate that family risk factors play a very important role in behavioural problems during adolescence.

Several theoretical models suggest that parental practices contribute to the development of externalising behaviour (e.g. the coercive family process theory, Patterson, DeBaryshe and Ramsey, 1993.). Researchers tend to examine the adolescents' adjustment effects of independent parental dimensions, but less frequently their interaction (Steinberg and Silk, 2002.). The data from the National Longitudinal Study of Adolescent to Adult Health (Add Health) show that parental monitoring protects adolescents from both non-aggressive and aggressive problem behaviour (Liu and Miller, 2020.). Numerous empirical studies have identified parental monitoring variables as predictors of externalising problems in adolescence (Stattin and Kerr, 2000.; Laird and LaFleur, 2016.). Research suggests that high levels of parental knowledge (directly or indirectly involved with adolescent self-disclosure) is related to low levels of externalising problems (Keijsers et al., 2010.; Kerr, Stattin and Burk, 2010.; Racz and McMahon, 2011.; Laird and LaFleur, 2016.). Previous research suggests that negative parental practices (e.g. corporal punishment, child abuse, inconsistent parenting and poor monitoring/supervision) positively predict externalising problems (Frick, Christian and Wootton, 1999.; Fite et al., 2006.; Ajduković, Rajhvajn Bulat and Sušac, 2017.). Meta-analysis based on the integration of 1,435 studies on associations of parenting dimensions with externalising symptoms in children and adolescents shows the strongest relation between externalising problems and harsh control, psychological control, and authoritarian, permissive, and neglectful parenting (Pinquart, 2017.). It is important to be aware that it is not only what parents do during their parental practice that matters, but also the emotional context in which they do it (Steinberg and Silk, 2002.). Positive parental attachment (trust in parents, good parent-child communication, and low levels of alienation) are linked to lower levels of externalising problems (Bosmanset al., 2006.; Fearon et al., 2010.). Some research results indicate the differences between the effects of parental attachment and different types of externalising problems, whereby attachment to parents only protected adolescents from non-aggressive behaviour (Liu and Miller, 2020.). The results of some studies indicate that fathers' cold parental styles influence externalising behaviour problems among adolescents (Spasić-Šnele and Anđelković, 2017.).

Contemporary studies have focused on the effects of adolescents' gender on parenting and the relationship between parenting and externalising problems. The adjustment of female adolescents seems to be more affected by parental monitoring (Laird et al., 2003.; Kapetanovic et al., 2019.). This is not surprising because research suggests that females experience parental monitoring more often than males (Kerr and Stattin, 2000.; Stattin and Kerr, 2000.; Leaper, 2005.; Racz and Mc-Mahon, 2011.; Keijsers and Poulin, 2013.; Kapetanovic et al., 2020.). Females more

often disclose potential risk situations to their parents than males (Racz and McMahon, 2011.). The literature points out that female adolescents have better affective relations with their parents (Hoeve et al., 2012.). This may follow traditional gender stereotypes whereby affection is encouraged in female more than in male adolescents (Leaper, 2005.). Even after a decline in early adolescence, the intensity of parent-daughter communication increases in late adolescence (Keijsers and Poulin, 2013.). As was discovered in a previous study, girls and their parents work toward a mature relationship which involves being both independent and connected at the same time, while the connection between parents and boys decreases (Keijsers and Poulin, 2013.). On the other hand, male adolescents can be considered more prone to externalising problems due to distorted perceptions as they are affected by criticism from others (parents, teachers, peers) (Leadbeater et al., 1999.). Through the socialization process, boys may adopt different social values compared to girls. For example, male adolescents are perceived to show an inclination towards social power and competition with their peers, while girls are of a hedonistic orientation (Sarracino et al., 2011.). Gender differences in peer socialization could be the reason for such a finding, where those male adolescents who express rule-breaking behaviour associate with anti-social peers to a greater extent than girls (Van Lier et al., 2005.). Better relationships with peers and parents serve as a protective factor in relation to externalising problems among female adolescents (Leadbeater et al., 1999.; Scaramella, Conger and Simons, 1999.; Steele and McKinney, 2019.). Some findings which indicate that girls are even more protected from aggressive behaviour by parental monitoring when compared to boys suggest that gender moderates the relation between parenting and different problem behaviour outcomes (Liu and Miller, 2020.). Griffin et al. (2000.) confirmed the moderating effect of gender on the relationship between parental practices and different problem behaviour outcomes. Based on the Project on Human Development in Chicago Neighborhoods study, Burnette et al. (2012.) found that gender moderated the pathway from harsh parenting to externalising behaviour, such that this was a significant pathway for females, but not for males. Parents more frequently implement negative parenting practices towards male adolescents, and reduce parental control and supervision earlier (Kerr and Stattin, 2000.; Stattin and Kerr, 2000.; Leaper, 2005.; McKeeet al., 2007.; Keijsers and Poulin, 2013; Ruhl, Dolan and Buhrmester, 2015.). In terms of research findings on the links between externalising problems and parental attachment among male and female adolescents, studies have found that externalising problems among male adolescents are more influenced by attachment to parents (Fearon et al., 2010.). However, there are certain inconsistencies in the research results considering findings about the lack of gender effects in the relationship between the quality of attachment and externalising problems (Deković, Buist and Reitz, 2004.) or negative parenting practice and externalising problems (Scaramella, Conger and Simons, 1999.). Research suggests that the relationship with both parents is important for externalising behaviour problems (Macuka, Smojver-Ažić and Burić, 2012.). Other studies suggest that similar coercion processes apply to both boys and girls (Eddy, Leve and Fagot, 2001.). It has also been proposed that although parenting practices may vary across cultures, their effect on adolescent adjustment may not differ (Bornstein, 2012.). A study involving Chinese and American adolescents indicates that similar aspects of parental monitoring and adolescent development were found in both cultures (Qin and Pomerantz, 2013.). Research carried out on a sample of 12 different cultural contexts provides evidence for the link between parental monitoring and communication with parents and adolescent externalising problems both globally and at a specific culture level (Kapetanovic et al., 2020.).

The current study examines the associations among parenting variables (the key aspects of parental monitoring, parental attachment and parental practices) and different types of externalising problems (aggressive and rule-breaking behaviour) in terms of the moderating effect of gender. Additionally, gender differences in adolescents' perceptions of the chosen parenting variables and externalising problems are also explored. Based on the results of previous research, we hypothesized that parenting variables (parental monitoring, parental attachment, parental practices), as well as externalising problems differ based on adolescent gender. As the previously reviewed studies suggest, we hypothesized that there is a significant gender effect on the relationship between parental monitoring, parental attachment and parental practices and externalising problems among adolescents.

#### **METHODS**

# Participants and the procedure

The research participants were students from six Belgrade secondary schools (three from each secondary and specialized vocational schools), and they were chosen randomly from one class in each grade (from the first to the fourth grade). The sample included 507 students of both genders aged from fifteen to eighteen. The average age of the students was 16.69 (SD = 1.12). The data were collected from the pupils by means of a questionnaire. The questionnaire completion was anonymous. The time needed for completing the questionnaire was one school lesson. The students were previously instructed orally and in written form on how to complete the questionnaire. Native speakers and bilingual (Serbian and English) experts helped with the final translation of the assessment materials from English to Serbian.

#### Instruments

Achenbach System of Empirically Based Assessment – ASEBA, Youth Self-Report – YSR (Achenbach and Rescorla, 2001.) was used<sup>4</sup> for the assessment of externalising problems part of the instrumentarium for assessing the emotional, social and behavioural problems of children and adolescents. The version of the questionnaire used was standardised to suit the children aged between 11 and 18. The prevalence and forms of manifestating externalising problems were studied on the basis of the *Scale of Aggressive Behaviour* (17 items) (item example: »I fight a lot«) and *the Scale of Rule-Breaking Behaviour* (16 items) (item example: »I drink alcohol«). The coefficients of Cronbach's alpha for the Scale of Aggressive Behaviour (0.84) and the Scale of Rule-Breaking Behaviour (0.82) reflect good internal consistency and correspond to the findings of other researchers (Achenbach & Rescorla, 2001).

The Scale of Parental Monitoring (Kerr and Stattin, 2000.; Stattin and Kerr, 2000.) consists of four sub-scales entitled: Parental Knowledge (9 items) (item example: »Do your parents know how you spend your free time?«), Child Disclosure (5 items) (item example: »Do you tell your parents about your friends? -e.g. what they think and feel about different things«), Parental Solicitation (5 items) (item example: »How often in the past month did your parents ask you how you spent your free time?«) and Parental Control (6 items) (item example: »Do you have to ask your parents for permission to go out at night at weekends?«). According to the results obtained by studying the sub-scales of parental monitoring, the reliability coefficients are mainly deemed to be good or acceptable: 0.85 for the sub-scale of parental knowledge, 0.83 for the sub-scale of parental control, 0.75 for the sub-scale of child disclosure, and 0.68 for the sub-scale of parental solicitation whose reliability is considered questionable. When compared to the findings of some other authors, similar values of Cronbach's alpha (Stattin and Kerr, 2000.) were obtained.

The Inventory of Parents and Peer Attachment – IPPA (Armsden and Greenberg, 1987.), the section for assessing the affective to the mother and father according to the latest amendments made by the author (Greenberg and Armsden, 2009.), was used to assess attachment quality. This instrument measures the adolescents' perceptions of the positive and negative affective and cognitive dimension of their relationships with parents and close friends – particularly how well they can serve as sources of psychological safety. It was anticipated for ages from twelve to twenty. It contains twenty-five items grouped into three sub-scales entitled: *Trust* (10 items) (item example: »My mother respects my feelings«), *Communication* (9 items) (item example: »My father notices when I am upset about something«) and

<sup>4</sup> The licence was acquired within the »Social Participation of Persons with Intellectual Disabilities« project, realized from 2011 to 2019 (Ev. no. 179 017), whose implementation was financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

Alienation (6 items) (item example: »I get upset easily in the presence of my mother«). The coefficients of Cronbach's alpha for the subscales of trust in the father (0.91), trust in the mother (0.89), communication with the mother (0.84), and communication with the father (0.88) show good reliability, with acceptable reliability in the case of alienation of the father (0.75) while questionable reliability was shown for alienation of the mother (0.70). In conformity with the findings of other authors, the revised version of the Inventory of Parents Attachment used in this study, with the exception of the sub-scale of alienation from the mother, has good reliability parameters (Pace, Martini and Zavattini, 2011.).

The Alabama Parenting Questionnaire - APQ (Frick, 1991.) measures five parenting dimensions which are relevant for etiology and the treatment of externalising problems. The version used is intended for six to eighteen-year-old children. It contains 42 items grouped into five sub-scales in the following way: Parental Involvement (10 items) (item example: »I help plan family activities«), Positive Parenting (6 items) (item example: »My parents praise me when I do something good«), Poor Monitoring/Supervision (10 items) (item example: »I sometimes forget to leave my parents a message or inform them where I am going«), Inconsistent Discipline (6 items) (item example: »My parents threaten to punish me and then fail to do so«) and Corporal Punishment (3 items) (item example: »My parents smack me when I do something bad«). The Alabama Parenting Questionnaire (Frick, Christian & Wootton, 1999) has poorer internal consistency as was reported by some other authors, although it is within acceptable limits. For the sub-scales of positive parenting (0.81) and parental involvement (0.79), the value of Cronbach's alpha indicates good, i.e. acceptable reliability. However, the coefficients measured for the sub-scales of corporal punishment (0.66) and poor monitoring/supervision (0.69) indicate questionable reliability and the sub-scale of inconsistent discipline shows poor reliability (0.52).

# **Statistical Analysis**

The data were processed by the SPSS statistical programme package version 21. For statistical analysis, parametric tests were used, because they are considered robust enough to detect the existence of eventual deviation from the normality of the distribution (Rasch and Guiard, 2004.). One-way ANOVA was conducted to examine gender differences. Eta-squared as a measure of effect size was calculated for each significant difference. Pearson correlations were used to examine the intercorrelations between of all the measures. Hierarchical linear regression was used to explore the predictive values of the gender and parenting variables and to examine the potential moderating effect of gender in predicting the dependent variables.

### **RESULTS**

**Table 1.** Gender differences in externalising problems, parental monitoring, parental attachment and parenting practice

	Gender	M	SD	F	η2
Aggressive helpevious	M	.46	.35	.57	.00
Aggressive behaviour	F	.44	.28	.57	
Dula brasica babadan	M	.42	.31	21.08***	.04
Rule-breaking behaviour	F	.30	.28	21.06	
Externalising problems	M	.44	.31	7.29**	.01
Externalising problems	F	.37	.25	7.29	.01
Parental knowledge	M	3.70	.74	23.31***	.04
raieiitai kilowieuge	F	4.00	.65	23.31	
Child disclosure	M	3.18	.75	61.50***	.11
Cilia disclosure	F	3.73	.79	01.50	
Parental solicitation	M	3.54	.74	16.15***	.03
raientai soncitation	F	3.80	.72	10.15	
Parental control	M	2.96	1.01	21.73***	.04
Tarental control	F	3.37	.97	21.75	
Trust in the mother	M	4.25	.63	1.23	.00
rust in the mother	F	4.31	.69	1.23	
Communication mother	M	3.59	.72	17.17***	.03
Communication mother	F	3.89	.86	17.17	
Alienation mother	M	2.10	.70	.33	.00
Alleriation mother	F	2.06	.78	.55	
Trust in the father	M	4.01	.73	.24	.00
nast in the lattlet	F	4.05	.94	.24	
Communication father	M	3.25	.83	.14	.00
Communication father	F	3.28	1.05	.14	.00

	Gender	M	SD	F	η2
Aliamatian fathan	М	2.25	.80	2.12	.00
Alienation father	F	2.37	.89	2.12	
Darantal involvement	M	3.11	.67	15.69***	02
Parental involvement	F	3.36	.72	15.09	.03
B	M	3.43	.88	10.20***	0.4
Positive parenting	F	3.76	.82	18.26***	.04
Poor monitoring/	M	2.76	.61	16 70***	.03
supervision	F	2.53	.61	16.79***	
La acceptate at discipling	M	2.58	.71	22	.00
Inconsistent discipline	F	2.62	.79	.22	
Company I avaish as set	M	1.87	.77	2.16	01
Corporal punishment	F	1.75	.70	3.16	.01

 $N_{male}$  = 209;  $N_{female}$  = 298; df (1, 505); \*p < .05; \*\*p < .01; \*\*\*p < .001

Table 1 shows that significant gender differences were found. The male participants had higher scores for rule-breaking behaviour (p < .001), externalising problems (p < .01) and poor monitoring/supervision (p < .001). The female respondents, on the other hand, had higher scores for parental knowledge (p < .001), child disclosure (p < .001), parental solicitation (p < .001), parental control (p < .001), communication with the mother (p < .001), positive parenting (p < .001) and parental involvement (p < .001). The observed effect sizes were small ( $\eta^2$  = .01 to  $\eta^2$  = .04), except for the child disclosure scale where the gender effect was medium ( $\eta^2$  = .11).

Table 2. Intercorrelations between the examined measures

Note. A – Age; EP – Externalising Problems; AB – Aggressive Behaviour; RBB – Rule-breaking Behaviour; PK– Parental Knowledge; CD – Child Disclosure; PS – Parental Solicitation; PC – Parental Control; TM – Trust in the Mother; CF – Communication with the Father; AF – Alienation Father; PI – Parental Involvement; PP – Positive Parenting; PM – Poor Monitoring/Supervision; IP – Inconsistent Parenting; CP – Corporal Punishment.

\*p < .05, \*\* p < .01, \*\*\*p < .001

Pearson correlations were used to examine the associations between the measures of externalising problems, parental monitoring, parental attachment and parenting practices. As seen in Table 2, externalising problems, aggressive behaviour and rule-breaking behaviour had low to moderate correlations with the parental monitoring, parental attachment and parenting practice variables.

In order to examine the predictive validity of the parental monitoring, parental attachment and parenting practice dimensions along with the potential moderating role of gender in these relationships, three hierarchical regression analyses were performed with externalising problems, aggressive behaviour and rule-breaking behaviour as the dependent variables. Age was a covariate in the first step, the gender and parenting variables (parental monitoring, parental attachment and parenting practice variables) were added in the second step, and interaction terms were the predictors in the third step (parenting x gender variables).

All continuous predictors were standardized in order to reduce the potential problems of multicollinearity. The main results of these analyses are displayed in Table 3.

**Table 3.** Characteristics of the hierarchical regression models with aggressive behaviour, rule-breaking behaviour and externalising problems as the criteria

Criterion		R	R²	Adj.R²	R² change	F change	df	F
Aggressive Behaviour	Step 1	.03	.00	.00	.00	.56	1,505	.56
	Step 2	.51	.26	.23	.26	10.48***	17,489	9.90***
	Step 3	.52	.27	.22	.01	.46	32,474	5.39***
Rule-breaking Behaviour	Step 1	.13	.02	.01	.02	8.12**	1,505	8.12**
	Step 2	.65	.43	.41	.41	22.02***	17,489	21.52***
	Step 3	.68	.46	.42	.03	1.66	32,474	12.44***
Externalizing problems	Step 1	.08	.01	.01	.01	3.43	1,505	3.43
	Step 2	.61	.37	.35	.36	17.52***	17,489	16.79***
	Step 3	.62	.39	.34	.02	.82	32,474	9.26***

p < .05, \*\*p < .01, \*\*\*p < .001

After controlling for age, the parenting variables and gender explain 25.6% of the variance in aggressive behaviour, 42.8% of the variance in rule-breaking behaviour and 36.9% in externalising problems. The moderating effects of the parenting variables and gender were tested in step 3. The addition of the cross-product interaction terms to the regression equation (parenting variables x gender) made a signifi-

cant contribution to the prediction of the dependent variables (up to an additional 2.8% of the variance was explained).

Table 4 presents the characteristics of the predictors in the hierarchical regression models. Firstly, aggressive behaviour was negatively predicted by trust in the father (p < .05) and positively by poor monitoring (p < .001) and corporal punishment (p < .01). There was no significant interaction effect of gender with the parenting variables in predicting the same criteria.

In the second regression analysis, rule-breaking behaviour was positively predicted by the respondents' age (p < .01), parental solicitation (p < .01), communication with the father (p < .05), corporal punishment (p < .001) and poor monitoring (p < .001). Negative relations with this criterion were found for parental control (p < .05), trust in the mother (p < .01), child disclosure (p < .01), parental knowledge (p < .001) and trust in the father (p < .001). The interaction terms of communication with the mother x gender, trust in the father x gender and positive parenting x gender significantly predicted rule-breaking behaviour at a .05 level of confidence. The interaction plots are described later in the results section.

The final regression analysis revealed that externalising problems were negatively predicted by parental knowledge (p < .01), child disclosure (p < .05), trust in the mother (p < .05) and trust in the father (p < .01), and positively by parental solicitation (p < .05), poor monitoring (p < .001) and corporal punishment (p < .001). The interaction terms (gender x parenting variables) did not emerge as significant predictors of externalising problems which indicates the absence of the moderating role of gender in this model.

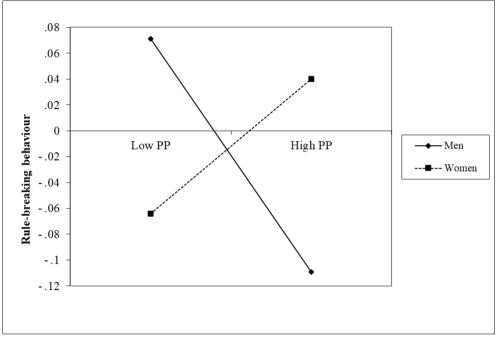
**Table 4.** Characteristics of the predictors in the hierarchical regression models

Criterion	Aggressive Behaviour	Rule-breaking Behaviour	Externalising problems β	
Predictors	β	В		
Step 1				
Α	.03	.13**	.08	
Step 2				
G	.04	05	00	
PK	08	22***	16**	
CD	11	16**	14*	
PS	.08	.11**	.11*	
PC	.00	08*	04	
TM	10	14*	13*	
CM	.04	.05	.05	
AM	.11	.06	.10	
TF	14*	23**	20**	
CF	.05	.13*	.10	
AF	.06	05	.01	
PI	.06	.05	.06	
PP	.00	01	01	
PM	.23***	.23***	.25***	
IP	02	02	02	
CP	.13**	.16***	.15***	
Step 3				
CM x G	.10	.22*	.17	
TF x G	.15	.25*	.22	
PP x G	.05	.15*	.11	

Note. A-Age; G-Gender; PK-Parental Knowledge; CD-Child Disclosure; PS-Parental Solicitation; PC-Parental Control; TM-Trust in the Mother; CM-Communication with the Mother; CF-Communication with the Father; CF-Communication wi

The interaction plots are presented in figures 1-3. The first figure indicates the different relations between positive parenting and rule-breaking behaviour among males and females. The male respondents with lower levels of rule-breaking behaviour scored higher on the positive parenting scale, while the females tended to report more rule-breaking behaviour if their scores on positive parenting were higher.

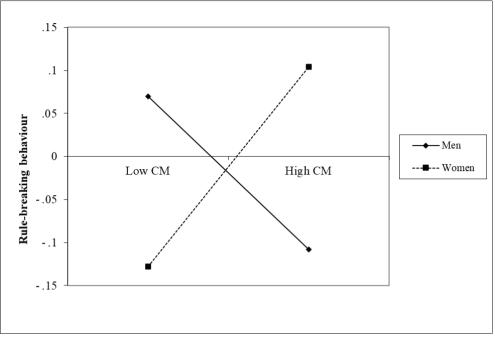
<sup>\*</sup>p < .05, \*\* p < .01, \*\*\*p < .001



Note. Mean-levels of Rule-breaking behaviour are displayed on y-axis; PP - Positive parenting.

Figure 1. The interaction plot between gender and positive parenting and rule-breaking behaviour.

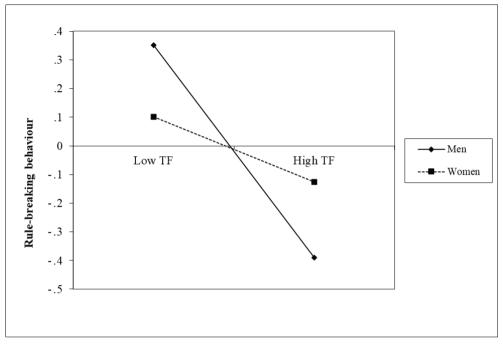
Figure 2 shows the way gender moderates the relation between communication with the mother and rule-breaking behaviour. The females in the study reported higher levels of rule-breaking behaviour if their scores on communication with the mother were higher. For the males, this correlation was negative - less rule-breaking behaviour indicates higher scores on the communication with the mother scale.



Note. Mean-levels of Rule-breaking behaviour are displayed on y-axis; CM – Communication with the mother.

**Figure 2.** The interaction plot between gender and communication with the mother and rule-breaking behaviour.

The moderating effect of gender on the connection between trust in the father and rule-breaking behaviour can be observed in Figure 3. For both the male and female respondents, trust in the father was negatively correlated with rule-breaking behaviour. According to the slopes, this correlation was stronger among the males, where trust in the father was a more important factor for less rule-breaking behaviour than for the females.



Note. Mean-levels of Rule-breaking behaviour are displayed on y-axis; TF - Trust in the father.

**Figure 3.** The Interaction plot between gender and trust in the father and rule-breaking behaviour.

#### **DISCUSSION**

The current study examined links between gender, parenting variables (parental monitoring, attachment to parents and parenting practice) and externalising problems (aggressive and rule-breaking behavior) in a sample of Serbian middle school students. The research results show that the parenting variables explain a higher percentage of variance in rule-breaking behaviour. The positive prediction of corporal punishment and poor monitoring/supervision, and the negative prediction of trust in the father were observed for all three criteria. Parental solicitation positively predicted rule-breaking behaviour and externalising problems. Trust in the mother, parental knowledge, child self-disclosure, and parental control negatively predicted rule-breaking behaviour, while age positively predicted rule-breaking behaviour. The moderating effect of gender was observed for the link between trust in the father, communication with the mother and positive parenting. The male respondents with lower levels of rule-breaking behaviour scored higher on the positive parenting and trust in the father scales, while the females with high levels

of communication with the mother scored higher on rule-breaking behaviour. Other significant gender differences were also found: the males had higher scores for rule-breaking behaviour, externalising problems and poor monitoring/supervision, while the females had higher scores for parental knowledge, child self-disclosure, parental solicitation, communication with the mother, positive parenting and parental involvement.

The results revealed no gender differences in aggressive behaviour among adolescents which is consistent with a number of research studies (Verhulst et al., 2003.). The reason for this may lie in the fact that aggressive behaviour among males in childhood decreases faster than among females, so that by late adolescence males and females actually express the same level of aggressive behaviour (Bongers et al., 2004.). The results are in line with those of other authors on the higher incidence of rule-breaking behaviour (Verhulst et al., 2003.; Rescorla et al., 2007.) and externalising problems (Verhulst et al., 2003; Rescorla et al., 2007.; Macuka, 2016.) among male adolescents compared to female adolescents. One of the explanations for more frequent rule-breaking behaviour among males points to genetic differences in etiology with males displaying heritability in a higher percentage of variance, which could explain the more frequent manifestation of rule-breaking behaviour compared to females even when the difference in the percentage of variance between the males and females in the study is only three percent (Bartels et al., 2003.). Peer socialization, and the implication that boys usually have more deviant friends (Van Lier et al., 2005.; Sarracino et al., 2011.) might serve as a good explanation for why none of the parent-adolescent relationship factors affected aggressive behaviour in the male sample.

The male adolescents reported poor parental monitoring/supervision more often than the female ones. Male aggressive behaviour might thus be understood by parents as part of their normative development in contrast to girls in whom such behaviour is not tolerated (Hinshaw and Liu, 2003., cited in Racz and McMahon, 2011.). The reasons for this may be associated with more frequent self-disclosure on the part of adolescent girls, with parents becoming aware of potential problems or risky situations earlier and hence being able to react sooner (Racz and McMahon, 2011.). Thus, parents' expectations of females may be higher in relation to males, particularly in adolescence, and in this regard, they are exposed to more corporal punishment (Gershoff, 2002.). Research results about limitations of parenthood individualization in Serbia indicate that upbringing practices of most sampled fathers and mothers reproduce a patriarchal matrix (Ceriman, 2019.). It means that parental program for a good daughter and good son image might differ a lot. Rule-breaking behaviour, for example, can be seen by parents as one of the ways in which adolescents demonstrate their need for more freedom and privacy. Therefore, the parents who find themselves in such situations may express increased tolerance towards behavioural problems (Lairdet al, 2003.). It might be considered as parental strategy related to the adolescents' need to gain autonomy and independence and to experimenting with high risk behaviour in such a context (Borawskiet al., 2003.). Additionally, although there is no overlapping of the items between rule-breaking behaviour and poor parental monitoring/supervision, the constructs overlap and the relationship with aggressive behaviour is thus much more significant (Stanger et al., 2004.). The prediction of corporal punishment may be explained by the previously mentioned proactive parenting skills (Laird et al., 2003.).

Age prediction of rule-breaking behaviour is widely recognized in research studies (Verhulst et al., 2003.; Bongers et al., 2004.). One of the explanations is the increasing influence of hereditability with age as a function of developmental changes (Harden et al., 2015.). Another involves changes in the dynamic of peer interactions with age, with higher rule-breaking behaviour related to overt peer victimization (Cooley et al., 2015.). It has been suggested that the development of aggressive behaviour is more affected by parental practices than rule-breaking behaviour (de Haan, Prinzie and Deković, 2012.).

The results show that the father-son relationship seems to be highly relevant in rule-breaking behaviour and externalising problems among males. Data confirming that attachment to parents of the same gender results in less rule-breaking behaviour can be found in the literature. For example, the results of a meta-analytical study which was conducted on a sample of over fifty thousand participants indicate that attachment to parents predicts delinquency, with stronger effects being reported between mothers and daughters on the one hand and fathers and sons on the other (Hoeve et al., 2012.). Adolescents establish good relationships with the parent of the same gender more easily (Sarracino et al., 2011.). However, it has been confirmed that attachment to fathers gains strength particularly in middle and late adolescence along with intensifying social relationships and actualization of the question of status within the group (Bosmans et al., 2006.). In contrast to mother-adolescent connectedness, father-adolescent connectedness is found to be a significant predictor of positive change in adolescents' problem behaviour (Fosco et al., 2012.).

Even the female respondents reported more stable and harmonic relationships with their parents, and good communication with mothers among females is recognized as a significant predictor of rule-breaking behaviour (Kerr and Stattin, 2000.; Stattin and Kerr, 2000.; Smetana and Metzger, 2008.; Keijsers and Poulin, 2013.) the unexpected result that better communication with the mother contributes to rule-breaking behaviour in girls can be explained by proactive parenting when mothers who perceive rule-breaking behaviour begin to compensate for what has been lost, i.e. they insist on better communication with adolescent girls (Griffin et al., 2000.). Further, exaggerated good communication between parents and adolescents and the absence of any conflict, in the same way as bad communication or frequent conflicts can also provoke problems in adaptation (Hayes, Hudson and

Matthews, 2003.). Research shows that parents can create an artificial climate of accepting exclusively positive emotions from adolescents, who, in that case, do not feel free to communicate more openly with them (Van der Giessen et al., 2014.). Female adolescents may think that manifesting rule-breaking behaviour falls into the domain of their private issues which are not to be reported to their parents, which in that case does not endanger good communication with parents regarding neutral themes (Smetana, 2011.). The different roles of mothers and fathers in adolescents' socialisation may serve as the explanation because of research results indicating that affective relationships with mothers are more related to prosocial behaviour toward the family, while affective relationships with fathers are more associated with prosocial behaviour toward friends (Padilla-Walker, Nielson and Day, 2016.). Positive parental practice is mostly directly related to rule-breaking behavior as it was discovered in this study, while the directions to aggressive behavior are mostly mediated (Falk et al., 2021.). More likely the explanation for gender moderated link between positive parental practice and rule-breaking behavior lies at reactive parenting, related to losing parental capacities because of the early onset trajectory and higher intensity of rule-breaking behavior at males (Rescorla et al., 2007.; Gutman et al., 2018.).

Studies frequently report the negative relationships between parental knowledge and parental control with rule-breaking behaviour (Stattin and Kerr, 2000.; Laird et al., 2003.; Laird and LaFleur, 2016.). These results might be interpreted in light of the fact that the emergence of problem behaviour is often accompanied by a decline in parental knowledge, partly due to the negative impact on the parent-child relationship, and partly due to adolescents' weakening belief that parents should have knowledge about their movements, friends and activities (Laird and Marrero, 2010.). Research recognizes child disclosure as the most important source of knowledge related to rule-breaking behaviour and delinquency (Stattin and Kerr, 2000.; Kerr, Stattin and Burk, 2010.). However, the authors note that it is difficult to interpret the findings leading to the direct influence of child disclosure on the development of rule-breaking behaviour and delinquency (Stattin and Kerr, 2000.; Kerr, Stattin and Burk, 2010.). Namely, female adolescents who express rule-breaking behaviour and delinquency have much more to hide from their parents, so they are less inclined to self-disclosure. Therefore, the research findings suggest that delinquency in turn predicts less self-disclosure (Keijsers et al., 2010.). However, by including variables which represent the construct of hiding information the authors established that self-disclosure, in contrast to hiding information, did not predict delinquency, while delinquency in turn predicted only hiding information (Frijins et al., 2010.). Therefore, concealing events that parents disapprove of by female adolescents indicates a decline in parental knowledge. The positive prediction of rule-breaking behaviour and externalising problems by parental solicitation indicates that parents' active efforts to gather information about their adolescents may have an unfavourable impact on their development (the »forbidden fruit« scenario), or more likely that such solicitation occurred reactively, after the problem behaviour had taken place (Keijsers et al., 2010.; Kerr, Sttatin and Burk, 2010.).

# Implications of the findings

Considering the key study results (the greater importance of attachment variables in gender moderated rule-breaking behaviour when compared to other parenting predictors) and evidence that family-level environmental influences common to rule-breaking decrease with age (Harden et al., 2015), practitioners should implement family support prevention and early intervention programmes for parents planning to have children or those with very young children. A total of 19 licensed programmes with elements of positive parenting were identified in Serbia, but only two were mainly focused on parenting, and the population with disorders (Žegarac, Marić and Polić, 2020.). Although there are some examples of good practice in Serbia, such as the father-son and father-daughter camps and parental management training organised by the NGO First Time with Fathers, there is ample uncovered space for prevention and interventions related to parenting and gender. Parent-based interventions are shown to be effective (stable moderate effect) in improving behaviour in children with externalising behaviour problems, as assessed by using parent reports and observational measures (Mingebach et al., 2018.).

## **Study limitation**

The present results should be interpreted with certain limitations in mind. At first, only parenting variables were included in the study, which means that the study lacks a range of variables (e.g. peer relationships) which may be important in explaining the gender differences in externalising problems among adolescents. The research was based on adolescents' self-reporting of parental monitoring and parental practice without distinguishing between mothers and fathers. The research design suggests that the results should be interpreted without saying anything about changes in parent-adolescent relationships over time, or about the direction of the link between the examined measures. Further, the studies which are used for the interpretation of the results are mostly conducted within American and Western European samples with minor exceptions (Macuka, Smojver-Ažić and Burić, 2012.; Ajduković, Rajhvajn Bulat and Sušac, 2017.; Spasić-Šnele and Anđelković, 2017.), implicating the limited generalization of the research results. Recommendations for future researchers are to involve some positive outcomes as criteria in addition to externalising problem behaviour. Additionally, including variables from

other ecological domains will bring new insights into the mechanisms for protecting adolescents from the discussed family risk factors.

*Note*. This research was funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia (Contract No. 451-03-68/2022-14/200018).

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# EKSTERNALIZACIJA PROBLEMA U PONAŠANJU U ADOLESCENTSKOJ DOBI NA TEMELJU PREDVIĐANJA RODITELJSKOG NADZORA, PRAKSI I PRIVRŽENOSTI: ISTRAŽIVANJE MODERACIJSKE ULOGE SPOLA

#### SAŽETAK

Istraživanja ukazuju da su razlike u odgoju dječaka i djevojčica povezani s eksternalizacijom problema u ponašanju. Samoprijavljene mjere koristile su se na uzorku od 507 beogradskih učenika srednjih škola (42,1% dječaka) kako bi se istražili moderacijski učinci roda na odnos između roditeljskog nadzora (Skala roditeljskog nadzora), privrženost roditeljima (Inventar privrženosti roditeljima i vršnjacima) i roditeljske prakse (Upitnik roditeljstva iz Alabame) i problema eksternalizacije (agresivno ponašanje i kršenje pravila). Rezultati istraživanja ukazuju na rodne razlike u kršenju pravila, eksternalizaciji problema i nekim varijablama roditeljstva. Analize hijerarhijske regresije otkrivaju značajne pokazatelje agresivnog ponašanja, kršenja pravila i eksternaliziranja problema, dok slab nadzor ima najveću povezanost sa svim kriterijima. Moderacijski učinak roda identificiran je u pojašnjenju veza između komunikacije s majkom, pozitivnog roditeljstva i povjerenja u oca s kršenjem pravila. Rezultati istraživanja raspravljaju se u kontekstu zaštitničkog roditeljstva u dijadama otac-sin i majka-kći za kršenje pravila. Navode se praktične implikacije razlikovanja značaja roditeljstva majki i očeva za prilagodbu adolescenata u pogledu roda.

Ključne riječi: roditeljstvo; eksternalizacija problema; rod



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