

## INDIVIDUALNE I PORODIČNE DIMENZIJE KAO DETERMINANTE EMOCIONALNE REGULACIJE ODBOJKAŠA KADETA I KADETKINJA

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**Sažetak:** Cilj ovog istraživanja bio je da se ispituju parcijalni doprinosi individualnih karakteristika odbojkaša oba pola i emocionalne atmosfere u porodici u tumačenju konstrukta emocionalne regulacije. U istraživanju učestvovalo je 286 ispitanika (142 kadeta i 144 kadetkinja), uzrasta od 16 do 17 godina. Primljeni su merni instrumenti (Upitnik emocionalne regulacije i kontrole, Skala percepcije roditeljskog ponašanja, Skala dečje percepcije sukoba među roditeljima, Upitnik temperamenta u ranoj adolescenciji i Skala pubertetskog razvoja). Dobijeni rezultati pokazali su da su individualne karakteristike i dimenzije temperamenta odbojkaša i odbojkašica značajne determinante njihove emocionalne regulacije. Adolescenti koji su imali intenzivniju samokontrolu minimalno su ispoljavali negativne emocije i uspješnije kontrolisali svoja osećanja. Dimenzije roditeljskog ponašanja, značajno su uticale na tumačenje konstrukta emocionalne regulacije isključivo kod kadeta. Odbojkaši koji su percipirali viši nivo prediktorskih varijabli majčine kontrole i očevog odbacivanja, lošije su upravljali sopstvenim emocijama.

**Ključne reči:** emocionalna regulacija, dimenzije temperamenta, pubertetski status, dimenzije roditeljskog ponašanja, dimenzije roditeljskog sukoba.

## UVOD

Istraživanja konstrukta emocionalne regulacije, koja predstavlja sposobnost pojedinca da upravlja i usmerava emocionalne reakcije, tek su se u poslednjoj deceniji XX veka počela u većoj meri sprovoditi, pokazuju u svom istraživanju (Cole *et al.*, 2004). S obzirom na to da odgovarajuće kontrolisanje emocija ima značajan uticaj na afektivno iskustvo i međulično funkcionisanje, važan segment razvoja adolescenta obuhvata dobro odabrano

## INDIVIDUAL AND FAMILY DIMENSIONS AS DETERMINANTS OF VOLLEYBALL MALE AND FEMALE PLAYERS EMOTIONAL REGULATION

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**Abstract:** The aim of this research was to examine partial contribution of individual characteristics of both male and female volleyball players and emotional atmosphere in a family in interpreting emotional regulation constructs. 286 examinees, aged 16-17, have taken part in the research (142 male and 144 female cadets). Applied measuring instruments (Emotional regulation and control questionnaire, Parental Behavior Perception Scale, Children's Perception of Interparental Conflict Scale, Questionnaire of Temperament in Early Adolescence and Pubertal Development Scale). Achieved results have shown that individual characteristics and temperament dimensions are significant determinants of male and female volleyball players' emotional regulation. Adolescents with intensive self control have minimally manifested negative emotions and their emotions were more efficiently controlled. Dimensions of parental behavior statistically and significantly influenced interpretation of emotional regulation construct, especially one of the male players. Male volleyball players who perceived higher level of mother's control and father's rejection, predictor variables were less successful in their emotions control.

**Keywords:** emotional regulation, temperament dimensions, pubertal status, parental behavior dimensions, interparental conflict dimensions.

## INTRODUCTION

Research of the emotional regulation construct, which represents the ability of an individual to control and direct emotional reactions, have begun in the last decade of the twentieth century, which is proved by the research of Cole *et al.*, (2004). Taking into consideration that appropriate emotional control has significant influence on affective experience and interpersonal relations, mastering emotional control represents an important seg-

učenje za kontrolisanje osećanja, što pokazuje istraživa-nje koje su sproveli (Rivers *et al.*, 2007; Suveg & Zeman, 2004). Značajan doprinos razvoju emocionalne regula-cije ima genetski faktor *temperament* ličnosti. U svojoj studiji, (Gross & John, 2003) naglašavaju da su procesi emocionalne regulacije formirani preodređenošću tem-peramenta i zato je određivanje funkcije temperamenta važno za shvatanje genetskih povoljnosti predadolescenc-ta za samostalnu emocionalnu regulaciju.

Autori (Zeman, *et al.*, 1997) konstatovali su da *pol roditelja* doprinosi socijalizacijskim naporima u zavisno-sti od pola deteta. Moris i saradnici (Morris *et al.*, 2002), smatraju da su devojčice u najvećoj meri uspešnije u upravljanju emocijama u odnosu na dečake, što se može pripisati genetskim razlikama u nivoima reaktivnosti.

*Emocionalna atmosfera u porodici* vrši upravljanje osećanjima zbog emocionalnih dečjih želja. U vreme ne-povoljne, prinudne ili nepredvidive emocionalne poro-dične atmosfere, dete je dovedeno u opasnost da postane veoma emocionalno reaktivno, zbog učestalih, neobičnih osećajnih načina izražavanja misli ili zbog emocionalnih postupaka. U ovakvim okolnostima, deca nedovoljno ili preterano percipiraju osećanja svojih roditelja i ma-nje su emocionalno zaštićena, navode (Cummings *et al.*, 2000). U svom istraživanju (Parke, 2004) smatra da rodi-telji koji imaju ozbiljne nesuglasice u braku najčešće su neprijateljski usmereni prema deci i manje emocionalno odgovaraju na njihove potrebe.

Treba naglasiti i činjenicu da se većina ranijih istra-živanja usmerila isključivo na školsku populaciju. Me-đutim, još uvek se malo zna o emocionalnoj regulaciji, dimenzijama temperamenta, pubertetskom statusu, di-menzijama roditeljskog ponašanja i dimenzijama sukoba u sportskoj populaciji. Ispitivanje takvih problema može da ima važne metodološke i teorijske primene. Metodo-loške primene odnose se na primerenost korišćenja ra-zličitih mera nadgledanja individualnih karakteristika i emocionalne klime u porodici, a teorijske na mogućnost izvođenja uopštavanja o prirodi procesa nadgledanja na osnovu rezultata istraživanja. Upravo je zbog toga ovo istraživanje važno, pošto je jedno od prvih istraživanja ove teme u našoj zemlji i na populaciji sportista.

**Cilj** u ovom transferzalnom istraživanju jeste da se ispita prediktivan doprinos individualnih dimenzija (temperament, pol i pubertetski status) i dimenzija rodi-teljskog ponašanja očeva i majki, kao i dimenzije sukoba među roditeljima) u objašnjenju emocionalne regulacije kod adolescentske populacije odbojkaša oba pola.

Polazeći od cilja u našem radu, postavljena je os-novna **hipoteza** prema kojoj se pretpostavlja da je spo-

ment of adolescent development, which is proved by the research done by Rivers *et al.*, (2007) and Suveg & Zeman (2004). Genetic factor – *individual temperament* has an important contribution to the emotional develop-ment regulation. In their study, Gross & John (2003) em-phasize the fact that emotional regulation processes are formed by temperament determinants which are prede-termined. Therefore, definition of temperament function is important for understanding of genetic advantages of preadolscents for independent emotional regulation.

Authors (Zeman, *et al.*, 1997) stated that *parental gender* contributes to the process of socialization accord-ing to child's gender. Morris *et al.* (2002) claim that girls control their emotions better than boys, which can be at-tributed to genetic differences in reactional level.

*Emotional atmosphere in a family* governs the feel-ings because of children's emotional wishes. If emotion-al atmosphere is unfavourable, forced or unpredictable, child may express strong emotional reactions because of frequent, unusual affective ways of thought expres-sion or because of emotional acts. In these circumstances children perceive their parents emotions either too ex-cessively or neglect them and they are less emotionally protected (Cummings *et al.*, 2000). In his research, Park (2004) states that parents who have serious disputes are mostly hostile to their children and do not emotionally respond to their needs.

It should be pointed out that the majority of re-searches have included school-age population. However, there is not enough information about emotional regula-tion, temperament dimensions, pubertal status, parental behavior dimension and conflict dimensions concerning athletes' population. Investigation of these problems can have significant methodological and theoretical impli-cations. Methodological implications refer to appropri-ateness of different measures of guidance of individual characteristics application and family emotional atmo-sphere, whereas theoretical implications refer to the pos-sibility of generalization of the nature of the guidance process according to the results of the research. Thus, this research is important, since it represents one of the first investigations of this subject in our country applied to athletes' population.

The aim of transversal research was to examine predictive contribution of individual dimensions (tem-perament, gender and puberty status) and dimensions of parental behavior, as well as parental conflict dimensions in order to be able to explain emotional regulation within adolescent population of volleyball players of both gen-ders.

sobnost emocionalna regulacija pored individualnih karakteristika kadeta i kadetkinja određena i emocionalnom atmosferom u porodici, koja se ispoljava u roditeljskom ponašanju prema detetu i kroz kvalitet roditeljskog ponašanja na koji negativno mogu uticati učestali sukobi roditelja.

## METODE

### Uzorak ispitanika i procedura istraživanja

Istraživanje je sprovedeno na odgovarajućem uzorku od 286 ispitanika (142 odbojkaša i 144 odbojkašice) uzrasta od 16 do 17 godina iz 10 odbojkaških klubova Međuregionalne kolubarsko-mačvanske lige Srbije: „Bravo“ (Valjevo), „Proleter“ (Loznica), „Zaslon“ (Šabac), „Spartak“ (Ljig); „**Železničar**“, (Lajkovac); „Osečina“ (Osečina), „Mladost“ (Ub), „Tamnava“ (Koceljeva), „Ribnica“ (Mionica) i „Rađevac“ (Krupanj). Prosečna starost ispitanika je 16,40 godina ( $SD = .85$ ). Svi ispitanici imali su najmanje jednu godinu sistematskog i organizovanog odbojkaškog treninga i takmičenja u odbojkaškom klubu.

Pre sprovođenja anonimnog ispitivanja, ispitanicima je objašnjen cilj istraživanja. Zamoljeni su za učestvovanje i objašnjeno im je da mogu da odustanu kad god poželevu. Ispitivanje je sprovedeno grupno, tokom redovnih treninga u oktobru 2012. godine. Sprovali su ga autori ovog istraživanja, a ostvareno je uz dozvolu odbojkaških klubova. Ispitanici su dobrovoljno ispunjavali upitnike u proseku za oko 60 min.

### Merni instrumenti

**I Upitnik emocionalne regulacije i kontrole**, (ERIK; Takšić, 2003) obuhvata 20 ajtema. Zadatak ispitanika je da na skali Likertova tipa od 5 stepeni (1 – *uopšte ne*, 2 – *uglavnom ne*, 3 – *kako kada*, 4 – *uglavnom da* i 5 – *potpuno*) odredi koliko se pojedina čestica odnosi na njih. Dobijeni koeficijent (Cronbach alfa) unutrašnje konzistencije na celom uzorku u ovom istraživanju iznosi  $\alpha = .91$ .

**II Skala percepcije roditeljskog ponašanja**, (SPRP; Macuka, 2007) sastoji se od 25 ajtema koji sadrže dve osnovne dimenzije roditeljskog ponašanja – emocionalnost (prihvatanje/odbacivanje) i kontrolu. Zadatak ispitanika je da na skali Likertova tipa od tri stepena (1 – *netačno*, 2 – *delimično tačno*, 3 – *potpuno tačno*), za svaku tvrdnju, zabeleži odgovor koji najbolje opisuje način na koji se njegovi roditelji ponašaju prema njemu. Utvrđena interna konzistencija izražena koeficijentom (Cronbach alfa) u ovom istraživanju za supskalu majčinog prihvatanja  $\alpha = .74$ , za ispitivanje očevog prihvatanja iznosi  $\alpha$

Bearing in mind the afore-mentioned aim of research, we have stated general hypothesis according to which emotional regulation is determined not only by individual characteristics of male and female players, but also by emotional atmosphere in a family, which is expressed through parental behavior towards a child and through the quality of parental behavior which can be negatively influenced by frequent inter-parental conflicts.

## METHODS

### Examinees sample and research procedure

The research included the sample of 286 examinees (142 male volleyball players and 144 female volleyball players) aged from 16 to 17 from 10 volleyball clubs of Interregional League of Kolubara and Mačva (Serbia): “Bravo” (Valjevo), “Proleter” (Loznica), “Zaslon”, (Šabac), “Spartak” (Ljig), “**Železničar**”, (Lajkovac), “Osečina” (Osečina), “Mladost” (Ub), “Tamnava” (Koceljeva), “Ribnica” (Mionica) and “Rađevac” (Krupanj). Average age of examinees is 16,40 ( $SD = .85$ ). All examinees were enrolled in organized volleyball trainings and competitions in their volleyball clubs for at least a year.

Before the testing, which was anonymous, the examinees were informed about the aim of the research. They were asked to take part in it and explained they were free to quit whenever they want. The research was conducted during regular trainings in October 2012. It was conducted by the authors of this paper, whereas the permission from volleyball clubs was obtained. The examinees fulfilled the questionnaires in approximately 60 min.

### Measuring instruments

**I Questionnaire of emotional regulation and control** (ERKQ; Takšić, 2003) includes 20 items. The task of examinees was to define if particular statement refers to them at the Likert’s scale of five levels (1 – *absolutely not*, 2 – *mostly not*, 3 – *depends*, 4 – *mostly* and 5 – *absolutely*) Obtained coefficient (Cronbach alfa) of internal consistency for general sample is  $\alpha = .91$ .

**II Parental Behavior Perception Scale**, (PBPS; Macuka, 2007) consists of 25 items which comprise two basic dimensions of parental behavior – emotions (acceptance/rejection) and control. The examinees had to mark the answer which describes in the best possible way the behavior of their parents towards them on Likert’s scale of three levels. (1 – *false*, 2 – *partially true*, 3 – *absolutely true*), for each statement. Internal consistency shown by coefficient (Cronbach alpha) in

= 72, potom  $\alpha = .70$  za ispitivanje majčinog odbacivanja i  $\alpha = .68$  za ispitivanje očevog odbacivanja. Za supskalu kontrola takođe su dobijene zadovoljavajuće pouzdanosti koje iznose  $\alpha = .82$  za ispitivanje majčine kontrole i  $\alpha = .78$  za supskalu ispitivanje očeve kontrole.

**III Skala dečje percepcije sukoba među roditeljima**, (CPIC; *Children's Perception of Interparental Conflict Scale*; Grych, Seid i Fincham, 1992, adaptirana verzija Macuka, 2011) sadrži 45 ajtema. Skala sadrži 9 supskala (frekvencija sukoba, jačinu sukoba, razrešenje sukoba, sadržaj sukoba, opažena pretnja, uspešnost suočavanja, samookrivljavanje, triangulacija i stabilnost), koje predstavljaju tri faktora sukoba višega reda: faktore sukoba (Cronbach alfa iznosi  $\alpha = .79$ ), pretnju (Cronbach alfa iznosi  $\alpha = .81$ ) i samookrivljavanje (Cronbach alfa iznosi  $\alpha = .81$ ). Zadatak ispitanika je da odredi koliko se pojedina čestica odnosi na njihovo doživljavanje sukoba među roditeljima označavanjem odgovarajućeg broja na skali Likertova tipa od tri stepena (1 – netačno, 2 – delimično tačno i 3 – tačno).

**IV Upitnik temperamenta u ranoj adolescenciji**, (Ellis & Rothbart, 2001, adaptirana verzija Macuka, 2011), meri različita svojstva temperamenta (samoregulacija, reaktivnost i emocionalnost) dece u uzrastu 9–15 godina. U ovom istraživanju, ispitivane su dve dimenzije temperamenta: samokontrola (Cronbach alfa iznosi  $\alpha = .77$ ) i negativna afektivnost (Cronbach alfa iznosi  $\alpha = .68$ ). Zadatak ispitanika je da odredi koliko se pojedini ajtem odnosi na njih označavanjem odgovarajućeg broja na skali Likertova tipa od pet stepeni (1 – gotovo uvek neistinito do 5 – gotovo uvek istinito).

**V Skala pubertetskog razvoja**, (PDS; *Pubertal Development Scale*; Petersen, Crockett, Richards & Boxer, 1988, adaptirana verzija Keresteš i sar., 2010) sadrži pet pitanja, od čega su tri pitanja zajednička, a odnose se na određivanje naglog rasta u visinu, određivanje promena na koži i telesne dlakavosti kod devojčica i dečaka. Preostala dva pitanja različita su u odnosu na pol: dečaci imaju pitanja o dlačicama na licu i promenama glasa, a devojčice o rastu grudi i menarhi.

Unutrašnja konzistencija Skale pubertetskog razvoja na uzorku kadetkinja izražena koeficijentom (Cronbach alfa) iznosi  $\alpha = .74$ , a na uzorku kadeta  $\alpha = .71$ .

Dobijene vrednosti Cronbachovih alfa – koeficijentata ajtema na uzorku odbojkaške populacije upućuju na relativno dobru internu pouzdanost primenjenih mernih instrumenata, jer koeficijent reprezentativnosti znatno prevazilazi minimalnu vrednost procene pouzdanosti od .70, navodi se u studiji (Revelle & Zinbarg, 2009).

this research is  $\alpha = .74$  (acceptance – mother) and  $\alpha = 72$  (acceptance – father),  $\alpha = .70$  (rejection – mother) and  $\alpha = .68$  (rejection – father). Coefficients  $\alpha = .82$  (control – mother) and  $\alpha = .78$  (control – father) were also obtained for control subscale.

**III Children's Perception of Interparental Conflict Scale** (CPIC; Grych, Seid i Fincham, 1992, adapted version Macuka, 2011) consists of 45 items. The scale consists of 9 subscales (conflict frequency, conflict intensity), conflict solution, conflict content, perceived threat, successful dealing with it, self-guilt, triangulation and stability), which represent three factors of higher level conflict: conflict factors (Cronbach alpha  $\alpha = .79$ ), threat (Cronbach alpha  $\alpha = .81$ ) and self-blame (Cronbach alpha  $\alpha = .81$ ). Examinees had to define if particular statement refers to their perception of interparental conflict by marking suitable number on Likert's scale of three levels (1 – false, 2 – partially true and 3 – true).

**IV Questionnaire of Temperament in Early Adolescence**, (Ellis & Rothbart, 2001, adapted version, Macuka, 2011), measures different temperament characteristics (self-regulation, reactivity and emotions) of children aged from 9-15. Two dimensions of temperament: self-control (Cronbach alpha  $\alpha = .77$ ) and negative emotional state (Cronbach alpha  $\alpha = .68$ ). The task of examinees was to define if particular item refers to them marking appropriate number on the Likert's scale - five-level scale (1- almost always false to 5 – almost always true).

**V Pubertal Development Scale**, (PDS; *Pubertal Development Scale*; Petersen, Crockett, Richards & Boxer, 1988, adapted version Keresteš et al., 2010) contains five questions, whereas three questions are mutual and they refer to the definition of sudden growth, skin changes and physical hairiness of boys and girls. Two questions differ according to the gender: boys have to answer the questions about beard and voice mutation, and girls have to answer the questions about breasts and menstruation. Internal consistency of Pubertal Development Scale is shown by coefficients (Cronbach alfa)  $\alpha = .74$  (female cadets) and  $\alpha = .71$  (male cadets).

Obtained values of Cronbach's alpha – coefficients of items of the sample of volleyball population show relatively high internal validity of applied measuring instruments, since representativeness coefficient significantly exceeds minimum value of validity estimation of .70 (Revelle & Zinbarg, 2009).

**REZULTATI**

U Tabeli 1a i 1b, prikazani su rezultati deskriptivne statistike ispitivanih supskala, posebno za poduzorke kadeta i kadetkinja.

**Tabela 1a.** Aritmetičke sredine, standardne devijacije i t-test – komparativno

Skale / Scale	Deskriptivni parametri / Descriptive parametres	Kadeti / Male players (N = 102)	Kadetkinje / Female players (N = 120)	t df = 221
<b>Emocionalna regulacija / Emotional regulation</b>	AC / AM	1.96	1.92	1.45
Emocionalna regulacija / Emotional regulation	CD / SD	.61	.73	
<b>Dimenzije temperamenta / Temperament dimensions</b>	AC / AM	3.47	3.52	2.48**
Samokontrola / Self-control	CD / SD	.64	.60	3.26**
Negativna afektivnost / Negative emotional state	AC / AM	2.95	3.08	
	CD / SD	.62	.60	

**Табела 1b.** – Aritmetičke sredine, standardne devijacije i t-test – komparativno

ПУБЕРТЕТСКИ СТАТУС / PUBERTAL STATUS	AC / AS	CD / SD	2.31	2.59	8.68**
ПУБЕРТЕТСКИ СТАТУС / PUBERTAL STATUS			.50	.51	
<b>Dimenzije roditeljskog ponašanja / Parental behaviour dimensions</b>	AC / AS	2.42	2.40	.89	
Prihvatanje-otac / Acceptance-father	CD / SD	.40	.43	3.18**	
Odbacivanje-otac / Rejection-father	AC / AS	1.48	1.38		
	CD / SD	.33	.31		
Контрола – отац / Control – father	AC / AS	.37	.35		
Прихватанје – мајка / Acceptance – mother	CD / SD	2.45	2.49	3.96**	
Odbacivanje – мајка / Rejection – mother	AC / AS	1.40	1.-38	3.90**	
Kontrola – мајка / Control – mother	CD / SD	.41	.33	3.86**	
	AS / AS	1.60	1.51	2.97**	
	CD / SD	1.59	1.51		
	AC / AS	.49	.44		
	CD / SD				
<b>Dimenzije sukoba među roditeljima / Parental conflict dimensions</b>	AC / AS	1.51	1.47	1.42	
Faktori sukoba / Conflict factors	CD / SD	.30	.34	5.53**	
Samokrivljenje / Self-blame	AC / AS	1.38	1.30	.60	
Pretnja / Threat	CD / SD	.40	.31		
	AC / AS	1.49	1.52		
	CD / SD	.28	.36		

\*\* $p < .01$

Na osnovu izračunatih vrednosti parametrijskog testa značajnosti Studentovog  $t$ -testa, vidljive su statistički značajne razlike između aritmetičkih sredina odbojkaša i odbojkašica u merenim varijablama temperamenta, pubertetskog statusa, dimenzijama roditeljskog ponašanja majki i očeva, na nivou  $p < .000$ , uz broj stepeni slobode  $df = 221$ . Analiza odgovora na nivou pojedinačnih manifestnih varijabli pokazala je da statističku značajnost između polova ne pokazuju samo dimenzije prihvatanja oca i samokrivljavanje oca. Dobijene razlike na odbojkaškom uzorku ukazuju na to da kadetkinje više percipiraju dimenziju temperamenta (samokontrolu i negativnu afektivnost),

**RESULTS**

The results of descriptive statistics of examined subscales, respectively for male and female players subsamples, are presented in Tables 1a and 1b.

**Table 1a.** Arithmetic means, standard deviations and i-test – comparatively

**Table 1b.** – Arithmetic means, standard deviations and i-test – comparatively

\*\* $p < .01$

According to the obtained values of parametric significance test, Student's  $t$ -test, statistically significant differences between arithmetic means of volleyball male and female players were defined in the following variables: temperament, pubertal status, parental behavior dimensions, at the level of  $p < .000$ , degree of freedom  $df = 221$ . The analysis of answers at the level of individual manifest variables showed that only father's acceptance and father's self-blame do not have statistical significance. The differences obtained in the sample of volleyball players showed that female players perceive temperament dimensions (self-control and negative emotional state), as

kao i pubertetski status – telesni razvoj, odnosno nivo telesnih promena naprednijim nego odbojkaši. S druge strane, očigledne su polne razlike u smeru viših prosečnih rezultata kod odbojkaša u odnosu na odbojkašice u dimenzijama roditeljskog ponašanja (odbacivanja i kontrole od oca i majke i manje prihvatanje od majke), međutim, kadeti, u većem stepenu nego kadetkinje, samokrivljuju sebe za pojavu dimenzije sukoba među roditeljima.

U cilju dobijanja uvida u relativne parcijalne uticaje prediktorskih varijabli na procenu kriterijuma, izračunate su dve hijerarhijske regresione analize u skladu s preporukom (Preachera & Hayesa, 2008), pri čemu je *emocionalna regulacija* predstavljala kriterijum, a prediktore ili nezavisne varijable *individualne karakteristike* i *emocionalna atmosfera u porodici* odbojkaša. Prediktorske varijable uvođene su u dva koraka. U prvom koraku, analize uključene su dimenzije temperamenta (samokontrola, negativna afektivnost i pubertetski status), a u drugom koraku dimenzije – emocionalna atmosfera u porodici – roditeljsko ponašanje majki (prihvatanje, odbacivanje i kontrola), roditeljsko ponašanje očeva (prihvatanje, odbacivanje i kontrola) i dimenzije sukoba među roditeljima (varijable sukoba, samookrivljavanje i pretnja).

**Tabela 2.** Rezultati hijerarhijske regresione analize: predikcija emocionalne regulacije adolescenata na osnovu individualnih karakteristika i emocionalne atmosfere u porodici

PEDIKTORI / PREDICTOR	KRITERIJUM / CRITERIUM					
	Emocionalna regulacija			Emocionalna regulacija kadeti kadetkinje		
	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$
<b>Prvi korak: individualne karakteristike adolescenta / First step: individual characteristics of adolescents</b>						
Samokontrola / Self-control	.33**			.30**		
Negativna afektivnost / Negative emotional state	.44**	.21	.08	-.49**	.22	.02
Pubertetski status / Pubertal status	-.05			-.06		
<b>Drugi korak: emocionalna atmosfera u porodici / Second step: emotional atmosphere in a family</b>						
Prihvatanje –majka / Acceptance –mother	.03	.19		.03		
Odbacivanje –majka / Rejection –mother	.04			.03	.38	
Kontrola – majka / Control – mother	-.19**			-.06		
Prihvatanje – otac / Acceptance – father	.04			.07		
Odbacivanje – otac / Rejection – father	-.17*	.31	.05	.08	.38	.02
Kontrola – otac / Control – father	-.09			.03		
Faktori sukoba / Conflict factors	.04			-.01		
Samookrivljavanje / Self-blame	.09	.32	.01	-.03	.39	.04
Pretnja / Threat	-.10			-.15*		

\* $p < .05$ ; \*\* $p < .01$

U Tabeli 2, prikazani su osnovni rezultati prve i druge hijerarhijske regresione analize. Regresioni model pokazuje da je skup prediktora – individualne karakteristike uzorka *odbojkaša* kadeta u prvom koraku protumačio 21% proporcije varijanse kriterijumske varijable. Pritom,

well as pubertal status – physical development, i.e. the level of changes, better than the male players. On the other hand, there are obvious gender differences since male players had better average results than the female players concerning parental behavior dimensions (parental rejection and mother's acceptance). However, male players perceive themselves to be guilty for parental conflict more than female players.

Two hierarchal regression analyses (according to Preachera & Hayesa, 2008) were applied in order to get an insight into relative partial influence of predictor variables on criterium assessment, whereas *emotional regulation* represented criterium and *individual characteristics* and *emotional atmosphere in a family* represented predictors, or independent variables. Predictor variables were introduced in two steps. In the first step of the analysis, only temperament dimensions (self-control, negative emotional and pubertal status) were included, and in the second step of the analysis, dimensions of emotional atmosphere – mothers' parental behavior (acceptance, rejection and control), fathers' parental behavior (acceptance, rejection and control) and interparental conflict dimensions (conflict, self-guilt and threat variables) were included.

**Table 2.** Hierarchal regression analysis results: adolescents' emotional regulation prediction according to individual characteristics

\* $p < .05$ ; \*\* $p < .01$

The results of the first and second hierarchal regression analysis are presented in the Table 2. Regression model shows that the set of predictors – individual characteristics of the sample of *male volleyball players* in the first set explained 21% of the proportion of criterium vari-

*dimenzije temperamenta* statistički značajno utiču na tumačenje varijabiliteta emocionalne regulacije: samokontrola ( $\beta = .33$ ) i negativna afektivnost ( $\beta = -.44$ ). Dobljene relevantne vrednosti standardnih parcijalnih regresionih koeficijenata, upućuju na to da kadeti koji imaju intenzivniju samokontrolu, a manju tendenciju ka negativnim osećanjima, uspešnije usklađuju svoje emocije.

Prediktorske varijable *majčino roditeljsko ponašanje* u drugom koraku, statistički značajno povećavaju srazmeru tumačene kriterijumske varijable emocionalne regulacije sa dodatnih 8% varijanse. Majčina kontrola ( $\beta = -.19$ ) značajno utiče na tumačenje emocionalne regulacije, a dobijeni  $\beta$ -koeficijent signalizira na to da odbojkaši koji prosuđuju veći stepen majčine kontrole, lošije usklađuju sopstvena osećanja. Isto tako, i skup prediktora *očeva roditeljsko ponašanje* značajno utiče na tumačenje emocionalne regulacije odbojkaša kada se prethodno podvrgne kontroli doprinos roditeljskog ponašanja majke sa dodatnih 5% varijanse kriterijumske varijable. U tom skupu nezavisnih varijabli, jedino je varijabla *očeva odbacivanje* statistički značajna ( $\beta = -.21$ ), što skreće pažnju na to da odbojkaši koji procenjuju više odbacivanja od oca, lošije usklađuju sopstvena osećanja.

Konačna regresiona jednačina definiše da je sistemom parcijalnih prediktora moguće objasniti sa 32% varijabiliteta emocionalne regulacije odbojkaša u adolescentnom uzrastu, uz tačno određene značajne negativne nezavisne varijable: negativna afektivnost, majčina kontrola i očeva odbacivanje.

U drugom delu Tabele 2. predstavljeni su rezultati hijerarhijske regresione analize na uzorku *odbojkašica* kadetkinja. Regresioni model upućuje na to da su prediktorske varijable *individualne karakteristike* objasnile u prvom koraku 22% varijanse kriterijumske varijable emocionalne regulacije. Izračunate relevantne vrednosti standardnih parcijalnih regresionih koeficijenata skreću pažnju na statistički značajan uticaj varijabli individualnih karakteristika – dimenzija temperamenta: *samokontrole* ( $\beta = .19$ ) i *negativne afektivnosti* ( $\beta = -.41$ ). To znači da odbojkašice koje imaju intenzivniju samokontrolu i niži nivo negativne afektivnosti, uspešnije usklađuju sopstvena osećanja. Međutim, vrednosti standardizovanih  $\beta$ -koeficijenata nezavisnih varijabli *roditeljskog ponašanja majke*, *roditeljskog ponašanja očeva* i *roditeljskog sukoba* nisu statistički značajno različite od nule, što naglašava da te dimenzije *nisu statistički značajno uticale na tumačenje varijabiliteta emocionalne regulacije* odbojkašica. Izuzetak čini jedino varijabla *pretnja* ( $\beta = -.17$ ), koja je kao značajan prediktor dimenzije roditeljskog sukoba ostvarila statistički značajan negativan doprinos na emocionalnu regulaciju.

able variance. Temperament dimensions have statistically significant influence on emotional regulation variability explanation: self-control ( $\beta = .33$ ) and negative emotional state ( $\beta = -.44$ ). Obtained relevant values of standard partial regression coefficients show that the players with better self-control, and lower tendency to negative emotions, are better in their emotions harmonization.

Mother's parental behavior predictor variable in the second step statistically significantly explains emotional regulation criterium variable with additional 8% of variance. Mother's control ( $\beta = -.19$ ) has statistically significant influence on emotional regulation explanation, and obtained  $\beta$ -coefficient signalizes that the male players who perceive higher level of mother's control are not so successful in their emotions handling. *Father's parental behavior* set of predictors has significant influence on emotional regulation explanation of volleyball players, if contribution of mother's parental behavior, with additional 5% of criterium variable variance is previously examined. Only *father's rejection* variable is statistically significant ( $\beta = -.21$ ) in the set of independent variables, which points out that the male players who perceive father's rejection are less successful in emotional regulation.

According to the final regression analysis, the system of partial predictors can explain 32% of variability of emotional regulation of male adolescent volleyball players with precisely set significant negative independent variables: negative emotional state, mother's control and father's rejection.

In the second part of the Table 2, the results of hierarchical regression analysis of the sample of *female volleyball players* are presented. Regression model shows that *individual characteristics* predictor variables in the first step explain 22% of variance of emotional regulation criterium variable. Obtained relevant values of standard partial regression coefficients emphasize statistically significant influence of individual characteristics variables – temperament dimensions: *self-control* ( $\beta = .19$ ) and *negative emotional state* ( $\beta = -.41$ ). Female volleyball players with lower self-control and lower level of negative emotional state are better in their emotions control. However, the values of standardized  $\beta$ -coefficients of independent variables of *mother's parental behavior*, *father's parental behavior* and *interparental conflict* are not statistically different than zero, which emphasizes that these dimensions *did not have statistically significant influence on emotional regulation variability of female volleyball players*. The *threat* variable ( $\beta = -.17$ ) is the only exception which has statistically negative influence on emotional regulation, as significant predictor of parental conflict dimension.

Konačna regresiona jednačina utvrđuje da je sistemom parcijalnih prediktorskih varijabli (individualne karakteristike i emocionalna atmosfera u porodici) protumačila 39% varijanse emocionalne regulacije odbojkašica u kadetskom uzrastu, uz značajne nezavisne varijable *samokontrola*, *negativna afektivnost* i *pretnja* (dimenzija sukoba među roditeljima).

## DISKUSIJA

Rezultati u ovom istraživanju pokazali su da nije utvrđena statistički značajna razlika na uzorku kadeta i kadetkinja na skali *emocionalne regulacije*, što je u suprotnosti sa nalazima (Eisenberg *et al.*, 1999) koji navode da su devojčice obično bolje u uređivanju osećanja od dečaka. Međutim, (Morris *et al.*, 2002) utvrdili su statistički značajne razlike u sposobnosti emocionalne regulacije učenika i učenica. Dobijeni nalaz podudaran je sa rezultatima u našem istraživanju, jer kadetkinje navode više nivo dimenzije temperamenta u odnosu na kadete. S druge strane, u ovom radu, izračunate deskriptivne vrednosti pokazale su statistički značajne polne razlike kod najvećeg broja ispitivanih determinanti emocionalne regulacije.

Dobijene vrednosti beta-koeficijenta, u prvom koraku, upućuju na to kako među analiziranim individualnim karakteristikama samo *dimenzije temperamenta* značajno tumače emocionalnu regulaciju kadeta i kadetkinja, odnosno bolje usklađuju sopstvena osećanja sportisti koji znatnije ispoljavaju varijablu samokontrole. To znači da odbojkaši koji manje manifestuju negativna osećanja, intenzivnije osećaju niže nivo straha i niže nivo ljutnje. Naši nalazi u skladu su sa rezultatima koje su dobili (Grossa & Johna, 2003) koji smatraju da je sposobnost emocionalne regulacije jednim delom formirana duševnim stanjem temperamenta. Izračunate vrednosti standardizovanih parcijalnih regresionih  $\beta$ -koeficijenta upućuju na to da su dve varijable: *samokontrola* i *negativna afektivnost*, naročito značajne za emocionalnu regulaciju sportista. Prva dimenzija temperamenta – *samokontrola* – omogućuje odbojkašima oba pola potiskivanje motivacionih i ponašajnih sklonosti usmeravanih afektima i obuhvata vladanje, usmeravanje ponašanja ili njihove pažnje u pojedinim okolnostima, te je zato izuzetno značajna u usmeravanju negativnih osećanja. To potvrđuju i nalazi (Murriss & Ollendick, 2005), koji ukazuju na to da adolescenti sa lošijom samokontrolom imaju manju sposobnost emocionalne regulacije, što ih čini manje sposobnim za prilagođavanje. Druga dimenzija temperamenta, *negativna afektivnost*, podrazumeva tendenciju sportista ka intenzivnom osećanju negativnih

According to the final regression equation, the system of partial predictor variables (individual characteristics and emotional atmosphere in a family) explains 39% of emotional regulation variance of female volleyball players, with significant independent variables *self-control*, *negative emotional state and threat* (interparental conflict dimension).

## DISCUSSION

The results showed that there is no statistically significant difference in the sample of male and female players in the *emotional regulation scale*, which is contrary to the findings (Eisenberg *et al.*, 1999) which state that girls control their emotions better than boys. However, (Morris *et al.*, 2002) some researches stated statistically significant differences between male and female ability of emotional regulation. Obtained data are compatible with the results of this research, since female players have higher levels of temperament dimensions than male players. On the other hand, obtained descriptive values showed statistically significant gender differences in most of the examined determinants of emotional regulation.

Obtained values of  $\beta$ -coefficients in the first step show that only *temperament dimensions* are significant for male and female players' emotional regulation interpretation, i.e. athletes whose self-control is higher are more successful in their own emotions harmonization. Volleyball players who do not manifest negative feelings, more intensively experience lower levels of fear and lower levels of anger. The results of the research are compatible with the results obtained by Grossa & Johna (2003), which state that emotional regulation ability is partially formed by temperament characteristics. Obtained values of standardized partial regression  $\beta$ -coefficients show that two variables, **self-control** and negative **emotional state**, are significant for athletes emotional regulation. The first temperament dimension – self-control – enables the volleyball players of both genders to suppress motivational and behavioral affects and includes governing and directing of behavior or attention under certain conditions. Therefore, it is very important concerning negative emotions regulation. The findings of Murriss & Ollendick (2005) also confirm this and show that adolescents with lower level of self-control have lower ability of emotional regulation, which makes them less capable for adjustment. Second temperament dimension, negative emotional state, includes athletes' tendency towards intensive feelings of negative emotions (anger and fear). According to the research conducted by Morris *et al.* (2002), negative emotional state of boys and



emocija (ljutnje i straha). Prema istraživanju (Morris *et al.*, 2002) negativna afektivnost dečaka i devojčica nepovoljno utiče na sposobnost emocionalne regulacije, što je i potvrđeno u ovom istraživanju.

*Pubertetski status* u našoj studiji jedina je parcijalna prediktorska u skupu individualnih karakteristika koja nije statistički značajno uticala na sposobnost emocionalne regulacije adolescenata oba pola. Dobijene relevantne vrednosti u hijerarhijskoj linearnoj regresiji na Skali pubertetskog razvoja upućuju na to da odbojkaši oba pola svoj telesni razvoj percipiraju u većini slučajeva prosečnim rezultatima vršnjaka i vršnjakinja, te izvesno nisu utvrđeni značajni učinci kod pubertetskog statusa u objašnjenju emocionalne regulacije u ispitivanoj odbojkaškoj populaciji. Međutim, nalazi istraživanja (Negriff *et al.*, 2008) signaliziraju na to da su rane pubertetske promene povezane sa višim nivoima problema u prilagođavanju, pri čemu osnovu znatnim delom čine problemi u usmeravanju negativnih osećanja.

U drugom koraku hijerarhijske regresione analize, percepcija negativne majčine kontrole i negativnog očevo odbacivanja utvrđene su kao značajniji prediktori emocionalne regulacije kadeta. Pretnje, ispitivanja, ucenjivanja i ismejavanja osnovni su sadržaji majčine kontrole koja obuhvata ponašanja koje ona koristi da bi ispravila ponašanje i intenzivno osećanje deteta. Kadeti koji percipiraju više nivoe takvog oblika nadzora majki lošije usmeravaju sopstvena negativna osećanja. Očevo odbacivanje odnosi se na nepovoljna osećanja koje on ispoljava u odnosu sa detetom u različitim okolnostima. Kadeti koji percipiraju da ih očevi više odbacuju, lošije usmeravaju lična osećanja. Dobijeni nalazi o odnosu roditeljskog ponašanja i dečje sposobnosti upravljanja emocijama u našem istraživanju aproksimativni su rezultatima dobijenim u istraživanju (Gottman *et al.*, 1996).

*Individualne karakteristike* kod kadetkinja, protumačile su 41% varijanse kriterijumske varijable emocionalne regulacije, dok karakteristike emocionalne atmosfere u porodici nisu značajno dodatno uticale na njeno tumačenje, pri čemu se varijabla pretnja pokazala kao jedini značajni prediktor. To znači da kadetkinje koje procenjuju veću pretnju zbog sukoba među roditeljima lošije kontrolišu svoja osećanja, dok kadeti percipiraju roditeljske sukobe kao beznačajne u tumačenju njihove emocionalne regulacije.

Uvidom u dobijene srazmere protumačenog iznosa varijanse kriterijuma emocionalne regulacije kod kadeta i kadetkinja, u ovom istraživanju, zaključuje se da su analizirane porodične nezavisne varijable u većem međusobnom odnosu sa emocionalnom regulacijom odbojkaša nego odbojkašica.

girls negatively influences emotional regulation ability, which is confirmed by this research.

*Pubertal status* is only predatory characteristic in our study which was not statistically significant for emotional regulation ability of adolescents of both genders. Obtained relevant values of hierarchal linear regression in the Pubertal Development Scale show that volleyball players of both genders perceive their own development the same as they peers do, so that significant contribution of pubertal status in emotional regulation explanation in the sample of volleyball population was not noticed.

However, the research done by Negriff *et al.* (2008) shows that early pubertal changes are associated with higher levels of adjustment problems, whereas problems occurring while trying to regulate negative emotions are mostly responsible for this.

In the second step of hierarchal regression analysis, perception of negative mother's control and father's rejection are recognized as significant predictors of players' emotional regulation. Threats, interrogations, blackmails and mocking represent part of mother's control which includes the behavior she applies to correct the behavior and child's intensive emotions. Players who perceive higher levels of this kind of mother's control are less successful in their own negative emotions regulation. Father's rejection refers to unfavorable emotions he expresses towards his child in different circumstances. Players who think that their fathers reject them are less successful in their own emotions regulation. Obtained results concerning the relation between parental behavior and child's ability to regulate the emotions are approximative with the results obtained by Gottman *et al.*, (1996).

*Individual characteristics* of female players explained 41% of variance of emotional regulation criterium variable, whereas characteristics of emotional family atmosphere did not have influence on its explanation, but the threat variable showed to be the only significant predictor. Female players who perceive interparental conflict as a threat are less successful in emotional control, whereas male players perceive interparental conflicts as unimportant for their emotional regulation explanation.

The analysis of the variance of emotional regulation criterium of both male and female players shows that there is mutually dependant relation between analyzed independent family variables and emotional regulation when male players are concerned, than the female players.

Therefore, some independent variables of parental behavior (mother's control and father's rejection) represent risk factors which contribute to a less successful control of negative emotions of male players, whereas certain

Dakle, neke nezavisne varijable roditeljskoga ponašanja (majčina kontrola i očevo odbacivanje) predstavljaju rizične faktore koji doprinose lošijoj kontroli negativnih osećanja kadeta, a pojedine dimenzije odnosa roditelja (npr. procenjena pretnja u sukobu roditelja) rizičan je faktor za slabiju kontrolu osećanja kadetkinja. Dobijeni vrlo skroman doprinos porodičnih varijabli u tumačenju emocionalne regulacije ukazuje na to da odbojkaši, posredstvom kognitivnog razvoja, postaju samostalniji u upravljanju sopstvenim osećanjima, te je izvesno da su posredovanja roditelja, kao i njihov doprinos u usmeravanju osećanja u kadetskom uzrastu, manje ispoljeni.

Tumačenje dobijenih rezultata ukazuje na način kako je primenjena hijerarhijska regresiona analiza potvrdila činjenicu da testirana hipoteza u ovom istraživanju može da bude prihvaćena.

Istraživanja individualnih karakteristika i porodičnih determinanti emocionalne regulacije još uvek nedostaju, posebno u sportskoj populaciji, pošto se konstrukt emocionalne regulacije adolescenata tek nedavno počeo intenzivnije istraživati. Značaj našeg istraživanja odnosi se na potvrdu važnosti dimenzija temperamenta odbojkaša kadeta i kadetkinja u objašnjenju njihove emocionalne regulacije.

Osnovna *metodološka ograničenja* ovog istraživanja odnose se na prikupljanje podataka u vrlo kratkom vremenskom periodu, demografsko obeležje analiziranog prigodnog uzorka, relativno malu veličinu i specifičnosti uzorka prosečne starosti oko 16,5 godina, što onemogućuje uopštavanje rezultata na celokupnu sportsku populaciju u Srbiji. Bez obzira na ograničenja, dobijeni nalazi u ovom radu omogućuju poređenje merenih varijabli i sa rezultatima dobijenim u evropskim državama, jer je korišćena jedinstvena metodologija.

Radi dobijanja pouzdanijeg uvida u posledične odnose determinanti ispitivanih varijabli, neophodno je sprovesti sveobuhvatnije longitudinalno dizajnirane studije, koje će proširiti ovaj nacrt uključivanjem nekih drugih prediktorskih varijabli, npr. funkcija ličnih dimenzija roditelja (temperamenta, emocionalne regulacije i mentalno zdravlje roditelja) i upotrebom drugih metoda (npr. intervju, opažanja, kao i korišćenjem višestrukih opažanja dece i roditelja) na veći i reprezentativniji uzorak ispitanika svih uzrasta koji se bave i nekim drugim sportovima.

## ZAKLJUČAK

Istraživanje sprovedeno je na uzorku od 286 ispitanika (142 kadeta i 144 kadetkinje), uzrasta od 16 do 17 godina, koji aktivno treniraju odbojku u 10 klubova u Međuregionalnoj kolubarsko-mačvanskoj ligi Srbije.

dimensions of interparental relation (e.g. perceived threat of interparental conflict) represent risk factor for a less successful control of female players. Modest contribution of family variables to emotional regulation explanation shows that male volleyball players, due to cognitive development, become more independent and govern their own emotions, so that parental influence, as well as their contribution to emotional regulation are less prominent in this period.

Interpretation of the obtained results shows the way in which hierarchical regression analysis confirms the fact that the tested hypothesis can be accepted.

Investigations of individual characteristics and family determinants of emotional regulation among athletes' population are relatively scarce, since adolescents' emotional regulation construct has been investigated lately. The importance of this research refers to the acknowledgment of temperament dimensions importance of male and female volleyball players for emotional regulation explanation.

*Methodological limitations* of this research refer to the information gathering in a short period of time, demographic characteristics of analyzed sample, relatively small sample and its specific characteristics (average age 16,5), which makes it impossible to make any generalization about athletes' population in Serbia in general. However, obtained results enable the comparison of variables with the results gathered in European countries, since unique methodology was applied.

More comprehensive longitudinally designed study should be conveyed in order to get more reliable insight in casual relations of determinants of examined variables, which would broaden this research by inclusion of other predictor variables, e.g. parental personal dimensions (temperament, emotional regulation, and parental mental health) and by another method application (e.g. interview, perception, and multiple perception of children and parents) in the bigger and more representative sample which would include examinees of all ages who are engaged in some other sports.

## CONCLUSION

The research included the sample of 286 examinees (142 male players and 144 female players), aged from 16-17, who are actively engaged in volleyball trainings in 10 clubs of Interregional League of Mačva and Kolubara in Serbia. Following measuring instruments were applied: Emotional regulation and control questionnaire, Parental Behavior Perception Scale, Children's Percep-

U ovoj studiji korišćen je skup sledećih mernih instrumenata: Upitnik emocionalne regulacije i kontrole, Skala percepcije roditeljskog ponašanja, Skala dečje percepcije sukoba među roditeljima, Upitnik temperamenta u ranoj adolescenciji i Skala pubertetskog razvoja.

Analizom rezultata hijerarhijske regresione analize uočeno je da ispitanici oba pola u kadetskom uzrastu imaju bolju samokontrolu, manje manifestuju negativne osećanja i efikasnije upravljaju svojim emocijama, na nivou  $p < .001$ . Dimenzije roditeljskog ponašanja, statistički značajno su doprinele objašnjenju pojma emocionalne regulacije samo kod odbojkaša. Kadeti koji su opažali viši stepen u prediktorskim varijablama majčine kontrole i očevog odbacivanja, nepovoljnije su kontrolisali vlastita osećanja.

Dobijeni rezultati centralnih i disperzionih parametara i hijerarhijske regresione analize mogu biti važan i utvrđen pravac za naredna longitudinalna istraživanja individualnih porodičnih dimenzija sportista u doba adolescencije koje utiču na tumačenje konstrukta emocionalne regulacije. Takođe, dobijeni nalazi mogu sa sigurnošću ( $p < 95\%$ ), pružiti indikativne informacije trenerima o uticaju temperamenta, pola i pubertetskog statusa, dimenzija roditeljskog ponašanja očeva i majki i dimenzije sukoba među roditeljima na emocionalnu regulaciju odbojkaša kadeta i kadetkinja.

#### **Izjava autora**

*Autori pridonijeli jednako.*

#### **Konflikt interesa**

*Mi izjavljujemo da nemamo konflikt interesa.*

tion of Interparental Conflict Scale, Questionnaire of Temperament in Early Adolescence and Pubertal Development Scale.

The analysis of the results of hierarchical regression analysis showed that the examinees of both genders show better self-control, do not express negative feelings so often and more efficiently control their emotions, at the level of  $p < .00$ . Parental behavior dimensions statistically contributed to the explanation of emotional regulation concept only within male volleyball players. Players who showed higher level of predictor variables of mother's control and father's rejection had lower results in their own emotions control.

The results of central and dispersive parameters and hierarchical regression analysis can be important for further longitudinal researches of individual family dimensions of athletes in adolescence, which are important for emotional regulation construct explanation. Therefore, obtained results can with certainty ( $p < 95\%$ ), give indicative information to coaches about the influence of temperament, gender and pubertal status, parental behavior dimension and interparental conflict dimension on male and female volleyball players.

#### **Authorship statement**

*The authors have contributed equally.*

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