

# PRIMENJENA PSIHOLOGIJA

## KONSTRUKCIJA I VALIDACIJA TESTA ZAVERENIČKOG MIŠLJENJA

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## RODNE RAZLIKE U NEGATIVNIM RELACIJSKIM ASPEKTIMA: ULOGA OSOBINA LIČNOSTI I KOMUNIKACIJE

Sanja Batić Očovaj i Nikolina Kuruzović



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## INTRODUCTION TO THE SPECIAL ISSUE ON CONFLICTS AND COMMUNICATION DIFFICULTIES IN INTERPERSONAL RELATIONSHIPS

Having emerged only after World War II as an area of scholarship and professional practice, conflict resolution is a relatively young discipline, with practice and theory being only loosely linked for decades (Deutsch, Coleman, & Marcus, 2006). Conflicts are omnipresent and they arise on different levels, with different motives and various dynamics, so it was no surprise to witness psychologists being among the researchers that were highly interested in exploring this phenomenon. Indeed, conflicts can always be observed from a psychological viewpoint, no matter if they occur in a dyadic relationship between intimate partners, between a patient and a therapist, in a peer-group of students, or between two teams within the same company. Especially if we define an interpersonal conflict broadly as “a dynamic process that occurs between interdependent parties as they experience negative emotional reactions to perceived disagreements and interference with the attainment of their goals” (Barki & Hartwick, 2004, p. 216), it is evident that there is plethora of perspectives from which a conflict could be observed.

Understanding when interpersonal conflicts happen, what fuels them, and why they escalate allows us to reduce their occurrence and severity in the future; understanding how people tend to react in a conflict situation allows us to empower those individuals; understanding what may be the consequences of a interpersonal conflict allows us to prepare better for its outcome. Early research attempts in this field mostly focused on the antecedents of conflicts and the conditions under which they may occur, which gave us only limited understanding on the psychology of a conflict. Later, research has delved deeper into the dynamics of interpersonal conflicts, describing how people behave during a conflict. For example, Rahim (1983) observed that during an interpersonal conflict people are driven with two distinctive concerns a conflict: concern for self and concern for others. Combination on both of these dimension results in identifying a dominant conflict-handling style of any person, which can allow us to predict how that person will most likely behave in similar situations.

Since communication is the main tool for establishing and maintaining interpersonal relationships, it is quite impossible to write about interpersonal conflicts and not to mention communication (Putnam, 2006). Again, the period directly after World War II saw a significant increase in psychologists' research interest in communication, and not just for one reason: new communication technologies, recent Nazi propaganda, ubiquitous mass media, and the beginning of the Cold war have all spurred interests in the way people communicate. The following decades witnessed increased industrialization, the internet, globalization, and finally alienation as some of phenomena that may significantly influence how we (and do we at all?) talk to each other. Interpersonal communication was and

still is at the heart of all the best and all the worst that the mankind has ever experienced, and it is therefore essential for us to keep searching for internal and external factors that influence the dynamics of interpersonal communication.

This special issue of *Applied Psychology* is thus comprised of selection of papers focused on conflicts and communication difficulties in interpersonal relationships. The papers cover these topics from various perspectives. First paper aims to construct and validate an inventory that measures general propensity for conspiracy thinking. It reports findings from two consecutive studies, where the first one tested the preliminary version, and the second one brings factor structure and validity testing. Second paper presents an overview of the most important features of violence against women, by providing the gender nature of violence in intimate partner relationships. Third paper deals with interethnic conflicts between children of two ethnic groups in North Macedonia. It observes perceptions of contact and conflict among primary aged children and their relations with outgroup attitudes such as liking, trusting, and wanting to play with children from the outgroup. Fourth paper examines the relationships between work-life balance, listening satisfaction, and relationship dissolution among cohabiting and marital couples, suggesting that listening satisfaction may have a mediating role between the other two variables. Fifth paper observes parental violence against children, concentrating on abusive fathers. Its aim was to test the effects of fathers' personality traits and frequency of negative life events, as well as their interaction, on violence against children. Finally, sixth paper explores gender differences in the quality of close relationships concerning negative exchange in the form of conflicts and antagonism. It also determines influences of personality traits and communication styles to these close relationships.

Guest editor

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## CONSPIRACY THINKING INVENTORY (CTI) – CONSTRUCTION AND VALIDATION STUDY<sup>2</sup>

Conspiracy thinking is defined as a form of reasoning about events and situations of personal, social, and historical significance, where “conspiracies” are a dominant factor. This research aims to construct and validate Conspiracy Thinking Inventory (CTI), which purpose is to measure general propensity for conspiracy thinking, rather than beliefs in specific conspiracy theories. Study 1 ( $N = 356$ ), a preliminary version of CTI consisting of 93 items, was constructed and subsequently shortened to 23 items arranged in 4 facets: Control of Information, Government Malfeasance, Threat towards One’s Own Country, Threat towards Personal Well-being. In Study 2 ( $N = 180$ ), factor structure and validity of CTI were tested, resulting in a two-factor solution: Conspiracy Thinking Aimed at Health and Well-being (CT), and Attitudes towards the Government Institutions and Representatives (AtGI). The pattern of correlations between CT and relevant constructs confirmed its convergent validity, and CT was also shown to be a good predictor of beliefs in specific conspiracy theories. Previously confirmed convergent and criterion validity and its psychometric characteristics show that CTI may be used as an indicator of conspiracy thinking. Nevertheless, divergent validity has yet to be confirmed by using other constructs (e.g., personality traits). Despite not having been foreseen, extraction of the second factor might be the consequence of using items with predominantly political content. This factor was not correlated with any external criteria which indicate that it does not reflect conspiracy thinking.

**Key words:** conspiracy theories, Conspiracy Thinking Inventory, construction, validation

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## Introduction

Conspiracy thinking is defined as a form of reasoning about circumstances of personal, social, and historical significance, in which conspiracy theories, plots concerning ill-intentioned individuals or organizations (Douglas & Sutton, 2008), are a dominant factor (Zonis & Joseph, 1994). Oliver and Wood (2014) conceptualize conspiracy thinking as a particular form of public opinion which emerges from two basic psychological predispositions: (a) tendency to attribute unexplained circumstances to unseen, powerful forces; and (b) propensity to endorse simplified narratives which interpret history as a constant battle between good and evil. In line with this conceptualization, Van Prooijen, Krouwel, and Pollet (2015) provide initial evidence that political extremists are more susceptible to conspiracy beliefs, and that this susceptibility can be at least partially explained by their tendency to accept simplified, black-and-white explanations of societal events. Since political extremism and out-group conspiracies have led to some of the greatest tragedies in human history (e.g., Holocaust), understanding psychological processes, underlying conspiracy thinking, and designing adequate instruments to measure it, are crucial to prevent such destructive consequences from occurring ever again. Additionally, conspiracy theories have been linked to other negative outcomes and alarming behaviours: a reduced interest to engage in politics (Jolley & Douglas, 2014), vaccine hesitancy (Mitra, Counts, & Pennebaker, 2016), reduced trust in well-established sources of knowledge (Imhoff, Lamberty, & Klein, 2018), which further attests to the need for a deeper understanding of this phenomenon.

## Conspiracy Thinking and Related Constructs

A characteristic of conspiracy thinking is suspicion and proneness to believe that other people have hostile intents, making it similar to paranoia (Candido & Romney, 1990; Combs et al., 2009). This similarity has been supported by previous studies reporting positive correlations between the two constructs (ranging from .36 to .58) (Cichočka, Marchlewska, & Zavala, 2016; Grzesiak-Feldman & Ejsmont, 2008; Imhoff & Lamberty, 2018). However, conspiracy thinking is not considered to be an independent psychological disorder, while paranoia is, nor do conspiracist beliefs necessarily originate from paranoia (Gray, 2008). Conspiracy thinking is also characterized by the belief that dangerous events are happening on a global scale, which is one of the components of the authoritarian personality termed *projectivity* (Adorno, 1950). Previous studies suggest that authoritarianism and general conspiracy thinking are correlated (correlations from .28 to .42) (Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013; Grzesiak-Feldman & Irzycka, 2009), and recent research confirms this finding with the association between authoritarianism and beliefs in conspiracies about malicious out-groups which threaten the current social structure being equal to .52 (Wood & Gray, 2019). One of the consequences of such beliefs is the feeling of vulnerability and intolerance

towards groups in power. On the other hand, social dominance orientation is generally associated with a positive attitude towards influential groups (Imhoff & Bruder, 2014). Earlier research (Bruder et al., 2013) has shown only a weak correlation between conspiracy thinking and social dominance orientation ( $r = .15$ ), whereas more recent findings (Wood & Grey, 2019) suggest a stronger correlation between social dominance orientation and conspiracy theories about powerful out-groups threatening a relevant in-group ( $r = .43$ ). The correlation between social dominance orientation and conspiracies about ill-intentioned in-group members is significantly weaker ( $r = .17$ ).

Additionally, people who endorse conspiracy theories often turn to supernatural forces as possible explanations of real-life events. Belief in extraordinary causes of everyday phenomena that are discarded by conventional standards is referred to as magical ideation, which is one of the key features of schizotypy (Eckblad & Chapman, 1983). Van Der Tempel & Alcock (2015) have hypothesized that schizotypy is correlated with conspiracist beliefs about supernatural forces, and subsequently reported the correlation of .38 between the two constructs on a sample of visitors of online conspiracy-related forums. This correlation has been replicated in recent studies ( $r = .32$ ,  $r = .34$ ) (Barron, Morgan, Towell, Altemeyer, & Swami, 2014; Georgiou, Delfabbro, & Balzan, 2019). Another construct related to supernatural explanations are religious beliefs, conceptualized as a highly structured form of reasoning, which provides a tool for individuals to make sense of day-to-day, societal phenomena (Park, 2005). Similarly, conspiracy theories offer alternative interpretations of daily events which might match an individual's set of opinions and help creating a coherent worldview (Douglas, Sutton, & Cichocka, 2017). Both types of beliefs have a function of maintaining a stable worldview, and also mark powerful, usually unattainable subjects responsible for particular events. With religious beliefs, the responsible subject is God, and with conspiracist beliefs, the main actors are influential groups. Previous research (Bruder et al., 2013) has provided evidence for the correlation between the two constructs ( $r = .25$ ).

## Existing Approaches towards Measuring Conspiracy Thinking

The vast majority of instruments which aim to measure conspiracy thinking include only existing conspiracy theories about real-life actors and events (e.g., Moon landing), and participants are asked to assess to which degree they believe in each one of them (Darwin, Neave, & Holmes, 2011; Leman & Cinnirella, 2007). Brotherton et al. (2013) have addressed the problem of poor psychometric properties of these instruments, and emphasized the necessity to develop a scale of general conspiracy thinking, which is not based on specific actors and events, and which allows greater comparability of results and a possible generalization of conclusions.

## Present Study

Taking the shortcomings of existing instruments into account, as well as the lack of their psychometric verification, the aim of this study was to construct and validate a short version of Conspiracy Thinking Inventory (CTI) for measuring individual differences in general propensity for conspiracy thinking, as opposed to specific beliefs in conspiracy theories. CTI was constructed in a multistep process: firstly, indicators of conspiracy thinking were identified, then the items that reflected these indicators were created, and finally, the instrument as a whole was validated, making it the first of this kind in the region.

### Study 1

In Study 1 93-item, pilot version of CTI was constructed with the aim to select the best items for the final version of the instrument to be validated in Study 2. The selection was done on the grounds of psychometric properties computed by using the RTT10G macro for SPSS (Knezević & Momirović, 1996), and Item Response Theory analysis conducted in the R package ltm (Rizopoulos, 2006).

### Construction of the Instrument

Considering all the limitations associated with instruments dealing with specific conspiracy theories, we decided to construct CTI in a way that did not refer to specific circumstances. *Generic Conspiracist Beliefs Scale* (GCB), as an example of a decontextualized instrument (Brotherton et al., 2013), was taken as a model for the item construction.

The longer version of the GCB scale consisted of 75 items grouped in 5 indicators: government malfeasance, extraterrestrial cover-up, malevolent global conspiracies, personal well-being, and control of information. Before constructing CTI items, content analysis of forums and websites about conspiracy theories was also performed<sup>3</sup>. We concluded that conspiracy theories about extraterrestrials were not widespread in this region, so this indicator was left out. The indicator „malevolent global conspiracies“ in GCB was used as an inspiration for generating items of other indicators, as its content overlapped with the content of other indicators to a great extent. In the pilot version of CTI, items were organized in 4 indicators: control of information, government malfeasance, the threat towards one's own country and threat towards personal well-being.

**Control of Information.** This indicator consisted of 26 items referring to situations in which organizations or individuals in the position of power deceived

<sup>3</sup> 50 articles and posts in social networks were inspected, out of which only 3 were about extraterrestrial activity.

the public and misused the information in line with their interests (*Official explanations of some events only disguise the fact that they were organized by secret organizations.*).

**Government Malfeasance.** This indicator included 16 items referring to immoral acts of government representatives aiming to control the occurrence of some events in the country (*Members of the government change the law to legalize their previously illegal actions.*)

**Threat towards One's Own Country.** This indicator was an innovation in comparison to GCB. It was added based on the content analysis, where we noticed a great sensitivity of commentators towards topics of national importance (out of 50 analyzed posts, 32% could have been interpreted as this indicator). This indicator consisted of 30 items referring to activities of powerful groups with a sinister goal to cause damage to Serbia and its citizens (*Certain countries conspire to destroy my nation.*).

**Personal Well-being.** This indicator included 21 items about events and circumstances, having a direct impact on the psychological and physical well-being of the citizens. (*I believe that chemicals harmful for health are deliberately put in GM foods.*).

## Method

**Sample and Procedure.** The sample was gathered through convenient sampling ( $N = 356$ ), and it consisted of participants aged from 15 to 63 ( $M = 22.72$ ;  $Mdn = 20$ ), 70.8% of which were female. The survey was administered by using the *Google Forms* platform. All the participants were told that the CTI items referred to general social attitudes since conspiracy thinking was not considered to be socially desirable, and mentioning it could potentially bias participants' responses.

**Instrument.** The pilot version of CTI consisted of 93 items. The total number of reverse coded items was limited to 23, to make sure that items reflected conspiratorial meaning (*Stories about powerful organizations controlling human lives via the Internet are a complete nonsense.*). Answers were given on a five-point Likert scale (1 - *completely disagree* and 5 - *completely agree*).

## Results

**Descriptive Analyses.** The values of standardized skewness and kurtosis were both under 1.96 ( $zSk = -1.82$ ;  $zKu = 0.51$ ), which led to the conclusion that the distribution was normal, and that the test discriminability was satisfactory, which was also confirmed with Kolmogorov-Smirnov Test ( $z = .65$ ;  $p = .80$ ). *T*-test showed that there was not a significant difference between genders ( $t(354) = 0.28$ ,  $p > .05$ ).

**Data Analysis.** Cronbach's alpha coefficient ( $\alpha$ ) was equal to .97, and *KMO* index of sampling adequacy was .99. Homogeneity index *H5* had the value of .51,

the range of item sampling adequacy was .92 - .99, while the item reliability range was .34 - .76. Range of validity determined with Hotelling procedure was .24 - .69 and with Bart's procedure .25 - .68, which suggested that the majority of items were correlated with the first principal component and the sum score.

**Exclusion of Items.** The items were dropped by using a combination of psychometric criteria. In the RTT10G, items with the best properties were chosen with all of them having values above .9 for item sampling adequacy, .5 for item reliability, .5 for Hotelling's and Bart's validity measure. In IRT analysis, multiple criteria for excluding items were combined: (a) the value of average unweighted misfit should not fall outside the range of 0.7 - 1.3; (b) discrimination of items should be high or very high, as defined by Baker (2001), leading to the selection of items which carried substantial information about the underlying trait (Partchev, 2004).

In order to choose an adequate IRT model, preliminary factor analysis, using Principal Axis Factoring and Promax rotation, was conducted revealing four underlying factors in line with initially hypothesized facets, which explained 38.23% of variance. Additionally, higher-order principal component analysis revealed one factor explaining 68.58% of variance, which was ultimately termed Conspiracy Thinking. First-order inter-factor correlations and higher-order loadings can be seen in Table 1. This factor structure was confirmed by using Horn's parallel analysis (Horn, 1965). Based on these results, graded response model with generalized partial credit model constraint was chosen and applied to items loading on every individual lower-level factor. These criteria led to the selection of the final 23 items for the final version of CTI, out of which 5 were reverse coded. Test information function for all 23 items revealed that the short version of CTI was highly informative in the range of -2 to +2 of the latent trait (TFI > 10, Embretson & Reise, 2000), which was expected due to the lack of participants scoring close to the minimum of maximum value.

Table 1  
*Inter-factor correlations and higher-order factor loadings*

	Government Malfeasance	Threat Towards One's Own Country	Control of Information	Conspiracy Thinking
Personal Well-Being	.49**	.58**	.45**	.79
Government Malfeasance		.54**	.64**	.85
Threat towards One's Own Country			.51**	.84
Control of Information				.84

Note. \*\*  $p < .01$ .

**Descriptive Statistics and Psychometric Properties after the Items Exclusion.** Final 23 items were chosen for the shorter version of CTI (Appendix A). The value of arithmetic mean was now 70.26, standard deviation was 18.03, and standardized skewness had the value of .47, while -1.17 was the value of the standardized kurtosis. Apart from the values of skewness and kurtosis, which indicated the presence of normal distribution, this was also confirmed with Kolmogorov-Smirnov Test ( $z = .04$ ;  $p = .23$ ). Psychometric properties of the shorter version of CTI can be found in Table 2.

Table 2  
*Psychometric properties of the 23-item CTI*

Cronbach's Alpha	.94
Kaiser-Meyer-Olkin index (KMO)	.95
H5 homogeneity index	.57
Item sampling adequacy range	.94 - .97
Item reliability range	.26 - .59
Hotelling's validity measure range	.42 - .64
Bart's validity measure range	.45 - .73

Due to a smaller number of items, Cronbach's alpha decreased, but it was still an indicator of high reliability. The KMO index remained almost the same, while the value of the H5 homogeneity index increased, which implied that CTI items referred to a more narrowly defined topic than it was initially the case.

## Discussion of Study 1

A 93-item self-report inventory of conspiracy thinking was constructed in Study 1. Factor analysis was conducted, and four factors were extracted in line with the initially hypothesized indicators. This finding was also in line with the previous study used as a model for the construction of CTI, where a five-factor solution was extracted (Brotherton et al., 2013). The difference in the number of factors in the two studies originated from the fact that the *extraterrestrial cover-up* indicator (Brotherton et al., 2013) was excluded in this study. In addition, higher-order factor analysis was conducted in order to test the assumption of unidimensional structure of conspiracy beliefs that relied on Ted Goertzel's (1994) concept of *monologic belief system*. Such system was defined as a self-sustaining system in which each belief provided evidence of the next one, meaning that those who believed in one conspiracy theory would easily accept other ones. This assumption was confirmed as one factor was extracted and ultimately interpreted as conspiracy thinking.

Based on its psychometric properties (discriminability, reliability, homogeneity, validity), as well as on item response theory analysis, we decided that 23 items should be kept in the final version of the instrument. Psychometric properties of the 23-item Conspiracy Thinking Inventory (CTI) were shown to be satisfactory. Cronbach's alpha ( $\alpha = .95$ ) decreased in comparison to the pilot version of CTI, but its value still testified to the internal consistency of the instrument. The value of the Kaiser-Meyer-Olkin index of sampling adequacy remained high, while the value of the H5 homogeneity index significantly increased suggesting the potential underlying unidimensionality. The 23-item CTI was further examined and validated in Study 2.

## Study 2

The aim of Study 2 was to validate CTI by using an independent sample through examining its factor structure, convergent and divergent validity.

### Method

**Sample.** A total of 180 students from the University of Belgrade participated in Study 2. They were recruited from three faculties: Faculty of Sport and Physical Education (47.8%), Faculty of Music and Fine Arts (6.1%), and Faculty of Philosophy (Department of Pedagogy - 20%, Department of History - 26.2%). The participants aged 19 to 34 ( $M = 21$ ), and 70.8% of them were female.

**Instruments.** The following questionnaires, scales, and measures were applied in Study 2:

**Conspiracy Thinking Inventory (CTI).** This instrument was validated in this study. The shorter version consisted of 23 items grouped in 4 indicators: Control of Information, Government Malfeasance, Threat towards One's Own Country, and Personal Well-being. Answers were given on a five-point Likert scale (1 - "completely disagree" and 5 - "completely agree").

**Delta-10 (Knežević, Opačić, Kutlešić, & Savić 2005).** Facets of paranoia and magical thinking, both consisting of 12 items, were chosen from the Delta-10 Inventory. The responses were given on a five-point Likert scale, and the sum score was subsequently calculated. In this study, reliability index for the facet paranoia was .75, and for the facet magical thinking .80.

**Right-Wing Authoritarianism Scale (Altemeyer, 1996; Serbian adaptation: Petrović, 2001).** This scale consisted of 30 items out of which 15 were pro authoritarian, while the other 15 were reverse coded. The responses were given on a five-point Likert scale. Scale reliability was satisfactory ( $\alpha = .90$ ).

**Social Dominance Orientation Scale (Pratto, Sidanius, Stallworth, & Malle, 1994; Serbian adaptation: Mihić, 2009).** This scale consisted of 16 items followed by a five-point Likert scale. Reliability for this scale was .88.

**Religiousness Scale (Strayhorn, Weidman, & Larson, 1990; Serbian adaptation: Todorović & Knežević, 2006).** This scale included 12 items accompanied by a five-point Likert scale. The reliability, as measured by Cronbach's alpha, was very good ( $\alpha = .83$ ).

**Specific Conspiracist Beliefs Scale (Lukić & Žeželj, 2017).** This scale was composed of 12 items referring to specific conspiracy theories present in this region (e.g., *Slobodan Milošević did not die of natural causes, he was murdered in Hague.*). The answers were given on a four-point Likert scale. Internal consistency in this study was .86.

**Procedure.** The approximately 45-minute testing sessions took place during the lectures in the three faculties. After induction and consenting, participants completed the battery of instruments in the same order.

## Results

**Construct Validity.** Exploratory factor analysis, using Principal Axis Factoring and Promax rotation, was conducted to examine the internal structure of the 23-item measure of conspiracy thinking. We chose Principal Axis Factoring as a factor extraction method since it was commonly recommended when the assumption of normality was violated (Costello & Osborne, 2005), which was the case with all CTI items. Promax rotation was used to achieve more natural associations between latent factors. Two-factor solution explaining 36.79% of the variance was extracted with the first factor accounting for 24.69% of the total variance, and the second factor accounting for 12.09%. A small correlation was observed between the two factors ( $r = .29, p < .01$ ).

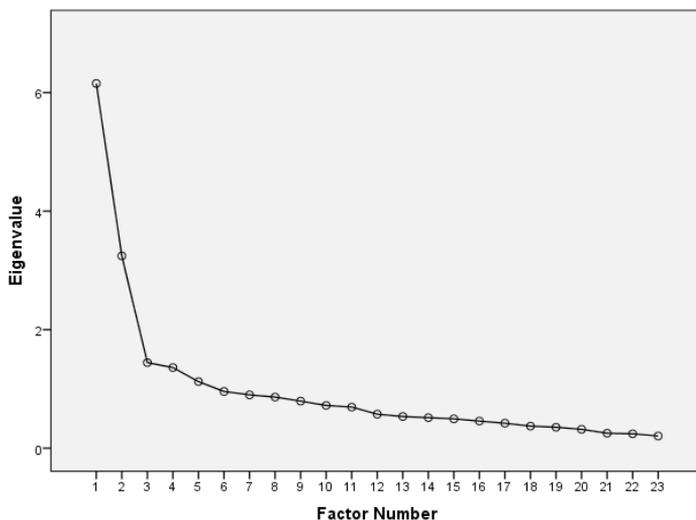


Figure 1. Scree plot after Promax rotation.

Horn's parallel analysis (Horn, 1965), using Principal components as a factor extraction method, and upper 95<sup>th</sup> percentile of the distribution as a criterion for factor retention (Glorfeld, 1995), was also applied to rigorously test the conclusion about the number of relevant extracted factors. This analysis was carried out by using an SPSS macro *parallel.sps* (O'Connor, 2000). The initial conclusion about the number of factors was supported as it was shown that only two factors had a higher Eigenvalue than the ones obtained on randomly generated data (Figure 2).

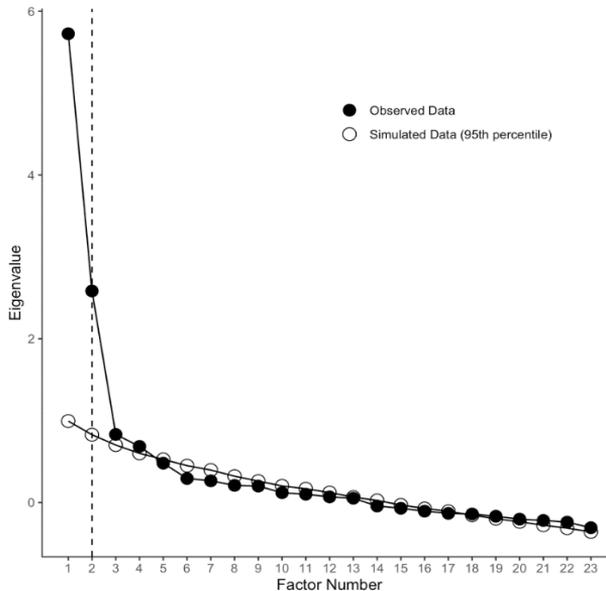


Figure 2. Scree plot for parallel analysis (Study 2).

A total of 3 items did not satisfy the two pre-set conditions: (a) a meaningful loading must be greater than .30, and (b) cross-loadings were not allowed, and were subsequently dropped. The remaining pattern of loadings reflected conceptually meaningful groupings (see Table A in Appendix A). The first factor was interpreted as conspiracy thinking aimed at circumstances threatening to personal health and well-being (*I believe that sterility is deliberately caused by vaccination in order to decrease the number of people on the planet.*), whereas the second factor reflected the control of information and malicious activities undertaken by government representatives (*I believe that members of the government have faked some events in order to distract the public from current problems.*).

**Descriptive Statistics for CTI.** Descriptive statistics and psychometric properties of factor scores can be seen in Table 3. Cronbach's alpha and *KMO* test of sampling adequacy were satisfactory, whereas *H5* homogeneity measure was high for both factors. This implied that the items loading on each of these factors pertained to a narrowly defined topic, which might further suggest the item redundancy. Descriptive statistics and psychometric properties of other instruments used in this study can be found in Appendix A (Tables B and C).

Table 3

*Descriptive statistics and psychometric properties of CTI factor scores*

	<i>M</i>	<i>SD</i>	<i>zSk</i>	<i>ZKu</i>	<i>KS</i>	$\alpha$	<i>KMO</i>	<i>H5</i>
CT	2.88	0.74	-0.22	0.83	0.07	0.88	0.97	0.83
AtGI	3.69	0.71	-3.82**	1.23	.10**	0.80	0.94	1

*Notes.* CT - Conspiracy Thinking; AtGI - Attitudes towards government institutions; *KS* - Kolmogorov-Smirnov test statistic.

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

**Convergent and Divergent Validity.** Correlations between extracted factors and constructs of interest can be found in Table 4.

Table 4

*Convergent and divergent validity correlations*

	P	MT	RWA	R	SDO	SCB
CT	.27**	.21**	.43**	.28**	.29**	.58**
AtGI	-.10	.05	.07	-.02	.10	.37**

*Notes.* CT - Conspiracy Thinking; AtGI - Attitudes towards Government Institutions; P - Paranoia; MT - Magical thinking; RWA - Right-wing Authoritarianism; R - Religiousness scale; SDO - Social Dominance Orientation Scale; SCB - Specific Conspiracist Beliefs Scale.

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

Correlations between the first factor (Conspiracy Thinking) and the constructs of interest were in line with initial expectations, whereas no correlations with the second factor (Attitudes towards the government institutions) were found, which supported the possibility that the second factor did not reflect conspiracy thinking. The only unexpected correlation in this study was the correlation between conspiracy thinking and social dominance orientation, where opposite results were expected.

Regarding the Specific Conspiracist Beliefs Scale (SCB) (Lukić & Žeželj, 2017), based on the assumption that general conspiracy thinking could predict specific conspiracist beliefs (Swami, Chamorro-Premuzic, & Furnham, 2010), both extracted factors were used to predict the score on this scale, which consisted of 12 widely known regional and global conspiracy theories. In multiple linear regression, both extracted factors were significant predictors of Specific Conspiracist Beliefs score accounting for 36.8% of the total variance, with conspiracy thinking explaining 33.2%, and attitudes towards government institutions explaining 3.6% of variance ( $\beta_1 = .51$ ,  $t_1(164) = 7.78$ ,  $p < .01$ ;  $\beta_2 = .202$ ,  $t_2(164) = 3.08$ ,  $p < .01$ ). This finding confirmed the initial hypothesis that the higher CTI score was followed by a higher SCB score.

**Replicability of the Factor Structure.** Even though the factor structure of a preliminary 93-item version of CTI did not represent a criterion for the item

selection *per se*, the factor structure of a 23-item CTI was subsequently tested on a sample from Study 1. This was done to gain an insight into the factor replicability in two independent samples. After the two-factor solution was extracted in the Horn's parallel analysis yet again (Figure 3), the factor loadings from Study 1 and Study 2 were used to calculate Tucker's congruence coefficient. For both factors, Tucker's congruence coefficient had the value of .99 and .97 respectively, which indicated that this factor could be considered identical in both samples (Lorenzo-Seva & Ten Berge, 2006).

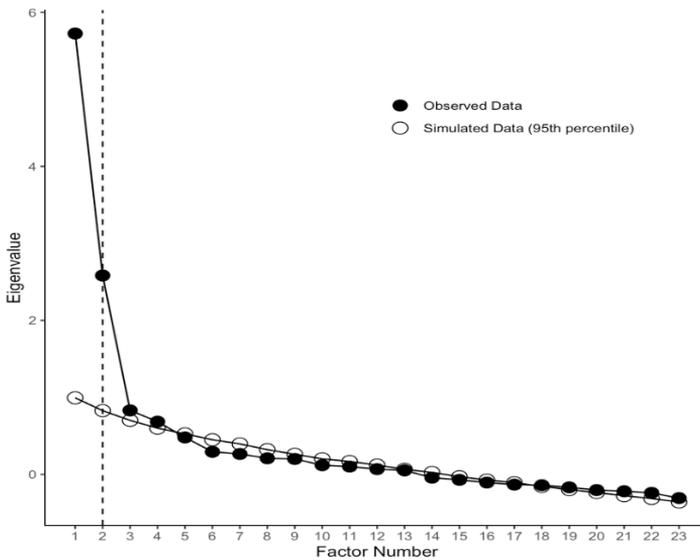


Figure 3. Scree plot for parallel analysis (Study 1).

## Discussion of Study 2

Factor analysis revealed two underlying dimensions. The first factor was interpreted as conspiracy thinking directed towards personal well-being, specifically, circumstances and individuals threatening to it, while the second factor was shown not to reflect conspiracy thinking, but rather attitudes towards government institutions and representatives, as participants might have found it difficult to distance themselves from the familiar actors and events in their own country. This interpretation was supported by the absence of correlations between this factor and any other construct used to test convergent validity. The final version of Conspiracy Thinking Inventory should consist of 20 items, 12 of which loaded high on the first factor.

Selection of instruments for testing convergent and divergent validity was not straightforward, since previous research yielded inconsistent results. Previously reported correlations varied significantly in intensity, which could at least partially be attributed to the usage of different instruments. However, in accordance with the majority of previous findings, a meaningful pattern of correlations

was observed between conspiracy thinking and paranoia, magical thinking, authoritarianism, and religious beliefs, confirming its convergent validity.

Positive correlation between conspiracy thinking and paranoia was expected due to the fact that paranoid ideation was characterized by believing in other people's hostile intentions. Additionally, a positive association between magical and conspiracy thinking was not surprising since magical thinking, similar to conspiracy thinking, included beliefs in alternative explanations that were not widespread (Eckblad & Chapman, 1983). Nonetheless, the low intensity of this correlation could be explained in terms of psychopathology. Conspiracy thinking was considered a subclinical construct, while magical thinking was one of the main characteristics of schizotypy, which classified it in the domain of psychopathology (Eckblad & Chapman, 1983).

A strong positive correlation was also found between conspiracy thinking and the right-wing authoritarianism. Previous research explained this correlation in terms of authoritarian aggressiveness, shifting the guilt for unfortunate events to out-group members, towards whom one had hostile feelings (Abalakina-Paap, Stephan, Craig, & Gregory, 1999). An alternative explanation could be based on authoritarian submissiveness and a blind faith in superior individuals or groups that had the power to influence events directly connected to one's safety and well-being. Since the strongest correlation was found between conspiracy thinking and authoritarianism, future studies should examine this relationship in more depth. In regards to religious beliefs, the common characteristic that could explain their correlation with conspiracy thinking was the belief that factors beyond people's control could influence their lives (Douglas et al., 2017).

Convergent validity of CTI was further confirmed as both factors were good predictors of beliefs in specific conspiracy theories. This finding was expected on the premise that individuals with general conspiracy ideation would be more prone to accept a wide range of available contents characterized by malicious acts and protagonists (Swami et al., 2010). The contribution of the first factor was significantly larger in comparison to the second factor, which attested to its interpretation as conspiracy thinking. The small contribution of the second factor could likely be attributed to the fact that some SCB items referred to prominent political events and actors. Thus this pattern of results could be interpreted in line with correlation findings to suggest that the second factor did not include conspiracist ideation, but rather narrowly defined political attitudes.

Divergent validity was, however, not confirmed in this study, and the adequacy of social dominance orientation for testing this type of validity was questionable. Previous studies found correlations of varying intensity between social dominance orientation and conspiracy thinking, depending on the instruments employed in the study (Bruder et al., 2013; Swami, 2012; Wood & Grey, 2019), but no study showed an absolute absence of correlation. Future research should consider using other constructs, consistently shown not to correlate with conspiracy thinking, to test divergent validity (e.g., personality traits) (Goreis & Voracek, 2019).

Also, alternative theoretical explanations can be offered to explain the observed positive correlation. According to social dominance theory, individuals who strongly express this orientation tend to perceive the world as a competitive

place where 'the strongest ones survive', and are also inclined to commit malicious acts out of self-interest (Duckitt, 2006). Thus, people with a hierarchical view of society might also be prone to believe that individuals in higher positions commit suspicious acts threatening to others, but might simultaneously perceive these acts as appropriate means of climbing the social ladder. In other words, individuals with strong social dominance orientation might regard malicious activities as just another way to success, but might also be afraid of such deeds done by someone else, as they can endanger them. This fear can manifest itself through belief in conspiracy theories. However, additional research is needed to provide stronger empirical support for this explanation.

## General Discussion

Based on the present study, Conspiracy Thinking Inventory (CTI) can be considered a valid measure of conspiracy thinking, since one of the extracted factors can be interpreted as conspiracy thinking aimed at circumstances threatening to personal health and well-being. At the same time, the unexpected extraction of the second factor (attitudes towards the government institutions) can be explained by predominantly political content of some items. It is highly likely that when responding to these political items, the participants have found it difficult to dissociate themselves from their attitudes towards current government institutions and representatives in their country, and consequently, they have not focused on their attitudes towards malicious acts of powerful people in general. However, further research is warranted to create more abstract items that will not induce any associations to specific events and actors.

If using the current version of CTI in future research, we recommend not to include items which load high on the second factor, in order to obtain results that will more reliably reflect conspiracy thinking. Additionally, since CTI has been created on the basis of the specific conspiracy beliefs in this region, it is not advisable to use it in a different cultural context without prior adaptation.

## Appendix A

Table A

### *Pattern matrix for CTI*

Item	CT	AtGI
I believe that sterility is deliberately caused by vaccination to decrease the number of people on the planet.	.75	
Vaccines are deliberately made in a way to cause developmental disorders.	.73	
Modern technology is deliberately produced in a way to cause sterility among young people.	.71	
Substances which hinder normal development of children are deliberately put in food and drinks available in supermarkets.	.68	
Health professionals consciously allow the use of vaccines for which they know are causing developmental disorders among children.	.66	
Military forces are spreading radioactive substances across my country to cause malignant diseases and exterminate the population.	.61	
There is a plan to destroy my nation with radioactive substances.	.61	
I believe that deliberate causing of climate change is a simple way to destroy agriculture and impoverish my country.	.60	
The purpose of vaccination is only disease prevention. *	.53	
I believe that chemicals harmful for health are deliberately put in food.	.47	
Powerful countries are trying to impose their deviant values on my country.	.41	
Certain countries actively conspire to destroy my nation.	.41	.36
Saying that toys containing toxic substances are deliberately imported in my country is ridiculous. *	.39	
I believe that members of the government have faked some events to distract the public from current problems.		.81
The governments faked some important events to gain a greater number of votes.		.80
Members of the government secretly change the law to legalize their previously illegal actions.		.68
Results of public opinion research are faked to correspond to governments' interests.		.61
The governments pay scientists to publicly present information corresponding to their interests.		.58
Loans that my country receive from other countries are only a way to extend their influence over my country and take control of its resources.		.58
I believe that the voters are the only ones deciding on the results of the elections. *		.37
Official explanations of some events only disguise the fact that they were organized by secret organizations.		.31
I believe that rumors about spying ordinary citizens are unfounded. *		
Stories about powerful organizations controlling human lives via the Internet are a complete nonsense.		

*Note.* CT - Conspiracy thinking; AtGI = Attitudes towards Government Institutions.

Table B  
*Descriptive statistics of used scales in Study 2*

	<i>M</i>	<i>SD</i>	<i>zSk</i>	<i>zKu</i>
Paranoia	24.56	6.69	3.76	-0.82
MT	31.64	8.96	0.82	-1.39
RWA	86.26	18.14	-0.63	0.96
SDO	41.18	11.34	1.17	-0.35
R	29.63	8.78	1.04	-0.83
SCB	30.32	7.57	-2.51	0.19

*Note.* MT - Magical thinking; RWA - Right-wing Authoritarianism; SDO - Social Dominance Orientation Scale; R - Religiousness scale; SCB - Specific Conspiracist Beliefs Scale.

Table C  
*Psychometric properties of instruments used in Study 2*

	Paranoia	MT	RWA	SDO	R	SCB
<i>KMO</i>	0.8852	0.9061	0.9622	0.95	0.9622	0.9505
<i>H5</i>	0.6432	0.6707	0.5029	0.6814	0.5029	0.8416

*Note.* MT - Magical thinking; RWA - Right-wing Authoritarianism; SDO - Social Dominance Orientation Scale; R - Religiousness scale; SCB - Specific Conspiracist Beliefs Scale.

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## KONSTRUKCIJA I VALIDACIJA TESTA ZAVERENIČKOG MIŠLJENJA

Zavereničko mišljenje predstavlja način razumevanja okolnosti od ličnog, društvenog i istorijskog značaja u kome je zavera dominantan faktor. Cilj ovog rada je konstrukcija i validacija Testa zavereničkog mišljenja (TZM) koji teži merenju opšte sklonosti ka zavereničkom mišljenju, nasuprot verovanjima u specifične teorije zavere. U Studiji 1 ( $N = 356$ ) konstruisana je verzija TZM sa 93 stavke, kasnije skraćena na 23 stavke u okviru faceta Kontrola informacija, Malverzacije na vlasti, Pretnja po sopstvenu državu i Pretnja po ličnu dobrobit. U Studiji 2 ( $N = 180$ ) proverena je faktorska struktura i validnost finalne verzije TZM. Ekstrahovana su dva faktora: zavereničko mišljenje usmereno na zdravlje i dobrobit osobe (ZM) i stav prema institucijama i predstavnicima vlasti (SPV). U skladu sa očekivanjima, obrazac korelacija između zavereničkog mišljenja i relevantnih konstrukata je potvrdio njegovu konvergentnu valjanost. Takođe, ZM se pokazao kao dobar prediktor verovanja u konkretne teorije zavere. Konvergentna i kriterijumska valjanost, kao i psihometrijske karakteristike sugerišu da se TZM može koristiti kao indikator zavereničkog mišljenja, pri čemu je neophodno proveriti divergentnu valjanost oslanjanjem na druge konstrukte poput crta ličnosti. Pojava drugog faktora može se objasniti korišćenjem stavki čiji je sadržaj bio prevashodno politički. Ovaj faktor ne korelira ni sa jednim od spoljnih kriterijuma što govori u prilog tome da ne odražava zavereničko mišljenje.

**Ključne reči:** konstrukcija testa, teorije zavere, Test zavereničkog mišljenja, validacija testa



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INSTITUTIONAL RESPONSE TO WOMEN'S  
NEEDS**

Although there are tendencies to portray women in partner relationships as physically equally aggressive as men, initiating violence, revenge, and using deadly force almost as much as men, men's violence against women is more pernicious, characterized by more severe and frequent acts of greater range, manifestations, and with more severe consequences. It is therefore unjustified to speak of gender symmetry, and present this type of violence in gender-neutral terms. This paper provides an overview of the most important features of the observed phenomenon, focusing on psychological violence, which plays a key role in "breaking the resistance", and in providing a "voluntary sacrifice", i.e., coercive control, structural in nature and extending to all aspects of a woman's life. Paradoxically, leaving a violent partner is a risk factor for violence and is considered to be potentially more dangerous than staying in a relationship. In the literature, help seeking and coping strategies used by women who have experienced violence are conceptualized in various ways, and research confirms that they depend on the features of violence and the resources available. It is shown that the crucial precondition for women who want to break out of the circle of violence and begin a new life is a fact that professionals understand the gender nature of violence, that effective social control of violent behaviour is established, that women are lent support through specialized independent programs over a longer period, which should be multidimensional and well synchronized, so as to include women, and take into account their needs, reinforcing their sense of security and space for action.

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## Introduction

There is still a lot of confusion both in the literature and in practice regarding the key characteristics of intimate partner violence, especially its gender dimension, the needs of women with experience of violence, and the appropriate institutional response. Polovina (1997) points out that intimate partner violence is difficult to talk about due to numerous protection, denial and avoidance mechanisms, because of personal (conspiracy of silence, shame), social (traditional beliefs and “licenses” for male aggression), and official aversion to acknowledge which behaviour is involved (unspecified competencies) within services, as well as the lack of interconnectedness of the institutional system. Violence in intimate partner relationships constitutes a specific form of domestic violence. In international treaties ratified by the Republic of Serbia, domestic violence is defined as “any act of physical, sexual, psychological, or economic violence occurring within the family or household, or between former or current spouses or partners, whether or not the offender shares or has shared the same residence with the victim.”<sup>2</sup>

The data confirm that women are at higher risk and are disproportionately more likely to be victims of intimate partner violence. Violence against women is widespread, although it is not easy to compare the data due to methodological differences (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). Women will most often be injured, raped or killed by men they know and often love (Tjaden & Thoennes, 1998). Physical violence is reported in 13–61% of women, sexual in 6–59% of women, and the prevalence of psychological violence is 20–75% (Garcia-Moreno, Jansen, Ellsberg, Heise, & Wattset, 2005; UN, 2006). When violence against women have led to a fatal outcome, in 40-70% of cases perpetrators are their intimate partners, which is in sharp contrast to the prevalence for men, which ranges from 4 to 9%.

Reviewed data for Europe highlight the importance of variations in methodology, but also indicate that between 20 and 25% of women at the minimum have experienced physical violence by partners at least once during their lifetime, more than 10% have experienced sexual violence, and between 19 and 42% have endured psychological violence (Hagemann-White, 2006; Martinez & Schröttle, 2006). Research conducted in European Union countries (by using a uniform methodology) shows that every third woman over the age of 15 has experienced physical and / or sexual violence, most commonly inflicted by her intimate partner (FRA, 2014).

In Serbia, data from surveys conducted at different times, on different samples, and with diverse methodology, show a similar and consistently high prevalence of violence. One in two women over the age of 15 has experienced some form of violence by an intimate partner, every fourth (or fifth) has experienced a physical assault, and every twentieth has experienced sexual violence (Babović,

<sup>2</sup> Law on Ratification of the Council of Europe Convention preventing and combating violence against women and domestic violence, “RS Official Gazette, International Treaties”, no. 12/2013, Art.3.

Vuković, & Ginić, 2010; OEBS, 2019; Otasević, 2005; Petrović, 2010; Vidaković, 2002). Serbia also records a large number of women killed by their partners, and in the family context, without an appropriate social response (Jovanović, 2013; Lacmanović, 2019; Lukić, 2013; Mršević, 2014).

This paper outlines some of the key features of this phenomenon, most notably its gender character, the way in which power and control over women are achieved, and continue beyond the termination of a partnership. The prevalence and incidence of this phenomenon, as well as its effects on the health and well-being of women, and also their families, communities and society in general, focuses on supporting effective strategies in combating violence, and achieving better social control of perpetrators. It particularly focuses on the long-term support for women in rebuilding their lives after breaking out of a violent relationship. This includes not only adequate community resources, but also the professionals' relative knowledge and appropriate attitudes.

## **Characteristics of Violence against Women in Intimate Partner Relationships**

The global character of violence against women is reflected through its presence throughout history and worldwide, in all cultures and social systems, which confirms its structural and systematic character. The similarity in the characteristics of this phenomenon indicates both their structural nature and their uniform meaning, that is, that violence against women occurs because they are women (and not due to any of their personal attributes / individual traits)<sup>3</sup>. However, the universality of the phenomenon means neglecting neither the context (cultural and historical differences and personalities), nor local events that influence changes in the manifestations and reactions (individual and social) to violence against women (Hester, 2004; Lybecker Jensen, & Nielsen, 2005).

## **Gender Imbalance of Violence in Intimate Partner Relationship**

Although there is a tendency to portray women in intimate partner relationships as physically equally aggressive as men (Archer, 2000, 2002; Gelles, Straus, & Murray, 1988), initiating violence, being vindictive, and using lethal force almost as much as men (Lysova, 2018; Sewel & Sewel, 1996, according to Dasgupta, 1999), numerous studies confirm that men's violence against women is more pernicious, as it is characterised by graver and more frequent acts, with a greater range of manifestations, and with more serious consequences. Although women and men alike can express frustration and anger, the gender asymmetry is clearly present when it comes to control-motivated violence, where women who physically attack and / or defend themselves are at risk of much more serious

<sup>3</sup> United Nations Committee on the Elimination of Discrimination against Women, General Recommendation no. 19, Violence against Women, Count 6.

retaliation by men (Kimmel, 2002). Therefore, it is unjustified to speak of gender symmetry, and refer to this type of violence in gender-neutral terms (Ignjatović, 2014).

Research on aggression and violence (though still insufficient and descriptive) also indicates gender differences in expression, consequences, motivation, and intention (Kambel & Manser, 1998). Aggression that occurs in the context of conflict is more widespread in intimate partner relationships, yet violence in the context of coercion is much more harmful to a woman (Cook & Goodman, 2006; Tjaden, 2006). Men are more likely to use forms that provoke fear and control of the victim, as well as the loss of freedom and autonomy, which is a critical component of intimate partner violence (Hester, 2009; Stark, 2004; Tjaden & Thoennes, 2000).

Furthermore, the difference between men's and women's understanding and attitudes to partner violence has been confirmed. Men deny violence, describing it as an "ordinary", nondramatic event, diminishing their power and influence (normalizing violence), and see it mainly as a specific event (at a certain time, in a certain place), whereas for women it is a process that overwhelms them in their daily lives, and which prevents them from breaking out of the circle of abuse (Hearn, 1998). At the same time, men are less likely to report violence because its forms are not alarming (Hester, 2009), although statements made by men may attract more attention because of the numerous gender role stereotypes (Ajduković, 2000). Research also shows that women commit violence in the context of the violence they suffer. They use weapons most commonly in the context of protection (Dasgupta, 1999; Hester, 2009), while emotional abuse, even when not dissimilar in frequency, differs in its typical forms (Swan & Snow, 2002).

This does not mean that women do not have the capacity to be violent, but the question is whether women's violence manifested in a heterosexual partner relationship can be termed "abuse" or long-term, repeated, gross mistreatment, which includes control, coercion and threat, leading to a systematic fear and submission (Dasgupta, 1999). Dasgupta (2002) points out that when both partners are treated equally, it actually means that they are both treated as if they were men, because a woman who reciprocates or takes revenge on a man risks being accused of violence, since the system conceptualizes her as passive and helpless. Concepts of mutual aggression suggest that this is a phenomenon that similarly affects women's and men's well-being (as if the aetiology and nature of the problem were similar), leading to completely wrong prevention and intervention programs (Reed, Raj, Miller, & Silverman, 2010). It is therefore emphasized that research and explanations for this complex phenomenon must take into account gender characteristics and context in order to increase its understanding (Myhill, 2017; Renzetti, 2006).

## Achieving Power and Control over a Female Partner

Although physical violence is the focus of institutional response, psychological violence plays a key role in “breaking the resistance” and in providing a “voluntary victim” (Herman, 1996). In this way, “more severe” forms of violence (physical and sexual) are not requisite in gaining power and control over a partner, except as a potential threat (with a serious possibility of realization), which keeps a woman in constant fear for her life, health and well-being (Pence & Paymer, 1993).

Psychological violence comprises a number of manifestations, which occur on their own or in combination with other forms (previously or simultaneously present). The analyses suggest at least two subdivisions of this phenomenon: verbal aggression (shouting, swearing, moderate criticism) and emotional abuse (tactics of control, domination, threats, disparaging, humiliation, isolation, denial of resources). Although repeated verbal violence can damage partner communication, it does not produce the detrimental effects of emotional abuse, while their non-discrimination and / or equalization exacerbates the unwillingness to stop the abuse and create a social climate that reproduces it (Capezza & Arriaga, 2008; Ganley, 1998).

The perpetrator chooses a partner who will tolerate or forgive the abuser, skilfully disguising his behaviour. However, he is hardly satisfied with mere obedience, but needs the victim’s approval (respect, gratitude, even love), so as to psychologically justify his violence with the ultimate goal of (gladly) making a voluntary sacrifice. Whimsical sharing of “petty / occasional favours” undermines the victim’s psychic resistance, sparks the hope that a desirable change will occur, which is more effective than constant denial, threat, or violence, and is critical to breaking the victim’s resistance (Herman, 1996; Pence & Paymer, 1993). During these periods, the woman “barely remembers” the bad times, and because of the mechanism of separation and isolation, she seems to be leading two different lives (Kelly, 2003).

Nevertheless, the perpetrator’s power is limited as long as the victim maintains relations with other people. Therefore, he actively seeks to isolate her from sources of information, emotional support, and concrete help. As she becomes more dependent and begins to look at the world through the eyes of the perpetrator, she lives in the conviction that he is omnipotent: that no one can stop or control him and that resistance is futile. The final control is achieved when a woman “betrays / abandons” her moral principles and fundamental relationships with other people (Herman, 1996).

Violent behaviour is rarely an individual incident, limited to a specific time and place. It represents a set of daily and unpredictable behaviours that, according to Stark (2007), draws on a woman’s energy, exhausts her sense of self, and isolates her from others, which has been articulated in the literature as the concept of power and control (Pence & Paymar, 1993), coercive control (Stark, 2007), or as intimate terrorism (Johnson, 2009). This type of control is structural in na-

ture and consists of destructive forms of deprivation (money, food, and other life resources), imposing choices, micro-regulation of everyday behaviour, a limitation of options and sources of support, which extends to all behaviours and spaces (he also decides and controls where she goes, who she socializes with, how she dresses, how much money she has at her disposal, what jobs in the home, outside and related to the children she effectuates, and in what way, determines access to information, or bans it, sets standards, monitors and punishes) (Stark, 2007). In particular, the abuser exploits the victim's multiple, complex, and interdependent needs and experiences (disability, mental illness, substance abuse) in order to enhance coercive control (Harris & Hodges, 2019).

Violence perpetrated by men is conscious, deliberate, and intentionally conducted behaviour aimed at establishing control and causing psychological pain. Therefore, it should not be reduced to an individual / psychological level of explanation, and interpreted neither as a deficiency in coping skills, lack of conflict resolution skills, lack of communication skills or low self-control, which it is not in most cases, nor as the result of illness and mental disorder, but socially adjusted and deliberately chosen behaviour that brings about the desired effects (Bancroft, 2015; Pence & Paymar, 1993).

Thus, interpreting violence against women in an intimate partner relationship as individual and psychological (rather than as a political, economic, or social problem) can be powerful in blaming the victim (or reducing her powerlessness) (Romito, 2008). Referral to psychotherapy treatment, family therapy or mediation can (completely) ignore the violence, or treat it as an incidental manifestation of a covert disorder (the victim receives a mental instability label, which confirms what the perpetrator says to her: "You are crazy", "The children will be taken away from you"), and it harbours a number of risks (Päivinen & Holma, 2017; Stanley & Humphreys, 2017). Moreover, psychological programs for perpetrators of violence may also show insufficient concern for women's safety, and examinations of their effects have shown controversial results (Gondolf, 2002). These actions "shift" the intervention from legal to psychological, from the public to the private sphere, which does not take into account the imbalance of power and the victim's limited capacity to represent herself effectively, or potentially jeopardize the victim's safety and decision-making in her own best interest (Eriksson & Hester, 2001).

Although exposure to violence requires psychological help, it is emphasized that psychology must be aware of its limitations (avoid psychologizing in interpreting the phenomenon, suggesting incorrect theoretical models, inadequate interventions within the health or social assistance system) to produce "tools" for understanding reality and social action (Romito, 2008). The standards of psychotherapy work with victims of intimate partner violence clearly indicate that the deficit-oriented approach is inadequate, i.e., that it should be sensitive to the victim's traumatic experiences and use empowering language (APA, 2019). Specialized psychotherapy programs that respect safety issues understand the ex-

istential reality of the victim of violence, and alleviate the symptoms of multiple stressors to which they are exposed. These programs show promising results, and their improvements require further work (Johnson & Zlotnick, 2009; Johnson, Zlotnick, & Perez, 2011). Also, contemporary and professionally designed prevention programs for working with perpetrators of violence emphasize the importance of an integrated and victim-oriented approach that respects the gender nature of violence, as well as close cooperation with specialized programs to support women<sup>4</sup> (Logar, 2015).

### **The Continuation of Violence after the Breakup of the Intimate Partner Relationship**

The separation period from a violent partner may be accompanied by risks of an increase, or occurrence of new forms of violence (Ignjatović, 2016; Pomicino, Beltramini, & Romito, 2018; Saenger, 2000). It has been reported that between 43% and 87% of abused women end their abusive relationship by leaving their partners, departing from their shared household with the children, which increases their vulnerability in terms of continued violence and the onset of poverty (Conroy, 1994; Schechter & Edleson, 1994). Although partner separation does not always end in violence, leaving a violent partner is a risk factor for violence that is considered to be potentially more dangerous than staying in a relationship (which seems paradoxical even to professionals).

Verbal threats, physical and psychological violence, “a climate of fear”, harassment in the workplace, threats of financial stifling or exhausting litigation, inability to receive social assistance or fear of losing it, risk of becoming a homeless woman, taking advantage of children (a child abuse), threats of harming or abducting children, murder threats, health problems and mental disorders in women, are just some of the forms of violence and its consequences during separation and post-divorce parenting, which often lead to negotiation process and acceptance of a compromise at the expense of the victim of violence (Bancroft & Silverman, 2002; Conroy, 1994; Hardesty, 2002; Hester, 2009; Ignjatović, 2016; Ignjatović & Pešić, 2012; Jaffe, Crooks, & Poisson, 2003; Liss & Stahly, 1993; Saunders, 2007; Schechter & Edleson, 1994). The primary motive for violence during the separation and post-divorce periods is the partner’s tendency to maintain control over her (the feeling of “ownership” of the partner, as well as of their common children).

There are numerous limiting circumstances for leaving, and even more for staying out of a violent relationship reported by women - mothers: the age of the child (daily routines conditioned by the children’s needs), the desire to preserve the father-child relationship (the desire of the woman, but also the pressure of the environment, including the law and institutions), economic dependence on

<sup>4</sup> Which are also the standards of the Council of Europe Convention on preventing and combating violence against women and domestic violence, Art. 16.

partners (and abuse of the right to child support), inability to get a “comfortable home”, safety and stability (leaving a child-friendly environment), illness or disability of children (requiring specific conditions). If they did not have children, women’s choices would probably have been different, because, even when some of them were skilled and would have been able to break out of the violent relationship, they rarely prioritized their needs over their children’s, which is indicative of the need for intervention and support for women victims of violence who are mothers, that would respond to their specific needs (Ignjatović, 2013; Ignjatović, 2016; Katz, 2019; Kelly, Sharp, & Klein, 2015; Krane & Davies, 2002; Pomicino et al., 2018).

### **Consequences of Violence against Women in Intimate Partner Relationships**

Victims of violence consistently suffer from lower general health status. They have more problems in physical and mental health, more difficulties in achieving a satisfactory family, social and professional life, which is coupled by significant gender differences in the health consequences of violence (Krug et al., 2002; Martinez & Schrötle, 2006; Walby & Allen, 2004).

Violence against women poses a risk to physical and reproductive health, with the incidence of physical injury and functional health disorders varying between 40% and 75% (Đikanović, 2006; Krug et al., 2002). In our social environment, the research also shows that women who have experienced physical and sexual abuse are two to four times more likely to report health problems, with injuries being present in 29% of these women, and suicidal ideas being three to five times more frequent compared with women who have not had such an experience (Otašević, 2005).

Mental health problems, though they often remain undiagnosed, also present a risk of violence (Harris & Hodges, 2019; Warshaw & Barnes, 2003). The spectrum of conditions ranges from (brief) stress reactions, through symptoms of post-traumatic stress disorder, to complex syndromes of long-term, recurrent trauma (Herman, 1996). The link between psychic violence and non-specific suffering and psychiatric disorders has been confirmed (Lamy et al., 2009). There is more frequent occurrence of depression, anxiety and post-traumatic stress disorder, over three times more frequent and with more pronounced symptoms in women victims of violence, especially sexual violence. (Campbell, 2002, according to Đikanović, 2006; Chandan et al., 2019; Martin & Macy, 2009). At the same time, in psychiatric clinics, more than two-thirds of female patients have had a history of physical and / or sexual violence (Dennis et al., 2009; Mechanic, Weaver, & Resick, 2008a, 2008b; Warshaw & Barnes, 2003). There is a link between violence and substance abuse, or psychoactive substance abuse and suicide attempts (Lamy et al., 2009; Martin, Beaumont, & Kupper, 2009; Salomon, Bassuk, & Huntington, 2002; Stark, 2004).

At the same time, there is a tendency to reverse the cause and effect, and instead of seeing violence as a reason for substance abuse, abuse is interpreted as a reason for everything else (including violence), with women being referred to psychiatric institutions for addiction treatment, or to some of the family or group therapies, where their abusers are in turn designated as their “caretakers”. This closes the “vicious circle” initiated by the abuser, for which the women have originally appealed for help (Romito, 2008; Stark, 2004).

Violence experienced by women is also associated with a variety of psychological consequences: altered experiences of self, neglect of one’s needs, loss of confidence in oneself and others, feelings of inferiority and shame, helplessness, inability to make decisions or manage one’s own life (Smith, Thornton, Develis, Earp, & Coker, 2002; Herman, 1996; Murray & Powell, 2009). The perceived threat or subjective evaluation of the victim of the partner abuse is shown to be the factor that most influences her behaviour and reactions to the traumatic event (Padejski & Biro, 2014). An exposure to violence during her lifetime increases the risk of recurrence and transmission of violence to subsequent generations (Chamberlain, 2006; Mitković, 2010).

Women victims of violence are at a much higher risk of poverty and social exclusion, and far more often beneficiaries of social and material assistance (Klein, 2009; Seith, 2001), since violence limits their access to resources and opportunities in different fields. They have significantly more difficulty in finding a job, tend to be absent from work, and also lose their jobs more often, due to health problems or because they do not have the childcare support. They have a number of financial difficulties, as well as problems to provide permanent and quality accommodation (Ignjatović & Pešić, 2012; Kelly et al., 2015; Lybecker Jensen & Nielsen, 2005; Romero, Chavkin, Wise, & Smith, 2003).

### Coping Strategies

Although previous research has emphasized passivity and maladaptive behaviours and reactions (Calvete, Corral, & Estévez, 2008), it appears that abused women (especially those who have turned for help and managed to leave their violent partners) have used various strategies, depending on the characteristics of violence and the resources available (Bastiani, Saurel-Cubizolles, & Romito, 2018). If they remain in a violent relationship, they do so due to a lack of knowledge, opportunities, or inadequate community interventions and resources (Dutton, 1992, according to Chiara & Scott, 2008), or other reasons that limit the ability to look at a complex situation and take decisions, and make choices in their best interests.

Coping strategies include a broad range of activities, cognitive and behavioural efforts to manage specific external and / or internal demands, emotion-oriented (aimed at reducing emotional distress and changing subjective assessment

of the situation), and towards the problem (altering the objective situation) (Half, 2011; Lazarus & Folkman, 1984, according to Chiara & Scott, 2008). Although less commonly used, security planning strategies give better effects, while avoidance strategies and attempts to end the relationship exacerbate the situation (Muftić, Hoppe, & Grubb, 2019). Two models are also used in the literature to conceptualize help seeking behaviour, survival hypothesis, and stage model, which are not mutually exclusive, and see the victim as a person overcoming many obstacles while actively seeking help and support, resorting to all available means, in stages, so as to achieve her goal, which is a process influenced by individual, interpersonal, and sociocultural factors (Bastiani et al., 2018).

The resources available to women are linked to their decisions. Employment (work outside the home) and more support from family and community have been shown to lead to more frequent use of problem-focused strategies, and more frequent search for protection against violence. When violence has been stopped, coping strategies play a key role in the recovery, coping and post-traumatic growth of a woman (Calvete et al., 2008; Pomicino et al., 2018). Women emerging from violence face the difficult task of creating a new life. It is important for professionals to have a contextualized understanding of their behaviour, in order to be less judgemental towards those who return to a violent relationship and organize interventions better (Chiara & Scott, 2008; Kelly et al., 2015; Krug et al., 2002). In this respect, it is important to review the measures and services offered to women with the experience of violence, which, with psychological and legal support, should include access to information and specific assistance (Ignjatović & Pešić, 2012; Kelly et al., 2015; Pomicino et al., 2018; Postmus, Severson, Berry, & Yoo, 2008).

### **Rebuilding Lives after Leaving an Abusive Relationship and Institutional Response to Women's Needs**

Research shows that most abused women (80% - 90%) have not used the formal sources of assistance. The most common reasons put forward for this are that there is no need or no use, and a number of obstacles of an external and internal nature (money, time, lack of knowledge about resources, childcare or inability to provide transport to the services, being prevented by their partners, or not believing that they are going to receive help, shame, fear of being condemned or criticized, protection of partners and many others) (Fugate, Landis, Riordan, Naureckas, & Engel, 2005).

Women report on (dis)satisfaction with the services provided by the institutions, pointing to the various factors on which this depends: feeling that they have not been seriously taken in charge, that they have not been trusted, that they have not been understood or listened to, or that they have not received the services they requested (Lybecker Jensen & Nielsen, 2005). Research confirms that

experts do not recognize the impact of violence, but rather reduce it to physical attacks, focus on short-term security, underestimate post-separation violence, put the pressure on women to get out of a violent relationship before establishing safe circumstances, have contradictory expectations, especially regarding the child protection in situations where women do not receive support for it (Kelly et al., 2015). A positive assessment of the institutional response is associated with the absence of prejudice, the identification of women's needs and the confidence of women in the ability of professionals to help (Lybecker Jensen & Nielsen, 2005).

In our context, likewise, women with the experience of violence rarely turn to institutions for help (Babović et al., 2010; Ćopić, Nikolić-Ristanović, & Petrović, 2010; OEBS, 2019), and experts' reactions are perceived as restrained and inappropriate, with frequent shifting of responsibilities to other institutions, long procedures and the possibility of their violent partners extending those in different ways, lack of information and support during the proceedings, lack of available and concrete assistance (Ćopić, 2002; Ignjatović, 2011; Ignjatović, 2016; Ignjatović, Pavlović-Babić, & Lukić, 2015; Lukić & Jovanović, 2001). The women's experiences confirm multiple vulnerability, developed fears and feelings of helplessness, especially among those who are unemployed, with lower education, from rural areas and / or from underdeveloped regions of Serbia, with no home / apartment ownership. These women often lack understanding and support of their family, friends and the community, which is why they remain in abusive relationships for a long time (Ignjatović & Pešić, 2012; OEBS, 2019). An effective institutional response implies multisectoral action, a combination of legal measures and sufficiently accessible social services (Hagemann-White, 2006; Hagemann-White & Bohn, 2007). so that the measures taken do not conflict with the victim's goals and interests, and ensure her participation in the decision-making, taking into account her understanding of empowerment and justice, and understanding the factors that influence her to renounce to further actions (Hagemann-White, 2019). Therefore, understanding the context and the assessment that mobilize appropriate protection strategies are crucial. The system intervention is more effective when the victim is motivated and willing to accept help, when institutions exchange information, informs women, and when support is concrete and provided for a sufficiently long period of time (Kelly et al., 2015; Pomicino et al., 2018; Robinson & Tregidga, 2007).

Women with the experience of violence seek exits and support, more often than informal sources, which themselves become targets of attacks, and which will determine their involvement (Gregory, 2017). From institutions, when violence is more severe in nature, children are affected (Bastiani et al., 2018). It has been shown as crucial that support for women during the process of leaving an abusive relationship and building a new life is available for at least two years, and that should be multidimensional and well synchronized (including appropriate security activities, re-establishing relationships, providing concrete assistance and specialized services, recovery from traumatic experience and empowerment,

until normalization of life in diverse domains) (Bastiani et al., 2018; Ignjatović et al., 2015; Kelly et al., 2015; Pomicino et al., 2018; Pešić, 2016).

The occurrence of fewer violent events (which is ensured by legal protection measures) does not mean that violence has been completely stopped. This constitutes the difference between being safe and feeling safe. Given that few perpetrators of violence experience liability in criminal or civil proceedings, victims are expected to undertake a range of security activities, which consumes a lot of time and energy in “battles with the system” (Kelly et al., 2015).

In Serbia, there are no data on the actual effects of emergency, and protection measures against domestic violence, which are supposed to stop violence and prevent its recurrence, but their numbers are steadily increasing (Ignjatović & Macanović, 2018, 2019). Although the international standards require accessible and affordable general support services for women and their children<sup>5</sup> (financial and psychological support, legal aid, social and health care, housing, employment, childcare), in our context there is no aggregated publicly available information as to which services, to what extent, in what period of duration, and from which providers are available to victims.

Victim support services are often of a project nature, being reduced due to austerity or lack of funding in underdeveloped municipalities (Ignjatović & Drobñjak, 2014). They are also characterized by one-dimensionality and / or focus on short-term interventions (for example, lump-sum financial assistance or temporary safe accommodation), without a long-term plan and measures, or a mismatch (for example, between measures to protect against domestic violence and the model of maintaining a child’s personal relationships with a non-trusted parent who behaves violently) (Ignjatović, 2013; Ignjatović, 2016; Pešić, 2016). Services for women with complex needs (women with disabilities, chronic illnesses and mental illnesses, the poor, the unemployed, the Roma population, with many children and others) are completely inadequate (or completely lacking), as well as monitoring and assessing the effects of the measures taken (Ignjatović, 2013; Ignjatović & Drobñjak, 2014; Ignjatović & Pešić, 2012). The mentioned shortcomings have not been eliminated even with the latest legal amendments (Ignjatović & Macanović, 2018, 2019), because they require harmonization of legal solutions, strategic and operational measures and activities, as well as adequate financial resources.

Leaving an abusive relationship is a complex process (not a one-off act that depends on the will of the woman), a unique “long-distance journey” in which new coping skills are acquired (Kelly, 2003; Kelly et al., 2015; Pomicino et al., 2018). Building a life after breaking out a violent intimate partner relationship begins by moving beyond the perpetrator’s control, and expanding the space for action across a number of areas: parenting, self-awareness, friends and family, community, seeking help, housing, competencies, well-being and security, financial situation.

<sup>5</sup> Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence, Art. 20.

While the space for action is growing in all the aspects, the biggest changes are happening in the sense of security, appealing for help, and personal competencies (Kelly et al., 2015). Safe and permanent housing for many women is more important than other domains, while accessible care for children is vital for single mothers. The space for action is linked to psychological health, but many women report modest health system responses and are critical of the predominance of medication treatment approach. For most, the challenge is to focus on them, and to control their emotional state, mental and physical health, which is the basis for the renewal of one's life and success in other areas. A continuous support for specialized independent programs (for example, within women's organizations that understand violence, respect women's independence, mediate and advocate for women's needs in institutions), as well as support from friends and family, is important in building confidence, rebuilding relationships with children and others, as well as exercising the right to protection and support (Kelly et al., 2015).

The few longitudinal studies of women's needs during and after leaving an abusive partnership highlight several key topics that should guide interventions (Kelly et al., 2015; Pomicino et al., 2018). Going through judicial procedures, ending violence, recovering and rebuilding one's life takes time. It is essential that professionals understand the violence (which occurs before and after separation), in order to be able to support the victims. Being able to provide a safe home and financial independence (being and feeling safe) are essential conditions for recovery and rebuilding one's life. The efficient social control of the perpetrator's abusive behaviour, as well as the will and capacity of the institutions to respond to the needs of women and their children, especially those of multiple, complex and interdependent nature, are requisite (yet often lacking). Community resources can be helpful or they present obstacles (when they are inadequate or lacking), which will support or discourage women from the process of breaking out of a circle of violence, recovery, and attaining independence.

The crucial role of specialized independent programs for women with experience of violence, their mediation and representation of women before the institutions, is being confirmed: supporting victims in becoming aware of the dynamics of violence, promoting self-protection and protecting children, using effective overcoming strategies more often, and gaining more access to community resources (Kelly et al., 2015; Pomicino et al., 2018). Psychological programs that focus on stabilization, safety, empowerment, and the skills to manage PTSD symptoms, anxiety, and depression play an important role.

In all the procedures, it is important that the experiences of the victim / survivor are heard and respected, and that the lent support better recognizes their needs. The victims must be reassured that justice protects them, not only before they leave the abusive relationship, but also afterwards, in order to successfully rebuild their lives (Kelly et al., 2015; Pomicino et al., 2018).

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# NASILJE PREMA ŽENAMA U INTIMNOM PARTNERSKOM ODNOSU I INSTITUCIONALNI ODGOVOR NA POTREBE ŽENA

Iako postoje tendencije da se žene u partnerskoj relaciji prikažu kao jednako fizički agresivne koliko i muškarci, da iniciraju nasilje, svete se i koriste smrtonosnu silu gotovo isto kao i muškarci, nasilje muškaraca prema ženama je ozbiljnije, čine ga teža i učestalija dela, većeg raspona manifestacija i sa težim posledicama. Zbog toga je neopravdano govoriti o rodnoj simetriji i ovu vrstu nasilja predstavljati rodno neutralnim pojmovima. Ovaj rad sadrži pregled najvažnijih odlika posmatranog fenomena, stavljajući fokus na psihičko nasilje, koje igra ključnu ulogu u „slamanju otpora“ i u obezbeđivanju „dobrovoljne žrtve“, odnosno kontrolu prinudom, koja je strukturne prirode i koja se širi na sve aspekte života žene. Paradoksalno, napuštanje nasilnog partnera predstavlja faktor rizika za nasilje i smatra se da je potencijalno opasnije od ostajanja u vezi. U literaturi se na različite načine koncipira traženje pomoći i strategije prevladavanja koje koriste žene sa iskustvom nasilja, a istraživanja potvrđuju da one zavise od karakteristika nasilja i dostupnih resursa. Pokazuje se da je za izlazak iz nasilja i uspostavljanje novog života ključno da stručnjaci razumeju rodnu prirodu nasilja, da postoji efikasna društvena kontrola nasilnog ponašanja, podrška ženama pružana od specijalizovanih nezavisnih programa, u dužem periodu, koja je višedimenzionalna i dobro sinhronizovana, tako da uključuje žene i uzima u obzir njihove potrebe, šireći njihov osećaj sigurnosti i prostor za akciju.

**Ključne reči:** institucionalna podrška, izlazak iz nasilja, kontrola prinudom, nasilje u intimnom partnerskom odnosu, potrebe žrtve

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## CONTACT, CONFLICT AND INTERETHNIC ATTITUDES AMONG CHILDREN IN NORTH MACEDONIA<sup>2</sup>

Improving interethnic relations in conflict-affected societies is a difficult task, as a complex repertoire of mutual views and reactions is developed. Furthermore, the experiences of the children in such situations have rarely been taken into perspective. Therefore, this study tries to address this research gap by using data from the Republic of North Macedonia, where interethnic tensions are still present between ethnic Macedonians and ethnic Albanians, although the violent outburst of the conflict ended in 2001. The paper is focused on perceptions of contact and conflict among primary aged children, and their relations with the outgroup attitudes such as liking, trusting, and wanting to play with children from the outgroup. A total of 194 children aged 6 to 11 ( $M = 8.4$ ) participated in the research, filling play-like items using Qualtrics. The sample was taken from two schools with a mixed language of instruction and was balanced for ethnicity (45.9% Macedonian, 54.1% Albanian) as well as gender (57.7% female, 42.3% male). The results of the series of regression analyses show that the contact quality and a number of outgroup friends are significantly correlated with outgroup liking, willingness to play, and outgroup trust, while the perception of conflict is negatively correlated with outgroup trust. The interaction between age and the contact quantity is a significant predictor of willingness to play with the outgroup, while the interaction between majority status and contact quantity is a significant predictor of outgroup trust. The study highlights the need for a meaningful contact between children from both ethnic groups for improvement of interethnic relations.

**Key words:** contact, conflict, intergroup attitudes, primary aged children

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## Introduction

Promoting intergroup understanding and improving intergroup attitudes is paramount for societies faced with violent outbursts of the interethnic conflict. The authors have pointed out that an important precursor for a change is changing the reactions of the groups towards each other (Bar-Tal, 2013). Keeping in mind that children start developing their ethnic identity early on (Nesdale, Durkin, Maass, & Griffiths, 2004), and even become aware of intergroup relations starting to develop prejudice (Aboud et al., 2012), it is very important to try to understand their experiences with the other groups, and the mechanisms through which positive intergroup relations can be promoted. This is especially important in societies faced with the conflict, as in such situations the children develop a repertoire of reactions towards the other group at a very young age (Bar-Tal, Diamond, & Nessie, 2017; Connolly & Healy, 2004). To date a number of interventions have been developed to promote such positive changes, and a number of them have been based on the contact hypothesis (Kupermintz & Salomon, 2005). The findings point to the value of contact in improving intergroup relations (Pettigrew & Tropp, 2006; Pettigrew, Tropp, Wagner, & Christ, 2011), especially in conflict-affected settings (Hughes, Lolliot, Hewstone, Schmid, & Carlisle, 2012; Hughes, Campbell, Lolliot, Hewstone, & Gallagher, 2013). However, most of the studies to date have involved either adults or older children (post-primary), with very few studies looking at the experiences of younger children (Connolly, 2000; Tomovska Misoska, 2013). Therefore, this paper tries to bridge the gap by looking at the relation between conflict, contact, and three outcome variables connected to intergroup relations: trust, outgroup liking, and willingness to play with the outgroup members. This study ultimately aims to understand how contact may help in promoting better intergroup relations in a society that has experienced a violent outburst of interethnic conflicts, and still experiences division.

### North Macedonia Context

To understand the relation among these variables, data from children aged 6 to 11 from the Republic of North Macedonia have been used. The Republic of North Macedonia is inhabited by people from different ethnic backgrounds, with the majority being Macedonians, and the largest minority being Albanians, followed by Turks, Roma, and Serbs (The State Statistical Office, 2005). Communication between the two biggest groups is fairly limited, and the interethnic dialogue is marked by intolerance, suspicion, and mistrust (Myhrvold, 2005). These tensions resulted in a violent conflict outburst in 2001, which ended with the signing of the Ohrid Framework Agreement granting more rights to the ethnic minorities in the country. However, the perceptions and interpretations were clearly ethnocentric by both ethnic groups (Petroska-Beska & Najcevska, 2004). Most of the studies conducted after the signing of the Ohrid Framework Agreement still show

consistent favourable perception of the author's own ethnic group, and a mostly negative perception of the other ethnic group (Jasari et al., 2005; Petroska-Beska, 2012; Petroska-Beska & Kenig, 2002). Although there has been an improvement over time, a certain degree of mistrust still persists among the members of both ethnic groups. Both Macedonians and Albanians have reported that they would not send their children to a school where another ethnic group is a majority (Maleska, 2010). This tension spans across generations, and even young people in the country show low levels of trust in the other ethnic group and high levels of social distance (Topuzovska Latković, Borota Popovska, Serafimovska, & Cekić, 2013).

The educational system has been both a product and a *de facto* contributor to ethnic separation in the country. Given the opportunity, minority students attend classes in their mother language, resulting in a very limited contact between Macedonian and Albanian pupils (Myhrvold, 2005). In ethnically mixed municipalities, some schools have only one language of instruction (some only have Macedonian and some only Albanian), and even in schools with multiple languages of instruction, there are still numerous ways to keep the pupils separate, such as splitting students into different buildings or different shifts. These arrangements have left Albanian children most isolated from the other ethnic groups (Petrovska-Beska, Najcevska, Kenig, Ballazhi, & Tomovska, 2009). The studies have shown that the educational system lacks capacity for promoting more positive mutual interactions, which leads towards the improvement of interethnic relations (Mickovska, Aleksova, & Raleva, 2009; Petrovska-Beska et al., 2009) and that stereotypes about the groups still persist among pupils (Petroska-Beska, 2012). Although teachers, parents, and even pupils are ambivalent towards the mutual contact, viewing it mostly as a source of conflict, many of them are also aware that pupils need to get to know each other and learn how to work with each other, which is only possible through greater mutual contacts (Petroska-Beska, 2012). As a result, there have been a number of efforts through various projects to enhance the capacity of the educational system for improving the intergroup relations, and many projects that encourage organized intergroup encounters have been undertaken. Although these efforts have promoted some movement towards better portrayal of the multicultural nature of North Macedonian society in schools (Petroska-Beska & Osmani, 2014), the experiences of children in North Macedonian primary schools have rarely been explored. Therefore, this study will focus on exploring the experiences of 6- to 11-year-old children. The paper starts by presenting the theoretical basis of the current work.

### **Contact, Conflict, Children, and Intergroup Attitudes**

Children who grow up in a society that has faced violent outbursts of the conflict tend to develop a repertoire of attitudes and behaviors towards the other ethnic group that reflects the views of the community in which they live (Bar-Tal

et al., 2017), even after the height of violence has passed (Ajduković & Čorkalo Biruski, 2008). In such situations, children tend to develop a strong in-group loyalty and lower levels of trust towards the other ethnic group (Ajduković & Čorkalo Biruški, 2008). It has been noted in the conflict-affected settings that more prejudice leads to less desire for a mutual contact, and a greater social distance between the groups (Binder et al., 2009).

An important way of reducing prejudice and promoting better intergroup relations in the conflict-affected settings has been the use of contact interventions. The value of contact was first emphasized by Allport, Clark, & Pettigrew (1954), and in its original formulation, the contact hypothesis proposed four conditions of contact that should lead to decreased prejudice, not only towards the individuals in the contact situation but also towards the whole group. The four conditions were the following: equal status within the contact situation, common goals, cooperation in the pursuit of those goals, and support for contact from authorities. Later research provided strong support for the value of contact in reducing prejudice and promoting positive intergroup relations in a variety of settings. Though the effects were stronger when the conditions were present, a recent meta-analysis (Pettigrew & Tropp, 2006) found positive effects even in the absence of the four conditions, although casual negative contact might lead to heightened negative attitudes towards the outgroup (Pettigrew et al., 2011).

The studies have found that both quantity and quality of contact are important for positive effects to occur (Binder et al., 2009; Hewstone & Brown, 2005; Niens, Cairns, & Hewstone, 2003). However, it has been noted that the quality of contact has stronger influence (Binder et al., 2009; Eller & Abrams, 2004; Tredoux & Finchilescu, 2007). In general, a higher quality contact was found to promote trust and more positive perceptions of the outgroup, and therefore lead to greater reconciliation efforts in two conflict-affected settings—Northern Ireland and South Africa (Tropp et al., 2017). The positive effects of contact extend even beyond the contact situations in predicting future contact intentions, with trust acting as a mediator (Binder et al., 2009; McKeown & Psaltis, 2017).

One of the most important variables being studied and outlined as especially conducive for reducing prejudice and promoting better intergroup relations is the intergroup friendship. Friendship reduces anxiety and promotes empathy and self-disclosure, thus leading to more positive attitudes (Pettigrew & Troop, 2006; Pettigrew et al., 2011; Turner, Tam, Hewstone, Kenworthy, & Cairns, 2013). Such positive effects of contact have been observed among the post-primary pupils in Northern Ireland (Hughes et al., 2013; Turner et al., 2013), where contact in ethnically heterogeneous schools have led to more positive ingroup norms about forming friendships with the outgroup (Hughes et al., 2013). In addition, it has been found that the organized contact have reduced the intergroup anxiety and improved outgroup attitudes, intergroup trust, and tendencies for more contact with the outgroup among the post-primary students in Northern Ireland (Hughes et al., 2012). It has to be noted, however, that certain studies have found differences in the effects of contact

when it comes to the majority/minority status of the participants. In this regard, the studies have found that the associations between contact and social distance are less robust for minority participants (Binder et al., 2009, Tredoux & Finchilescu, 2010). In addition, a meta-analytical study of the contact hypothesis has found a stronger contact-prejudice reduction link for groups with majority status, pointing to the need to explore the issue further and look at the conceptions of contact between the groups (Tropp & Pettigrew, 2005), which might be different between majority and minority groups (Tredoux & Finchilescu, 2010; Uluğ & Cohrs, 2017). When it comes to the age of the participants, most studies point out that the effects of contact are not related to age, and positive effects are noted among all age groups, although most studies have used participants who are adults or young adults (Pettigrew & Troop, 2006; Pettigrew et al., 2011), even in the conflict-affected settings (Cehajic, Brown, & Castano, 2008). There is a lack of studies for gender effects of contact when it comes to interethnic relations.

However, very few studies have looked at the experiences of primary aged children. One meta-analysis (Aboud et al., 2012) has found that contact has beneficial effects on younger children, with contact affecting their attitudes more than their interactions. The effects of contact have been even stronger for children with majority status. Some authors have noted that by the age of eleven, children in societies faced with violent outbursts of the conflict are quite competent in understanding and interpreting the wider context, and that contact interventions need to engage with their understandings in order to be successful (Connolly, 2000; Tomovska, 2010; Tomovska Misoska, 2014). Keeping in mind that by the age of eleven children are already aware of the broader context in which they live, understanding the aspects of contact connected to the outgroup attitudes in younger children is paramount. Age is an important variable, as studies show that children's competence in understanding the differences between the groups in conflict-affected settings increases with age (Bar-Tal et al., 2017; Tomovska Misoska et al., 2019). Therefore, the main goal of the paper is to understand the relations between the gender, ethnicity, and different aspects of contact and the outgroup attitudes among primary aged children in the Republic of North Macedonia.

Based on the literature review, the paper tests the following hypothesis:

Hypothesis 1: Perception of more conflict is related to lower trust, less willingness to play with the outgroup, and less outgroup liking.

Hypothesis 2: More contact is related to higher trust, more willingness to play with the outgroup, and more outgroup liking.

Hypothesis 3: Higher quality contact is related to higher trust, more willingness to play with the outgroup, and more outgroup liking.

Hypothesis 4: More reported outgroup friends are related to higher trust, more willingness to play with the outgroup, and more outgroup liking.

Hypothesis 5: The age and the majority status of the participants have moderating effects on the relationship between contact and outgroup attitudes, trust, willingness to play with the outgroup, and outgroup liking.

## Method

### Sample and Procedure

The current study was conducted in two schools in mixed municipalities in the Republic of North Macedonia. In one municipality Albanians were the local majority, and in the other municipality Macedonians were the local majority, to balance the potential status differentials between the two ethnicities on a local level. All the results were however calculated based on a country level majority/minority status (this variable was a part of the analysis entered as a dummy variable with 1 being assigned for majority). Both Macedonian and Albanian were languages of instruction in the two schools. In both schools the children were educated in separate classes (due to the opportunities for education in their mother tongue), but they had possibilities to meet members of the other group during casual encounters (school breaks, etc.). Also, some of the children were involved in planned contact encounters.

First, principals provided consent for the research to be undertaken in their schools. Then, parents were approached and asked to provide consent. Participating children also gave written consent before the research commenced. A total of 194 children participated in the research. Ethnic backgrounds of the participants were balanced, with 45.9% of Macedonian participants and 54.1% of Albanian participants. There were 57.5% of female and 42.3% of male children. The age ranged from 6 to 11 with an average age of 8.4 ( $M = 8.4, SD = 1.4$ ).

The data were gathered by using play-like tasks that the children completed using iPads via Qualtrics software. The children completed the tasks in a designated quiet area in the 15-minute one-on-one sessions with a trained researcher. Each task began with an introductory slide, where the researcher provided a brief overview of the task, reassured the participant that there were no right or wrong answers, and asked if they had any questions before beginning the section of the game. Throughout the game, participants were rewarded with stickers.

### Measures

**Contact.** Three items were used to measure contact. First, researchers introduced a 5-level clock picture Likert scale to participants and asked them how much time they spent with the outgroup member children; this item was used to measure the quantity of contact (contact quantity). The second item included a scale of four hands indicating a range from thumbs up to thumbs down. Participants were asked how good or bad their experiences were with the outgroup member children; the item was used to measure contact quality. The final item asked participants how many close outgroup member friends they had, utilizing a four-level scale displaying different numbers of people; this was used to measure the friendship aspects of contact (outgroup friends). Higher scores indicated more positive tendencies for contact. The measure was adapted from previous research in Northern Ireland (Tausch, Tam, Hewstone, Kenworthy, & Cairns, 2007).

**Outgroup Attitudes.** To measure outgroup attitudes, researchers introduced each participant to four fictitious characters from the background opposite that of the participant. Each character had a flag representing their community on their shirt and a name common to the background. Researchers then introduced the accompanying thumb scale and asked three questions about the children's perspectives toward the outgroup: How much do you like them (outgroup liking), how much do you trust them (outgroup trust), and how much do you want to play with them (willingness to play with outgroup). Participants selected one of the four thumbs to indicate their attitudes. In all the scales, higher scores meant more positive outgroup attitudes. The measure was adapted from previous work of Nesdale, Milliner, Duffy & Griffiths (2009). As the contact and outgroup attitude items used scales with different levels, the raw scores for each individual participant was divided by the number of the levels on the scale, so that the results were comparable across all the items used in the research. Thus, all the transformed scores were proportions, and the transformed scales ranged from 0 to 1.

**Perception of Interethnic Conflict.** To measure the perception of interethnic conflict, the researchers described a cartoon scene to participants, in which two children gender-matched to the participant were struggling over a toy. The researchers introduced this as an example of 'conflict.' Participants were then asked, "How much conflict do you think there is between Macedonians and Albanians in the country?". Participants could then respond via a five-level balloon scale ranging from none to a lot. Higher scores meant the perception of more conflict. The measure was taken from previous work by Dautel (2012).

## Results

### Descriptive Statistics and Correlations

The first step of data analyses included calculations of the descriptive statistics of the variables and their correlations. The results of the mean and standard deviation of the variables are given in Table 1.

Table 1  
*Descriptive statistics of used measures*

	Mean	Standard Deviation
Outgroup trust	0.49	0.29
Willingness to play	0.48	0.31
Outgroup liking	0.46	0.31
Perception of conflict	3.28	1.31
Quantity of contact	0.38	0.18
Contact quality	0.35	0.31
Outgroup friends	0.41	0.21

The correlation matrix for the variables included in the hypothesis testing is given in Table 2. As it can be seen, there are statistically significant correlations between the variables. Most notable is that the perception of conflict has only a significantly negative correlation with trust, meaning that those children who have higher perception of conflict also report less outgroup trust. Also, it has to be noted that the majority/minority status of the participant is not significantly correlated to many variables. There is no difference between the minority and majority participants when it comes to their outgroup attitudes (the correlations are not significant and additional *t*-test are non-significant as well). The only exception is the significant positive correlation between the majority/minority and quantity of contact, meaning that majority children tend to report more contact encounters with their outgroup peers ( $M = 0.41$  for majority participants, and  $M = 0.35$  for minority participants;  $t(179) = 2.25, p < .01$ ). Older children also tend to report higher levels of the outgroup trust, more willingness to play with the outgroup, and more outgroup liking. They also tend to report more frequent contact encounters and more outgroup friends. When it comes to the quantity of contact, it can be noticed that it is not correlated with the outgroup trust and outgroup friendship. It is, however, correlated with other variables and as such it will be included in the regression analysis.

Table 2  
*Correlations between used variables*

	Age	Maj/ Min	Like	Trust	Play	Conflict	Contact Quantity	Contact Quality	Friends
Age	1	-.06	.22**	.16**	.20**	-.02	.23**	.06	.26**
Majority/ Minority		1	.06	-.01	-.10	-.07	.17**	.02	.03
Liking			1	.39**	.42**	-.03	.16*	.41**	.32**
Trust				1	.42**	-.18**	.08	.27**	.32**
Play					1	-.02	.11	.26**	.23**
Conflict						1	-.04	-.01	-.09
Contact Quantity							1	-.06	.29**
Contact Quality								1	.17*
Friends									1

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

## Hypothesis Testing

To test the hypotheses, a series of hierarchical regression analyses were conducted with two blocks of variables being entered. The criterion variables were the following: outgroup trust, willingness to play with the outgroup, outgroup liking. In the first block, the predictor variables were contact quantity, contact quality, outgroup friends, perception of conflict, age, and majority/minority status (which was entered as a dummy variable with 1 being majority). In the second block, the interaction between the age and majority/minority status and the rest of the predictor variables were entered as a part of the regression.

The first regression analysis looked at outgroup liking as a criterion variable. Including the predictor variables, the first block of the model explains only 23% of the variance of the variable outgroup liking, and the model is statistically significant,  $F(6,174) = 9.99, p < .01$ . The results of the model testing are presented in Table 3. The results also show that only contact quality and the number of outgroup friends are statistically significant predictors of outgroup liking. When the interaction variables are added to the model in the second block, the model explains 22% of the variance of the criterion variable, and it is statistically significant,  $F(14,166) = 4.69, p < .01$ , while the change in the  $F$  statistic is significant. None of the interaction between the variables is statistically significantly linked to outgroup liking.

Table 3  
*Results of multiple linear regression for outgroup liking*

	$\beta$	$t$	$p$	Zero order correlations
<b>Step 1</b>				
Conflict	.00	0.01	.99	-.03
Contact quantity	.09	1.25	.21	.16
Contact quality	.37	5.51	.00	.41
Outgroup friends	.19	2.76	.01	.32
Age	.12	1.78	.08	.22
Majority status	.04	0.58	.56	.06
<b>Step 2</b>				
Majority contact quantity interaction	-.05	-0.25	.80	.12
Majority contact quality interaction	-.13	-1.04	.30	.25
Majority outgroup friends interaction	.21	1.22	.22	.22
Majority conflict interaction	.31	1.59	.11	.07
Age contact quantity interaction	.49	1.10	.27	.21
Age contact quality interaction	-.08	-0.17	.86	.42
Age outgroup friends interaction	-.15	0.33	.75	.33
Age conflict interaction	-.25	0.57	.57	.07

Note.  $\beta$  – standardized coefficients;  $t$  – value of t-test;  $p$  – level of significance.

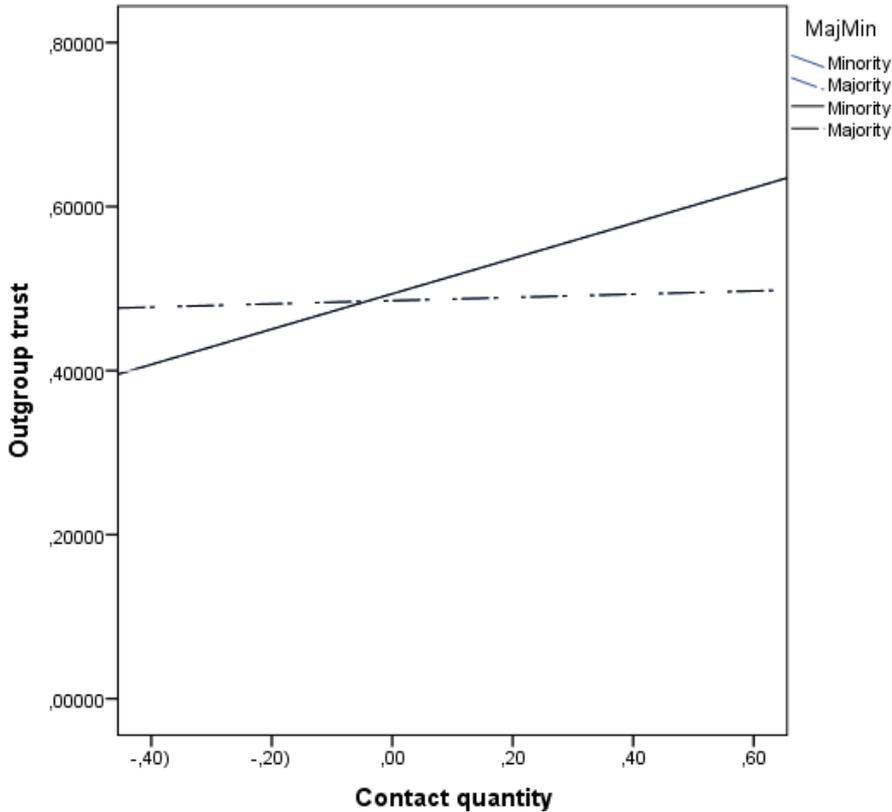
Another multiple regression model was run to test for outgroup trust as a criterion variable. The results in Table 4 show that the model is statistically significant,  $F(6,174) = 6.32, p < .01$ , and explains 15% of the variance of outgroup trust. The regression coefficients show that contact quality and a number of outgroup friends are statistically significant predictors of outgroup trust at the more stringent level, having a positive impact on outgroup trust. Perception of the conflict, on the other hand, is negatively related to outgroup trust at the level  $p < .05$ . When the interaction effects are included in the regression model, the model explains 18% of the variance, the model is statistically significant,  $F(14,166) = 3.83, p < .01$ , and the change in the  $F$  statistic is significant. The only significant predictor is the interaction between the majority status and contact quantity.

Table 4  
*Results of multiple linear regression for outgroup trust*

	$\beta$	$t$	$p$	Zero order correlations
<b>Step 1</b>				
Conflict	-.16	-2.28	.02	-.18
Contact quantity	-.01	-0.12	.91	.08
Contact quality	.22	3.14	.00	.27
Outgroup friends	.24	3.25	.00	.32
Age	.09	1.17	.24	.16
Majority status	-.02	-0.31	.76	-.01
<b>Step 2</b>				
Majority contact quantity interaction	-.43	-2.11	.04	.00
Majority contact quality interaction	.06	0.43	.67	.18
Majority outgroup friends interaction	.29	1.67	.09	.16
Majority conflict interaction	.01	0.03	.98	-.06
Age contact quantity interaction	.55	1.17	.24	.12
Age contact quality interaction	-.59	-1.26	.21	.27
Age outgroup friends interaction	.72	1.55	.12	.33
Age conflict interaction	-.61	-1.36	.17	.11

*Note.*  $\beta$  – standardized coefficients;  $t$  – value of t-test;  $p$  – level of significance.

The results in Graph 1 show that this is especially important for children with minority status, as for them more contact is connected to higher levels of trust.



Graph 1. Interaction effects of contact quantity and majority/minority status for outgroup trust

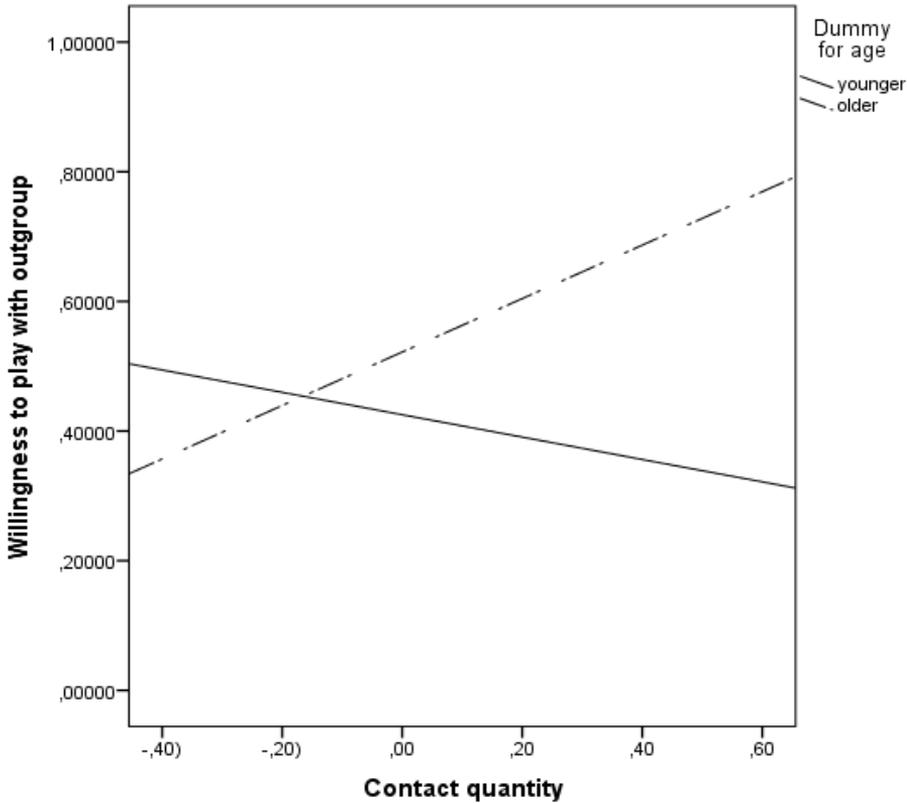
The last multiple linear regression included willingness to play with the outgroup as a criterion variable. The results of the first model are displayed in Table 5. As it can be seen, the model explains 9% of the overall variance and is statistically significant,  $F(6,176) = 4.13, p < .01$ . The perceived quality of contact and a number of outgroup friends are statistically significant predictors of willingness to play with the outgroup. When the interaction variables are entered in the model, it predicts 14% of the overall variance, and the model is statistically significant,  $F(14,166) = 3.13, p < .01$ . The change in the F statistic is also significant, and the prediction is improved in the second model. Only the interaction between age and the contact quantity is a significant predictor of willingness to play with the outgroup ( $p < .01$ ).

Table 5  
*Results of multiple linear regression for willingness to play with the outgroup*

	$\beta$	$t$	$p$	Zero order correlations
<b>Step 1</b>				
Conflict	.00	0.02	.98	-.02
Contact quantity	.06	0.74	.46	.11
Contact quality	.23	3.17	.00	.26
Outgroup friends	.13	1.27	.04	.23
Age	.14	1.88	.06	.20
Majority status	-.02	-0.34	.73	-.01
<b>Step 2</b>				
Majority contact quantity interaction	-.37	-1.82	.07	.23
Majority contact quality interaction	.17	1.29	.20	.21
Majority outgroup friends interaction	.25	1.41	.16	.13
Majority conflict interaction	.15	0.75	.45	.00
Age contact quantity interaction	1.29	2.79	.01	.18
Age contact quality interaction	.48	1.02	.31	.29
Age outgroup friends interaction	-.13	-0.28	.78	.25
Age conflict interaction	-.49	-1.08	.28	.06

*Note.*  $\beta$  – standardized coefficients;  $t$  – value of t-test;  $p$  – level of significance.

The results displayed in Graph 2 outline that older children who report more contact with the outgroup tend to display more willingness to play with the outgroup. For younger children, less reported contact is linked to more willingness to play with the outgroup.



Graph 2. Interaction effects of contact quantity and age for willingness to play with the outgroup

The results of the multiple regression models offer only a partial support for the Hypothesis 1. More specifically, perception of more conflict has a statistically significant negative relation to outgroup trust, and not to the other criterion variables. Therefore, it can be concluded that the perception of more conflict between the two ethnic groups lowers the outgroup trust. There is no support for Hypothesis 2, so that hypothesis is rejected. There is a full support for Hypothesis 3, as higher perceived quality of contact has a statistically significant positive link to outgroup liking, outgroup trust, and willingness to play with the outgroup. This means that perceiving a better quality of contact is linked to higher liking, trust, and willingness to play more with peers from the other ethnicity. Hypothesis 4 also receives a full support. This means that having more friends from the other ethnicity is linked to greater liking, trust, and willingness to play with peers from the other ethnicity. The age of the participants and their majority/minority status are not significant predictors of outgroup attitudes on their own. Hypothesis 5

receives a partial support as only some of the interactions are statistically significant. Namely, none of the interactions are statistically significant predictors of outgroup liking, only the interaction between the majority status and contact quantity is a significant predictor of the outgroup trust (with more contact being linked to the higher outgroup trust for majority participants), and only the interaction between age and contact quantity is a significant predictor of willingness to play with the outgroup (with more contact being linked to higher willingness to play with the outgroup for older participants, and less contact being linked to more willingness to play with the outgroup for younger children).

## Discussion

This paper aims to understand the relationship between perception of conflict, contact, and outgroup attitudes among 6- to 11-year-old Macedonian and Albanian children from the Republic of North Macedonia. Previous studies have shown the potential of contact in promoting more positive intergroup relations in the societies faced with violent outbursts of the conflict. However, the views of children living in these societies have rarely been taken into perspective in the previous literature. By investigating the perspective of children, this study makes a valuable contribution to understanding the mechanisms of improving intergroup relations in such settings.

The findings of the study point to the importance of quality of contact and a number of outgroup friends for building more positive outgroup attitudes. Specifically, those two variables have a statistically significant positive relation to outgroup trust, willingness to play with the outgroup, and outgroup liking. These results are in line with the previous findings (Binder et al., 2009; Hewstone & Brown, 2005; Hughes et al., 2012; Niens et al. 2003; Pettigrew et al., 2011; Tropp et al., 2017). In addition, the results show a statistically significant negative relation between perception of the conflict and outgroup trust, which is in line with the previous findings (Ajduković & Čorkalo Biruški, 2008). This means that offering children opportunities for meaningful contact interactions with their peers from the other ethnicity could serve as a mechanism for improving the intergroup relations between the two groups in the context of North Macedonia. The contact encounters should tend to promote building of friendships, as friendship has been pointed out as an important factor in improving the outgroup attitudes on the individual level (Hewstone & Brown, 2005; Hughes et al., 2012; Niens et al., 2003; Pettigrew et al., 2011; Tropp et al., 2017). In addition, the contact encounters should engage with children's understanding of conflict, and help them understand how it affects relations between the groups and their own relations, trying to overcome the negative effects of the conflict on their mutual relations.

The study has not found a statistically significant relation between the contact quantity and outgroup attitudes, which is not in line with some of the previous

studies (Binder et al., 2009; Hewstone & Brown, 2005; Niens et al., 2003). The findings might differ from the previous studies, as this is one of the few studies done with primary aged children, since the other studies have either used high school or adult populations. Other studies note that as children get older, their understanding of group symbols and interpretations of intergroup relations improves and gets more nuanced (Bar-Tal et al., 2017; Tomovska Misoska et al., 2019). The results might also be due to the fact that in both schools in which children study, they have opportunities for mutual interactions and meeting each other during breaks, which are not planned or controlled, and which might not even offer the possibility to get to know each other better as they are brief casual encounters. Therefore, for the children, the number of times they meet each other might not be connected to their outgroup attitudes. The results of the contact quantity however should not be looked at in isolation. The study has found a statistically significant relationship between the age of the participants and contact quantity, when it comes to willingness to play with the outgroup, although age on its own is not a statistically significant predictor of the outgroup attitudes. This means that the older children who report more contact with the outgroup are also more willing to engage in future positive mutual encounters, such as play, which again supports the notion that as they mature, their understanding of interethnic relations gets increasingly individualized and based on their own actual experiences (Connolly, 2000; Tomovska, 2010; Tomovska Misoska, 2013). It has to be noted that there is no difference in the outgroup attitudes between the majority and minority participants. However, the interaction between the majority status and contact quantity is a significant predictor of outgroup trust, which additionally explains the role of contact quantity in improving the outgroup attitudes. Namely, the participants coming from the minority ethnic group (Albanians), who also report more contact encounters, tend to express higher trust towards the other ethnic group (Macedonians). This finding is not in line with some other findings (Pettigrew & Tropp, 2006), but it might be due to the Albanian children having less chance for contact with their Macedonian peers (in line with the findings of Petroska Beska et al., 2009), thus providing more opportunities for contact is important for them. This again shows that there also might be different conceptions and experiences of contact (Tropp & Pettigrew, 2005) between the minority and majority groups and that this is an issue that needs to be explored further. All in all, the results show that children should be provided with more chances for mutual encounters, as more contact might be especially beneficial in improving the intergroup attitudes as children get older, as well as for the majority children. Also, other aspects of contact, such as the perceived quality of the contact encounters and their potential to offer chances for development of friendships, are even more important.

Although the study is limited in scope, and focuses on only two schools coming from the mixed areas in the country, the findings are valuable as they are some of the few focusing on such a young age. Therefore, future research in the field is needed. Future studies should broaden the research in different areas of the

country with different ethnic mixes and different types of schools to see what happens with children who do not have opportunities to casually meet each other in schools. In addition, qualitative insight into the experiences of children during their contact is necessary to understand the effects of the variables of the study deeper. The findings of the study point to the importance of contact for improving intergroup attitudes among primary-aged children. The study accentuates that the children should be provided with more opportunities for mutual contact encounters, which might be especially beneficial for older children and those coming from the majority. However, contact interventions must be carefully planned and designed in a manner that will allow the children to have positive fulfilling experiences with their peers from the other ethnic group, as the quality of contact seems to be an important aspect for the improvement of intergroup relations. In addition, children need to be given opportunities to develop friendships with their peers from the other group, as that is an important aspect in developing more positive outgroup attitudes through personal ties and opportunities for deindividuation. This means that contact encounters must be planned in a manner that will enable children to engage in pleasant mutual encounters focusing focus on discussing topics of interest to them (Tomovska, 2010; Tomovska Misoska, 2013), in the atmosphere that will enable development of closeness and friendships, but also engage with their understanding of the intergroup conflict, and the contested issues, offering alternative explanations, as well as deconstruction of the relations between the two groups to help building higher trust and improve the intergroup relations.

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## KONTAKTI, KONFLIKTI I MEĐUETNIČKI STAVOVI KOD DECE IZ SEVERNE MAKEDONIJE

Pospešivanje odnosa među etničkim grupama koje imaju istoriju uzajamnih sukoba predstavlja težak zadatak, s obzirom na postojanje zamršenog repertoara uzajamnih neusklađenih procena i reakcija. Osim toga, iskustva dece koja odrastaju u takvim okolnostima retko su uzimana u obzir kroz istraživanja. Shodno tome, ovo istraživanje nastoji da upotpuni korpus nalaza o pomenutom problemu, fokusirajući se na međuetničke tenzije između Makedonaca i Albanaca koji žive u Republici Severna Makedonija, iako su nasilni sukobi među ovim etničkim grupama okončani 2001. godine. U radu je stavljen akcenat na relacije između percepcije kontakata i konflikata između dece nižeg osnovnoškolskog uzrasta i njihovih stavova prema deci druge nacionalnosti izraženih kroz naklonost, poverenje i spremnost na zajedničku igru. Podaci su prikupljeni na uzorku od 194-oro dece uzrasta od 6 do 11 godina ( $M = 8.4$ ) primenom zadataka u formi igara koje su deci prezentovane preko tablet računara i platforme Qualtrics. Uzorak je prikupljen u dve škole i ujednačen je u pogledu etničke pripadnosti (45.9% dece makedonske nacionalnosti, 54.1% dece albanske nacionalnosti) i pola (57.7% devojčica). Rezultati serije regresionih analiza pokazuju da kvalitet međuetničkog kontakata i brojnost prijateljstava sa decom iz druge etničke grupe ostvaruju značajnu povezanost sa naklonošću, poverenjem i spremnošću za igru sa decom druge nacionalnosti, dok percepcija konflikata negativno korelira sa poverenjem prema deci koja pripadaju drugoj etničkoj grupi. Interakcija starosti dece i učestalosti kontakata predstavlja značajan prediktor spremnosti za igru sa decom iz druge etničke grupe, dok je interakcija statusa većinskog stanovništva i učestalosti kontakata značajan prediktor poverenja prema deci iz druge etničke grupe. Nalazi studije ističu važnost podsticanja konstruktivnih kontakata među decom dveju etničkih grupa u cilju poboljšanja međuetničkih odnosa.

**Ključne reči:** kontakt, konflikt, međugrupni stavovi, osnovnoškolski uzrast

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## AN EXAMINATION OF WORK-LIFE BALANCE, LISTENING SATISFACTION, AND RELATIONSHIP DISSOLUTION AMONG MARITAL AND COHABITING COUPLES

The high demands placed from a society on individuals may impact the perceived work-life balance of individuals in cohabiting and married relationships. Work-life imbalances may lead to poor communication, which can impact the feelings of wanting to dissolve the relationship due to dissolutionment. Also, when partners are dissatisfied with the listening behavior in their relationship, this may lead to relationship dissolution. To examine the relationships between work-life balance, listening satisfaction, and relationship dissolution among cohabiting and marital couples, this study analyzed data from the National Center for Family and Marriage Research at the Bowling Green State University (2010). Instruments included the Marital Disillusionment Questionnaire and the Work-Family Conflict Scale. The study included 2,150 individuals, including 1,075 couples with 50% of females and 50% of males, and the average age of participants was 44. Correlation analyses results demonstrated differences among marital and cohabiting couples based on their listening satisfaction and relationship dissolution. Work-life balance was positively related to listening satisfaction, but inversely related to relationship dissolution. Independent t-test results also showed that cohabiting individuals reported higher listening satisfaction than did married individuals. However, married individuals reported being more dissolutioned with their relationship than did cohabiting individuals. Regression results indicated that work-life balance was positively related to listening satisfaction, and inversely related to relationship dissolution. Listening satisfaction partially mediated the inverse relationship between work-life balance and relationship dissolution. The type of relationship moderated the relationship between work-life balance and listening satisfaction, and the inverse relationship between work-life balance and relationship dissolution. Finally, duration of the relationship moderated the positive relationship

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between work-life balance and listening satisfaction. Findings offer insights on the relationships between work-life balance, listening satisfaction, and relationship dissolution in romantic relationships.

**Key words:** cohabiting relationships, listening satisfaction, marital relationships, relationship dissolution, work-life balance

## Introduction

Marital and cohabiting relationships continue to be on the rise for the past several decades in the industrialized nations including the United States. Despite this growth, the odds of dissolution and divorce have been 45% (Schoen & Canudas-Romo, 2006). The instability of cohabiting and marital relationships during the past decade has been widely documented. The economic climate and the cost of living across the US has led to individuals in long-term relationships to work in order to make ends meet such as paying mortgages, food, house supplies, child-care services, and mutual debt. Dual-earning couples in marital and cohabiting relationships experience a strenuous stress within the relationship due to poor communication and work-life balance issues. Working partners devote much of their time to their careers by fulfilling rigorous schedules and career development objectives. However, when partners overcommit to their work obligations and schedules by performing tireless duties, this role may be in a direct conflict with spending time with one's family, and overtime, the relationship may become dissatisfying. If work demands are high, individuals may not devote an adequate amount of time and energy to their children or partners, and this may lead to relationship problems. Individuals who lack the communication abilities such as listening to one's partners' concerns tend to be less empathic, and are perceived to be poor communicators by their relationship partners (Gottman, 1999). Poor listening such as, "stonewalling," or being expressionless and apathetic when one's partner is speaking during conversations has been associated to reduced marital satisfaction and relationship dissolution (Gottman & Levenson, 1992). Because listening satisfaction during conversations has not been investigated in the context of work-life balance and relationship dissolution, the purpose of this study is to explore the relationships between perceived listening satisfaction, work-life balance, and relationship dissolution among marital and cohabiting couples.

### Marital and Cohabiting Couples' Perception Differences

Marital and cohabiting relationships experience differences throughout their relationship. Marital relationships have been accepted for many decades as the "status quo," and individuals can be bonded by religious and legal requirements, whereas, cohabiting relationships do not have the clear norms or legal obligations in comparison to marital relationships. Since the 1970s cohabitation has been perceived as a "trial period" prior to marriage, and it is constructed by negotiating partner roles that are established through communication channels (Cherlin, 2004). In our society, cohabiting relationships are also perceived to be short-term relationships, whereas marital relationships represent a long-term commitment with a spouse. Previous studies have documented that cohabiting individuals report having poor relationship quality, and for this reason, they may be more likely to dissolve in comparison to married individuals (Bouchard, 2006). A part of the

reason cohabiting individuals dissolve is explained by their lack of satisfaction in their relationship, and the lack of effective communication within a relationship. When individuals experience high disagreements and conflict, poor communication can be debilitating to the stability of the relationship (Brown, 2004).

However, attentive listening has been documented to facilitate quality relationships among both cohabiting and marital relationships. When a person is satisfied with one's partner listening behaviors, individuals are better able to solve their conflicts and prevent escalation (Gottman & Levenson, 1988). Perceived listening behavior functions to become socially supportive to one's partner, and to indicate shared understanding of one's partner's feelings and experiences. A study by Levenson, Cartensen, and Gottman (1994) has found that those in marital relationships who listen effectively report having quality conversations and being happily married. Also, both husbands and wives have reported being satisfied with their partners' listening skills when their partners' nonverbal expressions are positive, such as smiling (Pasupathl, Cartensen, Levenson, & Gottman, 1999). Interestingly, a study has reported that cohabiting individuals may not be willing to listen effectively to their partners due to the perceived lack of commitment in the relationship (Rhoades, Stanley, & Markman, 2009). Currently, there is a need to examine the differences in listening satisfaction perceptions among married and cohabiting individuals. To develop an understanding of the potential perception differences in listening, this study will examine the following hypothesis:

**H1:** Married and cohabiting partners differ in their perceived listening satisfaction with their partners.

Perceptions of relationship dissolution among cohabiting and marital partners may also differ. Relationship dissolution is defined as the "informal or legal separation" that terminates romantic relationships (Dush, 2013, p. 91). While both marital and cohabiting relationships dissolve, it may be due to different factors. For instance, cohabiting individuals have reported less investment in their relationship, lower levels of commitment, and decreased satisfaction in comparison to married individuals (Dush, 2013; Stanley, Whitton, & Markman, 2004). Also, cohabiting relationships are easier to dissolve than marital relationships. For instance, marital relationships may need to deal with courts, sharing children, sharing resources, such as a house or a bank account, which make them more difficult to dissolve (Dush, 2013; Wu & Penning, 2018), whereas cohabiting relationships may dissolve over an intense disagreement or conflict with no severe consequences. A study has found that cohabiting relationships are likely to dissolve with an average of less than two years over perceived disagreements, dissatisfaction, and dissolutionment (Brown & Snyder, 2006). Because the dissolution costs are higher for marital couples, marital relationships are more likely to make amends in the marriage in comparison to cohabiting relationships (Percheski & Meyer, 2018). With these findings in mind, the following hypothesis will be examined.

**H2:** Married and cohabiting partners differ in their perceived feelings of relationship dissolution.

## Work-Life Balance and Listening

The work-life balance (WLB) literature has been examining communication outcomes in marital and cohabiting romantic relationships. Work-life balance is defined as the “satisfaction and good functioning at work and home, with a minimum of role conflict” (Clark, 2000, p. 751). Studies have found that individuals who perceive their partners engaging in effective listening behaviors when discussing difficult work-life issues report being more satisfied in their relationship (Doohan, 2007; Pasupathi et al., 1999). Additionally, when individuals engage in work-life balance, they are able to communicate emotional support to their partners in stressful conditions (Gudmunson, Danes, Werbel, & Loy, 2009). Also, when individuals adopt effective communication skills in marital and cohabiting relationships, partners report being satisfied with the relationship, and are willing to engage in the problem-solving process (Perrone & Worthington, 2001). When individuals are able to effectively negotiate their work-life roles, they may become more available to engage in quality communication behaviors with their partners, which can enhance the overall marital quality (Li & Fung, 2011). By listening attentively to one’s spouse, couples are more likely to have positive interactions, such as mutual self-disclosure, empathy, and conflict resolution (Perrone & Worthington, 2001). Previous literature has not directly examined whether an individuals’ work-life balance perceptions relate to their listening satisfaction with their partners. In order to understand this underlying connection, this study will investigate the following hypothesis:

**H3:** After controlling for demographic variables, work-life balance is positively related to listening satisfaction.

## Work-Life Balance and Relationship Dissolution

The dissolution of marital and cohabiting relationships can be explained by perceptions of work-life balance in a family household. Several correlational studies have noted that when work hours exceed the number of hours devoted to one’s partner, it can escalate the conflict and lead to feelings of relational dissolution in marital and cohabiting relationships (Spitze & South, 1985; Voydanoff, 1998; Yucel, 2012). In particular, a longitudinal study has found that wives’ excessive work hours positively correlate with marital dissolution. However, this study has not controlled for any demographic variables, and examined only marital couples (Yucel, 2012). A lack of work-life balance highlights the inability to manage energy and time effectively, due to partners’ work schedules in order to stabilize their long-term relationships (Tausig & Fenwick, 2001). Relationships with the inability to manage work-life balance are more likely to suffer from relational dissatisfaction, and stress, which may lead to relationship dissolution (Neff & Karney, 2007; Schaer, Bodenmann, & Klink, 2008). Couples who experience poor work-life balance also experience mental health issues, such as burnout and irritation

that can lead to conflict that reduces the quality of their relationship (Schaer et al., 2008). While previous work has examined specific work-life balance factors, such as work hours and time expended, no study has clearly examined work-life balance as a uniform construct in the context of marital and cohabiting relationships that link this construct to relational dissolution. Although previous research highlights that the lack of work-life balance places a relational strain in marital and cohabiting relationships, studies have not examined how it relates to relational dissolution. To examine the underlying relationship, while accounting for demographics including sex, age, ethnicity, type of relationship, and duration of the relationship, the following hypothesis will be examined:

**H4:** After controlling for demographic variables, work-life balance is inversely related to feelings of relationship dissolution.

### **Listening Satisfaction as a Mediator of Work-Life Balance and Relationship Dissolution**

The inverse association between work-life balance and relationship dissolution may be influenced by a partner's listening satisfaction. Prior studies have noted that partners who maintain work-life balance in their family life are more likely to use effective listening behavior in the context of their romantic relationships (Pasupathi et al., 1999; Perrone & Worthington, 2001). In turn, partners who listen effectively to their partners' concerns at work are also more satisfied with their relationship, which can help them to engage in quality interactions about their work-life balance issues (Doohan, 2007). However, partners who report suffering from a work-life imbalance experience work stress and their relationship becomes less satisfying overtime, which leads to relationship dissolution (Debrot, Siegler, Klumb, & Schoebi, 2018; Yucel, 2012). When relational partners perceive that their partner is listening to them to understand their situation, they are more likely to experience "we-ness" and relationship satisfaction, which may reduce the likelihood of relationship dissolution (Reid, Dalton, Laderoute, Doell, & Nguyen, 2006; Ahmad & Reid, 2008).

Additionally, couples who perceive quality listening responsiveness skills with their partners are more likely to be satisfied in their relationship, and may be less likely to dissolve their romantic relationship (Cartensen, Gottman, & Levenson, 1995). Couples who perceive effective listening, such as using vocal backchannels, "mmms," report being more satisfied with each other, which aids in the stability of their relationship (Gould & Dixon, 1993). Partners who are satisfied with the listening responsiveness in their relationship, especially when trying to cope with stressful events, engage in dyadic coping mechanisms, which may reduce the likelihood of relationship dissolution (Kuhn, Bradbury, Nussbeck, & Bodenmann, 2018). Although the correlation relationships among these constructs have been established separately, no previous study has examined listening satisfaction as a possible mediator between work-life balance and relationship dissolution in mar-

ital and cohabiting relationships. By exploring listening satisfaction as an exploratory mediator, this study seeks to explore whether listening satisfaction plays a role in the relationship between work-life balance and relational dissolution perceptions. Thus, the following research question will be examined.

**RQ1:** Does listening satisfaction mediate the inverse relationship between work-life balance and relationship dissolution?

## Method

### Sample and Procedure

This national sample from the National Center for Family and Marriage Research at the Bowling Green State University (2010) included (50% women and 50% men,  $n = 2,150$ ), a total of 1,075 couples. The average age of the adult participants was 44 ( $SD = 11.95$ ; range = 18-64). The racial background of the participants was comprised of 80.5% White, Non-Hispanic, 5% Black, Non-Hispanic, 7.8% Hispanic, 1.8% two or more Races, Non-Hispanic, and 4.9% Other, Non-Hispanic. The educational background of participants was composed of 34.8% Bachelor's degree or higher, 36.6% some college, 23.3% high school, and 5.3% less than high school. The marital status of the participants includes 69.4% married, 0.2% divorced, 0.9% never married, and 29.4% living with a partner. Out of these participants, 70% reported being married, and 30% reported cohabiting in the household. The average duration of relationships across participants was 14.5 years. Additionally, the average duration of cohabitation prior to marriage within the subsample of married couples was two years. When indicating about the number of children under the age of 18, 59.9% of the couples reported being childless, while 40% reported having at least one child or more in the household. The employment status of the sample included 60.7% working (as a paid employee), 9.9% working (self-employed), 1.6% not working (on temporary layoff), 6.8% not working (looking for a job), 5% not working (retired), 5.8% not working (disabled), 10.3% not working (other). Lastly, the average household income of the sample ranged from \$50,000 to \$59,999 per year.

An online survey was conducted by the National Center for Family and Marriage Research at the Bowling Green State University in 2010, in order to examine married and cohabiting couples' relationship quality. Participants were recruited by using Knowledge Networks to ensure that the sample was representative of the U.S. population using a random-digital dial (RDD) and address-based sampling (ABS) methods. The inclusion criteria of the sample included being at least 18 years old, and reporting their relationship status (e.g., married, cohabiting). Once recruited, participants were randomly selected to complete a 25-minute online survey including demographic and measure-specific questions (e.g., work-life balance, listening satisfaction).

## Instruments and Measures

**The Marital Disillusionment Questionnaire (Niehuis, 2007).** This was a 12-item scale which was used to assess feelings of dissolution in romantic relationships. Niehuis (2007) included items that were worded to be applicable to cohabiting couples as well. Sample items, “*I am very disappointed in my marriage/relationship*” and “*If I could go back in time, I would not marry/cohabit with my partner.*” Participants indicated whether they agreed with each statement on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The alpha reliability of this instrument in this study was .93.

**Listening Satisfaction (Mansfield, 2011).** Listening satisfaction was assessed with one-item, which included, “*How satisfied are you with how well your spouse/partner listens to you?*” Participants indicated their agreement from 1 (*very dissatisfied*) to 5 (*very satisfied*). This one-measure item was developed in order to assess listening satisfaction among couples.

**Work-life Balance.** Mansfield’s (2011) adapted items from the Work-Family Conflict Scale developed by Netemeyer, Boles, and McMurrian (1996), and this instrument included items using a 5-point Likert scale. Sample items included

“*How much conflict is there in balancing work and family life?*”, “*How fair is the division of paid work and work around home in your household?*” “*Does your spouse/partner have a conflict in balancing work and family?*” “*How fair is division of work and work around home according to your spouse/partner?*” The alpha reliability of this instrument was .70.

**Demographic Variables.** To assess the control variables, demographic variables were measured including age, sex, ethnicity, relationship type, and duration of relationship.

## Results

### Descriptive Statistics, Correlations and Differences between Married and Cohabiting Partners

The analyses were conducted by using SPSS 22.0 and Process v5. The means, standard deviations, and zero-order correlations of the variables are displayed in Table 1. Work-life balance was weakly and positively associated with listening satisfaction,  $r = .07$ ,  $p < .01$ , with a power of 0.75, and a small Cohen’s  $d$  effect of 0.21. However, work-life balance was weakly inversely associated with relational dissolution,  $r = -.10$ ,  $p < .01$ , with a power of 0.98, and a small Cohen’s  $d$  effect of 0.31. Additionally, listening satisfaction was moderately and inversely associated with relational dissolution,  $r = -.65$ ,  $p < .01$ , with a power of 0.99, and a small Cohen’s  $d$  effect of 0.33.

Table 1  
Reporting means, standard deviations, and zero-order correlation matrix

Measure	1	2	3	4	5	6	7
1. Age	1						
2. Sex	-.72**	1					
3. Ethnicity	-.18**	-.02	1				
4. Relationship Type	-.29**	.01	.11**	1			
5. Relationship Duration	.70**	-.01	-.04	-.21**	1		
5. Work-Life Balance	.03	-.04	-.01	-.08**	.02	1	
6. Listening Satisfaction	.01	.16**	-.02	.10**	.08*	.07**	1
7. Relationship Dissolution	-.02	-.06**	-.01	-.12**	-.08*	-.09**	-.64**
<i>M</i>	43.08	1.50	1.45	1.30	14.51	0.27	1.88
<i>SD</i>	11.95	0.50	1.02	0.46	10.29	0.21	0.97

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

Independent sample t-tests were conducted to assess whether married and cohabiting partners differed in their perceived listening satisfaction and relationship dissolution. Findings revealed that cohabiting individuals,  $M = 2.02$ ,  $SD = 1.04$ , reported being more satisfied with how well their spouse/partner listened to them in comparison to married individuals,  $M = 1.82$ ,  $SD = 0.92$ ;  $t(2139) = -4.31$ ,  $p < .001$ , with a small Cohen's  $d$  of 0.20, and a power effect of 0.10. Additionally, an independent sample t-test revealed that married individuals,  $M = 3.96$ ,  $SD = 0.71$ , reported being more dissolutioned with their relationship than did cohabiting individuals,  $M = 3.76$ ,  $SD = 0.80$ ;  $t(1078) = 5.30$ ,  $p < .001$ , with a Cohen's  $d$  of 0.26, and an effect size of 0.13.

### Relation of Work-Life Balance, Listening Satisfaction and Relationship Dissolution

Hierarchical multiple regression analyses were conducted to analyze Hypotheses 3 and 4 by using bootstrapping analyses with 5,000 samples. The summary results of the findings for hypothesis 3 are located in Table 2. The third hypothesis predicted that after controlling for the demographic variables, age, sex, ethnicity, relationship type, and duration of relationship, work-life balance would be positively related to listening satisfaction. The multiple regression analysis provided a significant model,  $R^2 = .04$ ,  $F(4, 2360) = 21.94$ ,  $p < .001$ , after putting the controlling variables in the first block, and work-life balance in the second block. The first block on Table 2 ( $R^2 = .05$ ) shows that age, sex, relationship type, and duration of relationship were positively related to listening satisfaction. However, ethnicity

was not found to be related to listening satisfaction. In the second block, after accounting for the demographic variables ( $\Delta R^2 = .04$ ), work-life balance,  $\beta = .10$ ,  $p < .001$ , positively related to listening satisfaction. Thus, the third hypothesis was supported.

Table 2  
*Results of multiple regression analysis between the demographic and WLB variable and listening satisfaction*

	Listening Satisfaction			
	<i>t</i>	$\beta$	<i>r</i>	<i>p</i>
Block 1	( $R^2 = .05$ )			
Age	2.24	.10***	.40	.01
Sex	7.88	.17***	.17	.01
Ethnicity	-0.16	-.01	-.01	.38
Relationship Type	5.14	.11***	.09	.01
Duration of Relationship	1.75	.09*	.70	.04
Block 2	( $\Delta R^2 = .04$ )			
Work-Life Balance	2.60	.10***	.09	.01

Notes.  $\beta$  - standardized beta coefficients; *t* - value of t-test; *r* - correlation coefficient.

\*  $p \leq .05$ . \*\*  $p \leq .01$ . \*\*\*  $p \leq .001$ .

The fourth hypothesis predicted that after controlling for demographic variables, work-life balance would be inversely related to relationship dissolution. The summary results of the fourth hypothesis are provided in Table 3. The multiple regression analysis revealed a significant model,  $R^2 = .04$ ,  $F(4, 2070) = 11.57$ ,  $p < .001$ , after putting the controlling variables in the first block, and work-life balance in the second block. In the first block ( $R^2 = .02$ ), age, sex, relationship type, and duration of relationship were found to be negatively related to relationship dissolution. However, ethnicity was not found to be related to relationship dissolution. In the second block, after accounting for the demographic variables, the model accounted for four percent of the variance in the negative relationship between work-life balance,  $\beta = -.11$ ,  $p < .001$ , and relationship dissolution. Thus, the fourth hypothesis was supported.

Table 3

Results of multiple regression analysis between the demographic and WLB variable and relationship dissolution

	Relationship dissolution			
	<i>t</i>	$\beta$	<i>r</i>	<i>p</i>
Block 1		$(R^2 = .02)$		
Age	-2.74	-.06**	-.02	.01
Sex	-2.96	-.10**	-.06	.01
Ethnicity	-0.11	-.01	-.01	.91
Relationship Type	-6.09	-.14***	-.12	.01
Duration of Relationship	-1.84	.10*	-.10	.03
Block 2		$(\Delta R^2 = .04)$		
Work-Life Balance	-3.07	-.11***	-.11	.01

Notes.  $\beta$  - standardized beta coefficients; *t* - value of t-test; *r* - correlation coefficient.

\*  $p \leq .05$ . \*\*  $p \leq .01$ . \*\*\*  $p \leq .001$ .

A mediation analysis was conducted by using Hayes' (2013) Process v5 to explore research question one, which predicted that listening satisfaction mediated the relationship between work-life balance and relationship dissolution (See Figure 1).

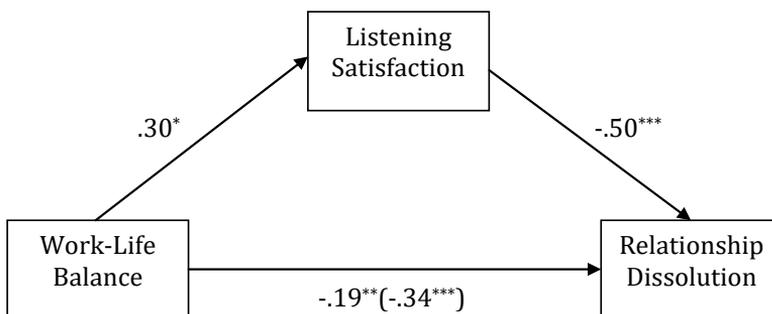


Figure 1. Mediation model relating to work-life balance, listening satisfaction, and relationship dissolution.

Notes. The values represented are standardized regression coefficients ( $\beta$ ). The value in the parenthesis denotes the direct effect of work-life balance on relationship dissolution with listening satisfaction as the mediator.

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

The results of the mediation are summarized in Table 4. In Step 1 of the mediation model, the regression analysis results, ignoring the mediator, indicated that work-life balance was a significant predictor of listening satisfaction. Step 2 showed that work-life balance, accounting for listening satisfaction (mediator), was a significant negative predictor of relational dissolution. In Step 3, listening satisfaction (mediator), controlling for work-life balance, was a significant predictor of relational dissolution. Step 4 also revealed that work-life balance was a significant predictor of relational dissolution. A Sobel test was conducted, and found partial support for the mediation in the model,  $Z = -2.84, p = .004$ . Approximately 42% of the variance in relational dissolution was accounted by the predictors. As such, listening satisfaction mediated the relationship between work-life balance and relationship dissolution.

Table 4  
*Results of model coefficients for the work-life balance: mediation analysis*

Outcome	Consequent							
	Listening Satisfaction			95%CI	Relationship Dissolution			95%CI
	$\beta$	$t(SE)$	$p$	Lower, Upper	$\beta$	$t(SE)$	$p$	Lower, Upper
Work-Life Balance	.30	2.85 (0.10)	< .01	0.09, 0.50	-.19	-3.27 (0.06)	< .01	-0.30, -0.08
Listening Satisfaction	—	—	—	—	-.49	-32.7 (0.02)	< .001	-0.52, -0.46
Constant	1.80	0.04	< .001	1.73, 1.87	4.89	155.3 (0.03)	< .001	4.83, 4.95
	$R^2 = 0.01, p < .001$				$R^2 = 0.42, p < .001$			

*Notes.* 95% CI (lower/upper) – lower and upper bound of a 95% confidence interval. Regression weights for a (Work-Life Balance to Listening Satisfaction), b (Listening Satisfaction to Relationship Dissolution), and c' (Work-Life Balance to Relationship Dissolution) are illustrated in Figure 1.

To better understand the relationships between work-life balance, listening satisfaction, and relationship dissolution, post-hoc moderation effects were explored by using relationship type and relationship duration as potential moderators using Hayes' (2013) Process v5 (Baron & Kenny, 1986). The first moderation effect examined whether relationship type moderated the relationship between work-life balance and listening satisfaction, and the relationship between work-life balance and relationship dissolution (See Figure 2).

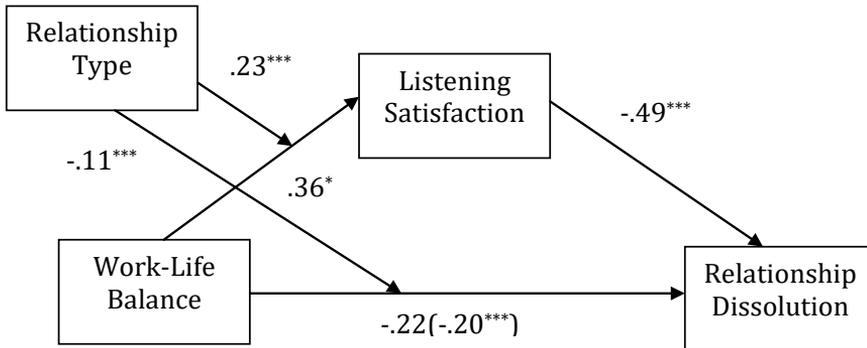


Figure 2. Moderated mediation model relating to relationship type as the moderator of work-life balance, listening satisfaction, and relationship dissolution.

Notes. The values represented are standardized regression coefficients ( $\beta$ ). The value in the parenthesis denotes the direct effect of work-life balance on relationship dissolution with listening satisfaction as the mediator.

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

The results of the first moderation test using relationship type are summarized in Table 5. Results demonstrated a positive moderating effect of relationship type on the positive relationship between work-life balance and listening satisfaction. Additionally, relationship type had an inverse moderating effect on the inverse relationship between work-life balance and relationship dissolution. The overall model supported listening satisfaction as the mediator of the inverse relationship of work-life balance and relationship dissolution, while accounting for the moderating effect of relationship type.

Table 5  
*Results of model coefficients for the work-life balance: moderated mediation analysis*

Outcome	Consequent								
	Listening Satisfaction			95%CI		Relationship Dissolution			95%CI
	$\beta$	t(SE)	p	Lower, Upper	$\beta$	t(SE)	p	Lower, Upper	
Work-Life Balance	.36	3.55 (0.10)	<.001	0.16, 0.55	-.22	-3.68 (0.06)	<.001	-0.34, -0.10	
Listening Satisfaction	—	—	—	—	-.49	-37.38 (0.01)	<.001	-0.51, -0.46	
Relationship Type	0.23	4.89 (0.04)	<.001	0.14, 0.31	-.11	-3.86 (0.03)	<.001	-0.16, -0.05	
Constant	1.88	88.90 (0.02)	<.001	1.84, 1.92	4.82	174.3 (0.02)	<.001	4.77, 4.87	
$R^2 = 0.02, p < .001$				$R^2 = 0.42, p < .001$					

Note. CI (lower/upper) – lower and upper bound of a 95% confidence interval. Regression weights for a (Work-Life Balance to Listening Satisfaction), b (Listening Satisfaction to Relationship Dissolution), c1' (Work-Life Balance to Relationship Dissolution), and a2, c2' (Relationship Type) are illustrated in Figure 2.

The second post-hoc moderation analysis examined the moderating effect of duration of the relationship in the relationship between work-life balance and listening satisfaction, and the relationship between work-life balance and relationship dissolution (See Figure 3).

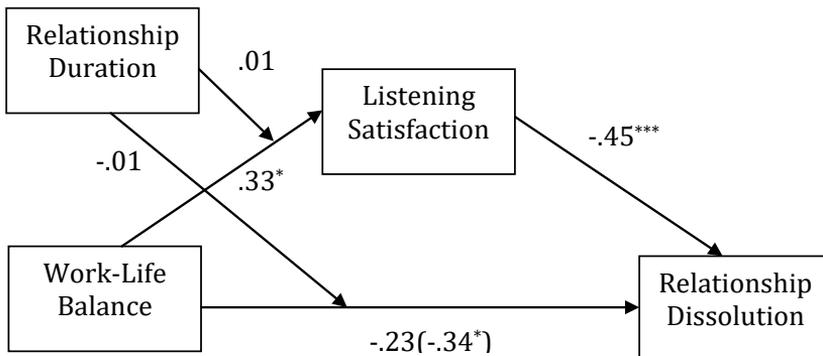


Figure 3. Moderated mediation model relating to relationship duration as the moderator of work-life balance, listening satisfaction, and relationship dissolution.

Notes. The values represented are standardized regression coefficients ( $\beta$ ). The value in the parenthesis denotes the direct effect of work-life balance on relationship dissolution with listening satisfaction as the mediator.

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

The results of the second moderation test using duration of the relationship are summarized in Table 6. It was found that relationship duration had a positive moderating effect in the relationship between work-life balance and listening satisfaction. However, relationship duration did not have a moderating effect on the inverse relationship between work-life balance and relationship dissolution. The overall model supported listening satisfaction as a mediator of the inverse relationship between work-life balance and relationship dissolution, accounting for the moderating effect of relationship duration.

Table 6

*Results of model coefficients for the work-life balance: moderated mediation analysis*

Outcome	Consequent							
	Listening Satisfaction			95% CI	Relationship Dissolution			95% CI
	$\beta$	$t(SE)$	$p$	Lower, Upper	$\beta$	$t(SE)$	$p$	Lower, Upper
Work-Life Balance	.33	54.25 (0.03)	< .05	0.03, 0.62	-.23	-2.39 (0.09)	< .05	-0.42, -0.41
Listening Satisfaction	—	—	—	—	-.45	-19.28 (0.02)	< .001	-0.49, -0.41
Relationship Duration	.01	2.07 (0.01)	<.05	0.01, 0.01	-.01	-1.15 (0.01)	< .05	-0.01, -0.01
Constant	1.87	54.26 (0.03)	<.001	1.80, 1.94	4.79	97.87 (0.05)	<.001	4.69, 4.88
	$R^2 = .01, p < .05$				$R^2 = .35, p < .001$			

*Note.* CI (lower/upper) – lower and upper bound of a 95% confidence interval. Regression weights for a (Work-Life Balance to Listening Satisfaction), b (Listening Satisfaction to Relationship Dissolution),  $c1'$  (Work-Life Balance to Relationship Dissolution), and  $a2, c2'$  (Relationship Duration) are illustrated in Figure 3.

## Discussion

The purpose of this study has been to explore the relationships between listening satisfaction, work-life balance, and relationship dissolution. The results from this study extend prior scholarship by examining differences among marital and cohabiting couples, and by exploring listening satisfaction as a mediator of the relationship between work-life balance and relationship dissolution. The findings can also guide future scholarship about the perceived listening satisfaction in marital and cohabiting relationships, and how it is associated with constructs such as work-life balance and relationship dissolution. Additionally, this study has tested the moderating effects of relationship type and duration of the relationship to further understand the interrelationships between the main constructs.

The findings of this study challenge the findings of previous scholarship indicating that marital and cohabiting partners differ in their listening satisfaction. First, cohabiting individuals have indicated being more satisfied with the listening abilities of their partners than have been marital individuals. Previously, there have been mixed findings, such as a study by Rhoades et al. (2009), who have found that cohabiting individuals might not be willing to listen effectively, based on the commitment levels of their relationship. Additionally, it has been found that marital partners exhibit effective listening capabilities (Pasupathi et al., 1999). Conversely, the reasons cohabiting individuals practice effective listening behaviors may be to maintain open communication, trust, and relational maintenance. By listening effectively to each other in conversations, cohabiting individuals are more likely to be satisfied in their relationship. Additionally, marital individuals might have perceived poor listening abilities from their partners, since overtime, married individuals might exhibit poor listening behaviors such as “stonewalling,” interrupting, and the silent treatment, to win arguments during conflicts (Haase, Holley, Block, Verstaen, & Levenson, 2016).

Additionally, married individuals have reported being more dissolutioned with their relationship than have been cohabiting individuals. Previously, research has documented that cohabiting individuals may be less invested, committed, and satisfied with their relationship in comparison to married individuals (Dush, 2013; Stanley et al., 2004). However, this study has found that married individuals are more dissolutioned with their partners, and this may be due to several reasons. First, since married individuals are legally bonded with each other, even if they are dissatisfied with their relationship, married individuals may choose to stay in poor quality relationships, and experience dissolutionment or the desire to terminate their relationship. Second, married individuals may judge their partners based on previous expectations. For instance, if partners appear to be more desirable in the early stages of marriage, or if their behavior has been more civilized, then partners’ dissolutionment may emerge, which may lead to relationship dissolution (Bae & Wickrama, 2019). Third, cohabiting partners might appreciate their partners to a greater extent than married individuals because of their perceived agency in their decision to stay in the relationship, and the expectations of their partner might be lower since there are no pre-established standards for cohabiting relationships in comparison to marital relationships (Cherlin, 2004).

Another finding is that work-life balance has been positively correlated to listening satisfaction among married and cohabiting couples. Studies have found that communication skills including listening behaviors are positively related to work-life balance (Li & Fung, 2011). Couples who perceive effective work-life balance may be more satisfied with the listening behavior of their partners. One reason may be that individuals who perceive work-life balance may devote more time and energy in conversing with their partners. When partners communicate regularly, partners may be better able to listen to each other’s problems and concerns (Perrone & Worthington, 2001). Another reason may be that partners of individ-

uals who effectively manage their work and life roles may exhibit the desirable listening behavior, which may enhance the quality of communication. However, when partners perceive poor work-life balance they also perceive poor listening capabilities from their partners. Partners who are overcommitted with work duties may rush through conversations with their partners, and this may lead to being dissatisfied with the listening behavior of their partners.

Additionally, work-life balance has been inversely related to relationship dissolution among married and cohabiting couples. Similar to previous studies, couples who perceive effective work-life balance in their lives are less likely to suffer from the factors that lead to relationship dissolution than those with poor work-life balance (Neff & Karney, 2007; Schaer et al., 2008). Couples with perceived work-life balance may be better at maintaining their relationship and avoid dissolution feelings toward their partners. On another note, couples who perceive poor work-life balance indicate being dissolutioned with their partners, and desire dissolution of the relationship. One reason for this finding may be that a lack of work-life balance may negatively impact the quality of the relationship, which may lead to relationship dissolution (Schaer et al., 2008). Additionally, low work-life balance can take a negative toll in the time and energy invested in the relationship, which can lead to relationship dissolution.

Another contribution of this study is that listening satisfaction serves as a partial mediator of the inverse relationship between work-life balance and relationship dissolution. Individuals in relationships that have experienced work-life balance report being satisfied with the listening behavior of their partners, and as a result, they are less likely to have a desire for relationship dissolution. Because work-life balance implies that couples are better able to divide their labor at home, and manage their time and energy resources, the couples with effective work-life balance skills may be more equipped to practice effective listening behaviors, which can lead to listening satisfaction. If partners are satisfied with their partners' listening behaviors, this may reduce perceptions of relationship dissolution. As such, listening satisfaction, an understudied phenomenon, may play a mediating role in reducing perceptions of relationship dissolution. By engaging in the listening process during conversations, couples may be able to potentially halt marital dissolution. Yet, if partners are not satisfied with the listening behavior of their partner, this may weaken the relationship between work-life balance and relationship dissolution.

This study has also shown that relationship type and duration of the relationship have moderating effects on the relationships between work-life balance and listening satisfaction, and work-life balance and relationship dissolution. In particular, relationship type, whether a couple is married versus cohabiting, have an effect on the relationship between work-life balance and listening satisfaction, and this may be because cohabiting couples report being more satisfied with their partners' listening behaviors than the married couples do. One explanation may be due to the enhanced work-life balance that is reported by cohabiting couples,

given that cohabiting couples may be more likely to fairly share home responsibilities and duties in comparison to married couples (Hakansson, Milevi, Eek, Oudin, & Wagman, 2019). Similarly, because married individuals are less likely to equally divide the labor in the home in comparison to cohabiting individuals (Baxter, 2005) this can explain why relationship type has had a negative moderating effect on the inverse relationship between work-life balance and relationship dissolution. Lastly, it has been found that duration of the relationship has a moderating effect in the positive association of work-life balance and listening satisfaction. Such individuals with perceived work-life balance, in longer relationships, may be more satisfied with the listening behavior of their partners than those in shorter relationships. This moderating effect may be explained in the fact that lengthier romantic relationships tend to become more interdependent and intimate, and partners learn how to read each other's communicative feedback and appraisals better than in shorter relationships (Campbell, Lackenbauer, & Muise, 2006; Swann, De La Ronde, & Hixon, 1994).

## Implications

Several implications may be derived from the results of this study. From the research perspective, this study suggests that an understudied construct in romantic relationships, listening satisfaction, may be helpful in understanding the inverse association between work-life balance and relationship dissolution. For instance, relationship researchers may examine the role of listening satisfaction in the context of cohabiting and marital relationships by using longitudinal approaches. To add, the moderating effect of relationship type and duration of the relationship have informed the interrelationships between work-life balance and listening satisfaction, and work-life balance and relationship dissolution. The results also provide practical implications for couples and relationship practitioners such as marital counselors. First, this study has shown that cohabiting couples are better able to engage in work-life balance, and have also reported enhanced listening satisfaction. Cohabiting couples who are able to engage in active listening processes may be more mindful and attentive about their partners' work-life balance needs (Perrone & Worthington, 2001), and as a result, may have a reduced likelihood of relationship dissolution. However, marital couples who struggle with work-life balance may also engage in poor listening practices, which can place the couple at risk for relationship dissolution. As such, couples that communicate about their work-life balance problems, and listen and provide feedback to each other may reduce their likelihood of relationship dissolution (Gravningen et al., 2017). Couples' relationship length may also play a role in how individuals perceive their partners' listening behaviors due to their commitment and investment in the relationships, and this can help marital counselors understand why couples who perceive having work-life balance may be more likely to be satisfied with their partners' listening behaviors than those with perceived imbalances.

## Limitations and Future Directions

Limitations of this study will be discussed along with directions for future research. First, this study is cross-sectional. Future studies need to adopt a longitudinal perspective to determine if the inverse relationship between work-life balance and marital dissolution becomes stronger over time. Also, a longitudinal perspective may be applied across the relationship of cohabiting and married individuals, to determine the impact of listening satisfaction on the perceptions of relationship dissolution. Second, this study has included only heterosexual couples. Future studies may investigate whether these findings are consistent across LGBT couples. Third, the measure of listening satisfaction is a one-item measure. While one-item measures have been adopted by previous scholars, future researchers need to develop new listening satisfaction scales to capture the complexity of this understudied construct in the context of romantic relationships (Doell, 2003). For example, future researchers can create a new scale based on Doell's (2003) dual concepts of listening, including listening to understand one's partner and listening to respond. Fourth, the perceptions of both partners have not been taken into account in this study. In the future, studies should include the perspectives of both partners to determine how these constructs impact their relationship. Finally, the frameworks examined in this study have been limited to examining the mediation effect of listening among the constructs, and the moderating effects of the type of relationship and duration of the relationship. Future research can broaden this framework with other potential pathways such as personality constructs like narcissism and extroversion, and the nature of the work position.

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## RELACIJE IZMEĐU BALANSA PRIVATNOG I PROFESIONALNOG ŽIVOTA I VARIJABLI ZADOVOLJSTVA PARTNERSKIM RELACIJAMA

Visoki zahtevi koje savremeno društvo stavlja pred pojedince mogu uticati na poimanje balansa između privatnih i profesionalnih uloga, kako u vanbračnim, tako i u bračnim zajednicama. Nesklad između privatne i profesionalne sfere života za ishod može imati slabu komunikaciju koja doprinosi udaljavanju i razlazu među partnerima. Osim toga, ukoliko pojedinac nije zadovoljan spremnošću partnera da ga sasluša, to, takođe, za ishod može imati slabljenje i prekid veze. U nastojanju da se ispitaju relacije između usklađenosti privatnih i profesionalnih uloga, zadovoljstva spremnošću partnera da sasluša onog drugog i procene vanbračne, odnosno bračne zajednice kao oslabljene, u istraživanju su analizirani podaci Nacionalnog centra za istraživanje porodice i braka pri Bowling Green State Univerzitetu. Na uzorku od 2150 ispitanika (1075 parova; 50% žena, prosečna starost 44 godine) primenjen je Upitnik prekida partnerske veze i Skala konflikata među životnim ulogama. Usklađenost privatne i profesionalne sfere života ostvaruje pozitivnu povezanost sa zadovoljstvom partnerovom spremnošću da sasluša onog drugog, dok je negativno povezana sa percepcijom oslabljenosti partnerskih relacija. Rezultati t-testa za nezavisne uzorke, takođe, ukazuju na to parovi koji žive u vanbračnoj zajednici izveštavaju o višem zadovoljstvu u pogledu spremnosti partnera da sasluša onog drugog, u odnosu na parove koji su u braku. Sa druge strane, parovi koji žive u braku ispoljili su viši stepen percepcije oslabljenosti partnerskih relacija nego parovi koji žive u vanbračnoj zajednici. Rezultati regresione analize sugerišu da je usklađenost privatnih i profesionalnih uloga pozitivno povezano sa zadovoljstvom u pogledu spremnosti partnera da sasluša onog drugog, dok je negativno povezano sa percepcijom oslabljenosti partnerskih relacija. Zadovoljstvo partnerovom spremnošću da sasluša onog drugog kao medijator ostvaruje indirektni efekat između negativno povezanih varijabli usklađenosti privatnih i profesionalnih uloga i percepcije oslabljenosti partnerskih relacija. Tip partnerske zajednice ostvaruje moderatorski efekat u relaciji između usklađenosti privatnih i profesionalnih uloga i zadovoljstva spremnošću partnera da sasluša onog drugog, odnosno između negativno povezanih varijabli usklađenosti privatnih i profesionalnih uloga i percepcije osla-

bljenosti partnerskih relacija. Naposljetku, dužina trajanja veze moderira relacije između usklađenosti privatnih i profesionalnih uloga i zadovoljstva spremnošću partnera da sasluša onog drugog. Dobijeni nalazi produbljuju shvatanje relacija između usklađenosti privatnih i profesionalnih uloga, zadovoljstva partnerovom spremnošću da sasluša onog drugog i percepcije oslabiljenosti partnerskih relacija.

**Ključne reči:** balans privatnog i profesionalnog života, bračni odnosi, kohabitacija, prekid veze, slušanje od strane partnera

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## EFFECTS OF PERSONALITY TRAITS AND NEGATIVE LIFE EVENTS ON FATHERS' VIOLENCE AGAINST CHILDREN<sup>2</sup>

Previous studies mostly explored the characteristics of mothers who showed tendency towards violence against children. However, there was a lack of research regarding the characteristics of abusive fathers. The aim of this study was to test the effects of fathers' personality traits and frequency of negative life events, as well as their interaction on violence against children. The study was conducted on a sample of 259 fathers from the general population from Serbia. Results showed that higher Aggressiveness and more presence of negative life events contributed to the prediction of violence against children. Furthermore, the interaction between Neuroticism and negative life events was also significant, showing that fathers with lower Neuroticism and more negative life events were more prone to violence against children. The results of this study confirm that personality traits could be important determinants of violent behavior toward children, but also add to the conclusion that some of them should be considered in the context of negative situational factors.

**Key words:** fathers, violence against children, personality traits, negative life events

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## Introduction

Conflicts between parents and young children may take serious consequences and result in violence against children. Results of several meta-analytic studies in the USA and Europe have shown that 7–20% of children experience some form of maltreatment in a family context (e.g., Barth, Bermetz, Heim, Trelle, & Tonia, 2013; Stoltenborgh, Bakermans-Kranenburg, van IJzendoorn, & Alink, 2013). In Serbia, results show that 30–45% of all the victims of the family violence are children who have experienced some form of emotional or physical violence in their family before the age of 14 (Ignjatović, 2015; UNICEF, 2014, 2017, 2019). Due to very high prevalence of experienced violence, it is very important to identify the dispositional and situational factors which contribute to the parents' violence against their children.

The usual predictors of the occurrence of violence against children are related to the dispositional characteristics of the parents. Previous studies have been more focused on the specific characteristics of abusive mothers (e.g., Stith et al., 2009). More precisely, tendencies toward loneliness and isolation, impulsivity, becoming upset and angry, the fear of being controlled (Black, Heyman, & Slep, 2001), hostile attributions about infant's intentions signal (Berlin, Dodge, & Reznick, 2013), higher depression and anxiety, lack of empathy to children's needs (Mennen & Trickett, 2011), as well as lower self-worth in family relationships (Christensen et al., 1994) have been the risk factors of a child maltreatment by mothers.

However, there is a gap between research and practice when it comes to the role of fathers as perpetrators of violence against the children (e.g., Featherstone & Peckover, 2007). Thus, fathers have been perpetrators in 67% of cases where physical abuse is the dominant form of child abuse (Trocme et al., 2003). This is also evident in Serbia, showing that 45.9% of interviewed mothers who have experienced a family violence report that their husbands have been abusive to their children (Ignjatović, 2015), or that in 69.9% of child homicide cases (with evidence of physical abuse in almost 20%), the mothers have been only slightly more frequent perpetrators than fathers (Baralić et al., 2010). Research of the judiciary system of the family and criminal law in Serbia have confirmed that men are far more often the perpetrators of violence against children (Jovanović, Simeunović Patić, & Macanović, 2012; Petrušić & Konstatinović Vilić, 2010).

Characteristics of abusive fathers have been explored more systematically only in recent years. In the study in which abusive fathers are compared to non-abusive fathers, the results have shown that abusive fathers more often experience anger and report more mental health concerns (such as depression, hostility, and paranoid ideation), more stress in parenting, and less empathy for their children (Fransis & Wolfe, 2008). Moreover, fathers' depression is significantly related to a father-child conflict (Kane & Garber, 2004), and a greater use of corporal punishment along with parenting stress, heavy alcohol use, and drug abuse,

while there is no relation between generalized anxiety disorder and a greater use of corporal punishment (Lee, Perron, Taylor, & Guterman, 2010).

Previous results have shown that the risk factors are relatively comparable in abusive mothers and fathers, for example, positive attitudes about parental aggression, attribution of child responsibility for aggression, overreactive discipline, and anger expression (Slep & O'Leary, 2007). However, there are some specificities when it comes to the characteristics of abusive fathers. For example, social support could decrease a mother's aggression towards a child, what is not the case with the father's aggression (Schaeffer, Alexander, Bethke, & Kretz, 2005). Furthermore, high-risk fathers report less empathic perspective-taking ability and emotion recognition, which is not found in high-risk mothers (Asla, De Paul, Perez-Albeniz, 2011; Perez-Albeniz & De Paul, 2004). In some research, empathy is indirectly connected to negative child attributions through reactivity, which in turn predicts the risk of aggression towards the child, but it is documented that this link is more prone in mothers compared to fathers (Rodriguez, Smith, & Silvia, 2016). Moreover, the increased risk of aggression towards the child is significantly predicted by more mental health symptoms in mothers than in fathers, while, significant predictors in both parents are negative child attributions, less knowledge of discipline alternatives, and lower support from the partner (Rodriguez et al., 2016).

Another frequently investigated group of the risk factors captures the external factors, such as stressful events related to a family and a social context, as well as to other life domains. Many studies have shown that the cumulative exposure to negative events, rather than single factors, are related to the child abuse and maltreatment (e.g., Begle, Dumas, & Hanson, 2010; MacKenzie, Kotch, & Lee, 2011). Previous results have shown that the most important fathers' external risk factors for the child maltreatment are those related to the socio-economic status, e.g. job loss (Berger, 2005; Paxson & Waldfogel, 2002), followed by negative events related to physical and mental health and stress (Kane & Garber, 2004; Steele, Forehand, & Armistead, 1997), conflicts with the spouse (Tajima, 2000), history of abuse within the nuclear family (Ellonen, Peltonen, Pösö, & Janson, 2017), and war circumstances (Ballet, Sirven, Bhukuth, & Rousseau, 2011). However, the role of stressful events could be more complex. For example, the results of a study have shown that mothers reporting a history of the family abuse see themselves as more effective parents. However, their level of life stress and social support mediate that relationship, resulting in the lower parenting effectiveness when high levels of stress and poor social support are present (Levendosky, Huth-Bocks, Shapiro, & Semel, 2003). Given the potentially complex role of the negative life events, this study aims to identify specific patterns of interactions between the father's personality traits and negative life events that contribute to the violence against children.

The role of fathers in the children's lives is culturally more variable than the role of mothers (Paquette, 2004). In the Serbian society, the dominant charac-

teristic of the role of the father is a financial support and authority, as opposed to closeness, which is attributed to the mothers. The fathers are consistently described as less functional in the parental role, while their influence on the child's development remains specific and less conspicuous when compared to the influence of the mothers (Mihić, 2010).

Considering the specific role of the father in the upbringing of children in the Serbian society, it seems important to identify the fathers' risk factors in violence against their children. To the best of our knowledge, there are no studies that link parents' basic personality traits to violence against children, but rather the specific traits. Based on the results of previous research in which anger and low empathy have emerged as the dominant characteristics of the abusive fathers (Francis & Wolfe, 2008; Slep & O'Leary 2007), it can be assumed that the dominant predictor of violence against children would be Aggressiveness, as well as a higher frequency of negative life events (e.g., Berger, 2005; Kane & Garber, 2004). In addition, Neuroticism is also related to aggression and violence, especially to affective and impulsive ones (e.g., Bettencourt, Talley, Benjamin, & Valentine, 2006). Previous research have shown mixed results regarding the effects of fathers' Neuroticism indicators on the child maltreatment. For example, a fathers' depression, but not problems with anxiety, is related to the use of corporal punishment (Kane & Garber, 2004; Lee et al., 2010). In another, more mental health symptoms, including depression and anxiety, do not predict aggression towards children in fathers (Rodriguez et al., 2016). Based on the previous studies, we cannot give clear expectations about the effect of Neuroticism, but considering the effect of Neuroticism on aggression, we assume that Neuroticism would have a positive effect on violence against children. In addition, since low Conscientiousness refers to high impulsivity and problems of self-control (e.g., Čolović, Smederevac, & Mitrović, 2014), we expect that Conscientiousness would have a negative effect on violence against children. Furthermore, we have tested the interaction between personality traits and negative life events on violence against children, assuming that negative life events could have a moderator role in relations between personality traits and violence against children. Thus, this research could give the first assumptions about father's personality determinants of a child abuse in the context of situational factors.

## Method

### Participants and Procedure

This study included 259 male participants from the general population of Serbia, who are parents and have at least one child. The majority of fathers had two children (74.1%). Participants were aged from 26 to 76 ( $M = 48.61$ ,  $SD = 0.59$ ). The majority of participants were married (91.5%) and currently em-

ployed (73.8%). Most of the participants finished high school (56.8%) or had a university degree (32.2%). The sample characteristics were in accordance to the typical characteristics of male parents population in Serbia (Statistical Office of the Republic of Serbia, 2017).

The study was approved by the Institutional Review Board. All participants signed an informed consent form before taking part in the study. The data were collected by trained undergraduate students as a part of their pre-exam activities. Instruments were distributed in a paper-pencil form, with guaranteed anonymity.

## Instruments

**Violent Behavior Questionnaire (VBQ: Kodžopeljić, Dinić, & Čolović, 2014).** VBQ was developed as a self-report measure of the tendency towards adult forms of physical (severe or minor), verbal, and relational/indirect violence, aimed at various people such as parents, brothers/sisters and other relatives, intimate partners, friends, and unknown persons. Originally, VBQ comprised of 25 items (five per target group of people) with a 5-point Likert response scale (1 - *never*, 2 - *once or twice a year*, 3 - *several times per year*, 4 - *several times per month*, 5 - *several times per week*). In this study, five items were taken from the VBQ by indicating children as the target group. However, one item ("machinations and plotting against a child") showed a low corrected item-total correlation (.17) with only 9 participants who chose a response other than 1, thus this item was omitted (final  $\alpha = .69$ ).

**Big Five Plus Two - Short Version (BF+2-70: Čolović et al., 2014).** This instrument was used to measure basic personality traits based on psycholexical studies in Serbia. BF+2-70 assessed seven traits of which five were related to traits from the Big Five model: Neuroticism (which included anxiety, depression, and negative affect), Extraversion (which included warmth, positive affect, and sociability), Aggressiveness (which included anger, disagreeableness, and tough-mindedness), Conscientiousness (which included self-discipline, persistence, and cautiousness), and Openness (which included intellectual curiosity and novelty seeking). Two additional dimensions were evaluative: Negative Valence, which referred to self-blame and self-criticism, but also to exploitativeness and Positive Valence, which referred to a high sense of superiority and egocentrism. BF+2-70 consisted of 70 items (10 per trait) with a 5-point Likert response scale (from 1 = *strongly disagree* to 5 = *strongly agree*). Cronbach's alpha coefficients of the scales were good, ranging from .75 to .86.

**Life Events Questionnaire (LEQ: Smederevac, Mitrović, Kodžopeljić, Dinić, & Čolović, 2011).** The LEQ included 50 events and it was designed to assess positive and negative life events which referred to different life aspects (health, love and marriage, parenting, job...), with a binary response scale (0 = *never* and 1 = *at least once in life*). Due lack of evaluative estimation of events, only 13 clearly negative events were included in this study based on the previous stud-

ies (e.g., Kane & Garber, 2004; Paxson & Waldfogel, 2002; Tajima, 2000). These events included conflicts with a partner about child upbringing, psychoactive substance abuse, lack of money, etc. ( $\alpha = .94$ ).

## Results

### Descriptives and Correlations

Frequency analysis showed that no father reported that he used a form of violence several times per week (the answer 5 on the scale, see Table 1). The majority of participants reported that they had never performed indirect violence and serious physical violence against their children, while the most frequent forms of violence were less serious physical violence followed by the verbal violence. Correlations between violence forms were in a range from .08 to .42 and it was noticeable that machinations and plotting against the child showed lower correlations with other forms. Since this item showed a low corrected item-total correlation, it was omitted from the total score. The remaining four items formed one factor which explained 51.97% of the total variance and showed high contributions to the factor (from .65 to .79).

Table 1

*Frequency and descriptives of several forms of violence against children among fathers*

Violence against children	never	once or two times	several times per year	several times per month	<i>M</i>	<i>SD</i>
Mocking and making a rough jocks	204 (78.8%)	44 (17%)	10 (3.9%)	1 (0.7%)	1.26	0.54
Machinations and plotting against a child	250 (96.5%)	8 (3.1%)	1 (0.4%)	-	1.04	0.21
Insulting and threatening	188 (72.6%)	54 (20.8%)	17 (6.6%)	-	1.34	0.60
Easier hitting, pushing	125 (48.3%)	109 (42.1%)	24 (9.3%)	1 (0.4%)	1.62	0.67
Beating with or without tools	208 (80.3%)	43 (16.6%)	8 (3.1%)	-	1.23	0.49

*Note.* *M* – mean; *SD* – standard deviation.

Although skewness and kurtosis were in recommended range (+/-2, see Gravetter & Wallnau, 2014), the scores on negative life events formed binominal distribution, thus they were normalized by using Tukey's formula. Correlations between violence against children and personality traits, and negative life events were generally low, but it could be due to small variance of scores on violence against children scale (Table 2). Among personality traits, the highest correlations with the tendency towards violence showed Aggressiveness and Negative Valence in a positive direction, and Conscientiousness in a negative direction. Negative life events were positively related to violence against children, indicating that the experience of more negative life events was related to a higher tendency towards violence against children. Correlations between negative life events and personality traits were in a range from -.20 (with Conscientiousness) to .20 (with Negative Valence).

Table 2

*Descriptives and correlations between violence against children and personality traits and negative life events*

	Violence against children	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Violence against children	1	5.44	1.66	1.38	1.85
Neuroticism	.13*	21.59	7.63	0.38	-0.66
Extraversion	-.15*	38.16	5.74	-0.55	0.64
Aggressiveness	.19**	21.75	7.49	0.50	-0.39
Conscientiousness	-.20***	40.28	5.80	-0.37	-0.39
Openness	-.06	34.76	6.92	-0.25	-0.03
Negative Valence	.19**	14.86	4.51	0.93	0.45
Positive Valence	-.07	27.87	5.97	0.29	0.96
Negative life events	.20***	5.74	4.69	0.62	-1.15

*Notes.* Scores of Negative life events were normalized in the analysis, but raw scores were presented in the Table. The score of violence against children comprised of 4 items and theoretical range was 4-16, it was 10-50 for personality traits, and 0-33 for negative life events. *M* – mean; *SD* – standard deviation.

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

## Prediction of Violence against Children

In order to test the prediction of violence against children, a hierarchical regression analysis was conducted. Before the analysis, all scores were centered,

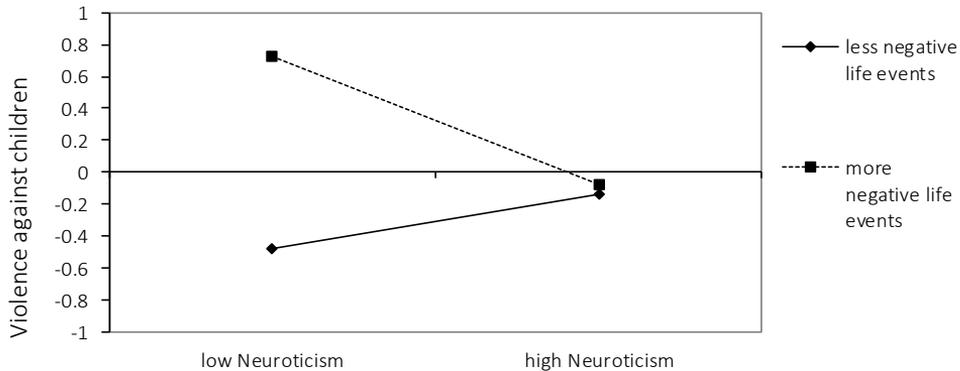
and skewness and kurtosis of standardized residuals were checked for normality ( $Sk = 1.15$  and  $Ku = 1.54$  which suggested that distribution could be considered as normal). Due to a large age range among participants, the age was entered in the first step as a control, personality traits were entered in the second step, negative life events were entered in the third step, and interaction between personality traits and negative life events were entered in the fourth step. The results showed that the model with interaction between personality traits and negative life events was significant, which explained 16% of the criteria,  $F(16,242) = 2.88, p < .001$ , and archived a significant incremental prediction of the violence against children,  $\Delta F(7,242) = 2.12, p < .05$ . In the final model, Aggressiveness and Negative life events showed significant positive effects on violence against children (Table 3). Furthermore, the interaction between Neuroticism and Negative life events was also significant, showing that fathers with lower Neuroticism and more Negative life events were more prone to violence against children (Figure 1).

Table 3

*Prediction of violence against children based on personality traits and negative life events among fathers*

	$\Delta R^2$	$p$	Predictors	$\beta$	$p$
Step 1	.01	.206	Age	.01	.84
Step 2	.07	.008	Neuroticism	-.07	.34
			Extraversion	-.07	.34
			Aggressiveness	.17	.03
			Conscientiousness	-.07	.31
			Openness	.16	.06
			Positive Valence	.10	.22
			Negative Valence	-.06	.44
Step 3	.03	.004	Negative life events	.19	.01
Step 4	.05	.041	Neuroticism x Neg. life events	-.18	.03
			Extraversion x Neg. life events	-.02	.82
			Aggressiveness x Neg. life events	.13	.10
			Conscientiousness x Neg. life events	-.05	.54
			Openness x Neg. life events	.07	.40
			Positive Valence x Neg. life events	.04	.61
			Negative Valence x Neg. life events	.09	.24

*Note.*  $\Delta R^2$  – change of multiple determination coefficient;  $p$  – significance level;  $\beta$  – standardized regression coefficient.



*Figure 1.* Interaction between Neuroticism and Negative life events on violence against children among fathers (cut off was made as  $M \pm 1SD$ ).

## Discussion

Previous studies regarding the explanation of violence against children were more focused on the characteristics of the mothers. In this study, we explored the role of fathers' characteristics in the explanation of various forms of violence against children. In line with the frequency of violent forms in other countries (UNICEF, 2014) as well as in the previous report on violence against children in Serbia (UNICEF, 2019), verbal violence was the most frequent in our study as well, followed by the less serious physical violence, while serious physical violence was the least frequent.

Although emotional and physical violence could be distinguished, due to the low presence of various violence forms in this study, all violent forms contributed to the one factor. This finding was in line with the results showing that the differentiation between emotional and physical violence could be very problematic, as these two forms usually coincided (e.g., Vachon, Krueger, Rogosch, & Cicchetti, 2015).

Results showed that correlations between personality traits and negative life events on the one side, and violence against children on the other hand, were generally low. Among personality traits, somewhat higher correlations showed Conscientiousness in a negative direction, and Aggressiveness and Negative Valence in a positive direction. Furthermore, Negative life events showed a correlation with violence against children in the same range as dominant correlates among personality traits. However, in hierarchical regression analysis, only Aggressiveness, among personality traits, showed significant prediction in the final model. Thus, frequent experience and expression of anger, roughness, and tough-mindedness in father contributed to the higher preparation of violence against children. This was in line with the previous studies in which fathers' frequent anger

experience and expression, as well as low empathy, were related to aggression and violence against children (Francis & Wolfe, 2008; Slep & O'Leary 2007). It could be assumed that antagonism, poor anger control, and stubbornness were linked to poor emotion regulation and overreaction in parent-child conflict situation, in which aggression and violence against children could be used as the unadaptive strategy for conflict resolving. Other studies also supported relation between poor emotion regulation and elevated child abuse potential (Rodriguez, Russa, & Kircher, 2015). Furthermore, more presence of negative life events related to various life domains contributed to the prediction of violence against children. The effects of stressful and negative life events were reported as a risk factor of the occurrence of violence against children in both mothers and fathers (e.g., Begle, 2010; Paxson & Waldfogel, 2002). Negative life events are mostly stressful for an individual. Some stressors can exhaust an individual's resources, resulting in maladaptation, such as depression or behavior problems (e.g., Ngo & Le, 2007), but also different kinds of violence (e.g., Lila, Gracia, & Murgui, 2013; ten Have, de Graaf, van Weeghel, & van Dorsselaer, 2013). It seems that manifestation of violence, partially influenced by negative and stressful life events, can also be directed towards one's own children in case of the fathers. It could be explained by conclusions that men, in comparison to women, are more prone to perceive stressors as more intense, and have more dysfunctional behavior reactions on stressors (Hamaideh, 2010), which also include violence towards children.

The most interesting result was about the effect of interaction between Neuroticism and Negative life events on violence against children. Thus, fathers with lower Neuroticism and the more frequent presence of Negative life events were more prone to violence against children. In previous studies, anxiety, depression, and stress, which captured trait neuroticism, were considered as risk factors for mothers in the preparation of aggression towards children (e.g., Rodriguez et al., 2016). However, results about the role of those characteristics in fathers were mixed. For example, in one group of studies, depression was the characteristic of abusive fathers (Francis & Wolfe, 2008), or it was related to a father-child conflict, but not to the anxiety-related problems (Kane & Garber, 2004). However, in another group of studies, there were no significant relations between mental health symptoms (including depression and anxiety) and the risk of aggression towards the child (Rodriguez et al., 2016). The difference in these results could be due to the presence of a moderator variable, such as cumulative negative life events included in this study. Thus, the presence of more negative life events made the family dynamic more stressful, which influenced the quality of relationships with the partner, as well as with children (e.g., Tajima, 2000). It could be assumed that the presence of more negative life events was positively related to Neuroticism, and in this study that was confirmed ( $r = .24, p < .001$ ). However, low Neuroticism in the presence of more negative life events could indicate unconcern and unaffectedness by these events, and not the resilience. Thus, low Neuroticism in this context could be interpreted as emotional coldness and lack of care, even a denial of the

problems. Furthermore, an emotionally cold and distant father is still a prototype of the father figure in Serbian culture (Mihić, 2010) in which higher tolerance towards physical punishment exists, because this type of punishment is still considered as normative (see Isaković, 2017).

There are several limitations of this study. First, the obtained effects are relatively small, thus further research need to explore the interaction between personality traits and situational stressful factors. Second, as this is a cross-sectional design, no causal explanation could be provided. Third, all variables are self-report measures, thus social desirability should be taken into account when considering the sensitivity of the measurement topic. Fourth, the number of children per parent have not been analyzed in this study, given that most of the fathers have two children. Fifth, the age of the children has not been collected, so future studies should include these characteristics as well. Further research should also include a more in-depth measure of violence against children.

In spite of these limitations, the current study offers some important implications. Considering the results of the research, it appears that the treatment of anger management and prevention programs focused on constructive strategies of conflict resolution in the parent-child interaction are needed in working with fathers. Thus, education about alternative parental discipline acts is also important. Hence, whilst working with fathers, it is necessary to pay extra attention to the development of adaptive mechanisms of coping with stressful situations.

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## EFEKTI OSOBINA LIČNOSTI I NEGATIVNIH ŽIVOTNIH DOGAĐAJA NA VRŠENJE NASILJA NAD DECOM OD STRANE OČEVA

U dosadašnjim studijama su uglavnom istraživane karakteristike majki koje su imale sklonost ka vršenju nasilja nad svojom decom. Međutim, karakteristike očeva koji ispoljavaju nasilje nad decom su manje istražene. Cilj ovog istraživanja je bio ispitivanje efekata osobina ličnosti i učestalosti negativnih životnih događaja kod očeva, kao i njihove interakcije, na vršenje nasilja nad decom. Istraživanje je sprovedeno na uzorku od 259 očeva iz opšte populacije iz Srbije. Rezultati su pokazali da veća agresivnost i veća učestalost negativnih životnih događaja značajno doprinose predviđanju nasilja nad decom od strane očeva. Nadalje, interakcija između neurotizma i negativnih životnih događaja se takođe pokazala značajnom, u smeru u kojem su očevi sa nižim neurotizmom i većom učestalošću negativnih životnih događaja više skloniji ispoljavanju nasilja nad decom. Rezultati ovog istraživanja potvrđuju da osobine ličnosti očeva mogu biti važne odrednice nasilničkog ponašanja prema deci, ali da je pojedine personološke karakteristike potrebno razmotriti u kontekstu negativnih situacionih faktora.

**Ključne reči:** nasilje nad decom, negativni životni događaji, očevi, osobine ličnosti

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## GENDER DIFFERENCES IN NEGATIVE RELATIVE ASPECTS: THE ROLE OF PERSONALITY AND COMMUNICATION STYLE<sup>2</sup>

The research aimed at the exploration of gender differences in the quality of close relationships with a mother, a father, a sibling, a partner, and a friend concerning the negative exchange in the form of conflicts and antagonism, as well as the role of personality traits and communication styles in the development of individual differences. The sample consisted of 400 participants (69% females), age from 19 to 51. Data were collected using the short version of personality questionnaire Big Five Plus Two (VP+2-70), questionnaire about close relationship quality Network of Relationship Inventory (NRI), and the scale for estimating communication skills, Communicator Style Measure (CSM). The results confirmed gender specificities concerning a degree of the negative exchange in the relationship types, and their correlations with personality traits and communication style. Females had stronger negative exchange with partners and fathers, while males had it with siblings. Extraverted females had more conflicts with their mothers. Higher Openness and Positive Valence of males was followed by greater conflicts with partner and lower Antagonism with friends, whereas the higher Consciousness was followed by greater negative exchange with siblings. Daughters with more assertive communication and sons with more expressive communication had stronger degree of confrontations with parents. On the other hand, males with more assertive communication, and females with more expressive communication had stronger conflicts with partners. Stronger negative exchange of females with fathers and partners was probably due to their greater orientation to deal with relationship problems and emancipation needs. The

<sup>2</sup> The data used in this paper were obtained during the research conducted for the purpose of developing a doctoral dissertation entitled "Individual and social determinants of close interpersonal relationships: The importance of personality traits, family interactions, and communication".

result that more assertive women had stronger degree of conflict with parents maybe the results from the fostering of the honest communication in the family of origin. Confronting more assertive women with their parents may stem from fostering honest and directive communication in the family of origin. Given that the society pressures males to be independent, the result that more expressive males had stronger negative exchange with their family of origin had been expected. These findings showed that expressiveness indicate immaturity. The willingness of more assertive men to engage in a negative exchange with a partner indicates their involvement in the relationship.

**Key words:** gender, communication style conflicts, personality traits, relationships with loved ones

## Introduction

Close interpersonal relationships determine psycho-social development of every individual. They are recognized as socialization agents and providers of the context for the early childhood development. However, they keep their important role throughout the life by helping us in satisfying our needs, reaching our goals, and staying healthy. In order to get more realistic picture of the close relationship experiences, we have to reconsider the problems in their functioning.

Firstly, the quality of close relationships is mainly investigated as a bipolar dimension for the satisfaction with romantic and marital relationships (Fincham & Rogge, 2010). The accumulation of knowledge has showed that quality includes other positive aspects of the relationship experiences like interaction, intimacy, respect and affection, as well as negative ones like conflicts, antagonisms, criticism, rejection, and violence (Furman & Buhrmester, 1985, 2009; Vangelisti, 2006). Persons experience and express to various degrees unpleasant emotions, negative thoughts and attitudes, as well as undesirable behaviors towards the loved ones. Dysfunctional events in relationships cannot be avoided (Cupach & Spitzberg, 1998), but can be used as an alarm for the change. They are the main challenge to intimacy because they can lead to a decline in the quality of the relationship and its termination. "Among the most commonly studied negative phenomena there are abuse and sexual violence, communicational and interactive problems (i.e. conflicts), the beginning and termination of relationships (i.e. jealousy), and problematic relationships" (Perlman & Carcedo, 2011, pp. 5-6).

## Conflicts and Antagonism in the Close Relationships

There are many forms of negative exchanges in close relationships, but we have constrained our research to conflict and antagonisms. The most frequently studied negative events in the close relationships are conflicts occurring in the situations in which a person does not like behavior, feelings, and thoughts of close persons (Eldridge, 2009). Authors of the instrument used for this paper have conceptualized the conflict as a quarrel and contrasting, and the antagonism as unpleasant and boring behavior (Furman & Buhrmester, 1985). They focus on the behavior and avoid to deeply explore nomological network of these constructs. They conceptualize the conflict just through its emotional aspect. The conflict is more completely defined as a dynamic process between independent parties when they experience negative emotional reactions to perceived disagreements, and interfere with the achievement of their goals (Barki & Hartwick, 2004). The antagonism is in the conflict theory understood as a result of collision between autonomy and connection (Erbert, 2000). This concept also occurs in personality theory as the negative pole of the Agreeableness or reduced motivation to maintain positive social relationships with others (Lynam & Miller, 2019). Extreme values on this dimension indicate psychopathological aggressive tendencies with

manifestations of dominance and grandiosity (Holden, Roof, McCabe, & Zeigler-Hill, 2015). It has an important role in the interpersonal circumplex model of personality, and represents a combination of coldness and dominance (Lynam & Miller, 2019).

Occurring disagreements or negative exchanges with the loved ones may represent both a constructive phenomenon and a driver of development (Shantz & Hartup, 1992, according to Jensen-Campbell, Gleason, Adams, & Malcolm, 2003). Numerous authors believe that they are natural and inevitable relational phenomena necessary for the further development of close relationships, as well as the social and emotional development of the persons involved. They represent a chance for us to get to know ourselves and others better (Graziano, Jensen-Campbell, & Hair, 1996; Sanford, 2009). However, people differ in the frequency and strength of their occurrence, as well as in the success of resolving them. These individual differences point to the importance of exploring the correlates of conflict and antagonism in close relationships, which are the factors that contribute to their occurrence, development, and resolution. Certain correlates concern the role of individuals in close relationships, others are related to the state of a close relationship, with some originating outside the close person or the relationship itself (Neff & Frye, 2009).

Important correlates of the relationship quality are personality traits, because they affect the beginning and development of the communication. In this paper, the Big Five plus Two model has been used (Čolović, Smederevac, & Mitrović, 2014), which is created as a result of a psycholexic study in our country. This model integrates the traits covered by the Big Five and two evaluation dimensions of the Positive and Negative Valence. In the shortened instrument, Neuroticism measures a negative affect and depression, Extraversion measures sociality and cordiality, Conscientiousness measures persistence, perseverance, and a responsible attitude towards obligations, Openness measures orientation towards art and various intellectual activities, while Aggression measures the anger. In terms of evaluative dimensions, Positive valence measures narcissism, while Negative valence measures manipulative tendencies and, to a lesser extent, a negative self-image. In the following text, we have overviewed relevant findings regarding a negative exchange mentioned in the same dimensions.

Agreeableness is the most important determinant of the conflict. It stems from the successful internalization of anger and frustration control (Graziano et al., 1996), and leads to conflict avoidance and forgiveness (Park & Antonioni, 2007). Pleasant individuals negatively evaluate the effectiveness of conflict resolution strategies focused on demonstrating power (Jensen-Campbell, Graziano, & Hair, 1996). Neuroticism is associated with a more frequent occurrence of negative relational events, due to their erroneous and predominantly negative interpretations followed by negative emotional states, and ineffective ways of responding to conflict situations in the form of avoidance, distancing and neglect (Berry & Willingham, 1997). Extraversion is characterized with the tendency to

initiate and maintain relationships, as well as to emotionally engage in it, but can lead to dominant and competitive behavior (Park & Antonioni, 2007). Empirical evidences have not confirmed yet that extraversion leads to more conflicts (Asendorpf & Wilpers, 1998). Conscientiousness is associated with a higher incidence of pressure-driven conflicts due to the inability to achieve ambitious goals, while Openness protects against destructive conflicts by increasing adaptability to the demands of others (Park & Antonioni, 2007). Narcissism powerfully generates conflicts in deeper relationships because it is characterized by a tendency to underestimate others, selfish and aggressive behaviors, lack of warmth, trust, and forgiveness as well as vindictiveness (Wurst et al., 2017). Greater self-esteem leads to a more success in the conflict resolution (Frone, 2000).

An important, but unclear personal correlate of conflict and antagonism is a communication style. In this study, the communicator style is "the way one verbally and paraverbally interacts to signal how literal meaning should be taken, interpreted, filtered, or understood" (Norton, 1983, p.19). Norton (1983, p.12) has assumed that the communicator style as the meta-message can either negate or reinforce the message, and can also "disconfirm, ambiguate, transcend, or obscure meaning". According to Norton (1983), communication styles are typical profiles on the descriptors Friendly, Impressive, Contentious/Argumentative, Attentive, Precise, Animated, Dramatic, Open and Dominant style, and a special self-evaluative dimension - Communication Image. Friendly style determines the absence of hostility in communication and the pursuit of intimacy. Impressive style measures the noticeability and memorability of communication. Relaxed style indicates the degree of absence of anxiety in communication. Contentious style measures the propensity to seek and provide explanations and reasoning. Attentive style measures the willingness to pay attention to what others are saying. Precise style measures the focus on accuracy and detail during communication. Animated style measures the frequent use of gesture. Dramatic style measures imagery and overstatement in communication. Open style measures an extrovert and affordable way of communication. Dominant style measures the tendency to take control in communication. The reduction of descriptors have resulted in the dimensions Active (dramatic, lively) versus Relaxed and Indirect (attentive, supportive) versus Directive (dominant, argumentative), which some also recognize as equivalent to Ozgud's dimensions of Evaluation and Dynamism (Ganster, Petelle, Baker, Dallinger, & Backus, 1981, according to Baker & Ganster, 1985; Graham, 1994). Most studies of the dimensionality of communication styles identify Assertiveness and Love (Waldherr & Muck, 2011). Non-directivity would correspond to Assertiveness, and Relaxation to Love. It is important to note that among personality-oriented researchers, the communication style is seen as a characteristic adaptation of a person who is partly genetically determined (Waldherr & Muck, 2011). It turns out that the communication style determines a conflict management (Sillars, Canary, & Tafoya, 2004). Negotiation occurs when communication is cooperative direct, conflict avoidance occurs when cooperative and

indirect, direct quarrel occurs when competitive and direct, and indirect quarrel occurs when competitive and indirect. Sometimes, factors such as socio-cultural characteristics or environmental circumstances can lead to the conflict situations. Thus, conflict situations and antagonism are more common if the loved ones experience stressful situations, e.g. at work or related to financial hardship (Frye & Karney, 2006). Relational problems are shaped by the cultural values of the environment or the ethnic group to which the person belongs, especially those concerning the determination of appropriate feelings and behavior towards close persons (Eldridge, 2009).

An important aspect to consider when studying conflicts and antagonism in close relationships is the type of close relationship itself. Close relationships differ from each other both in terms of formation and in their nature. Each relationship has its own mechanisms of functioning, serves different motivational systems, meets different needs and goals of individuals, patterns of behavior and interaction, and socio-psychological functions (Hinde, 1979; Takahashi, 2003). All this generates differences between the negative exchange specific for different relationship types. Regardless of the existence of conflicts and negative feelings, family relationships, as a type of involuntary relationship, continue to exist because they cannot be terminated formally (Koerner, 2009). When it comes to the consequences of negative relational phenomena arising from voluntary relationships (marital relations, friendships), the situation is completely different, since they most often lead to a decline in the quality of the relationship and eventual termination. It is not surprising that conflicts and antagonism, which are linked to numerous variables of physical and mental health, mortality rates and devastating effects on posterity, are the most widely studied single topics in the studies of marital relationships (Fincham, 2009).

## Gender Differences

Gender is a very important correlate of conflicts and antagonism in close relationships and numerous researchers (Black, 2000; De Goede, Branje, & Meeus, 2009; Fischer & Evers, 2011). They have explored gender differences in the various negative aspects of the close relationships i.e., the frequency of the occurrence, the way of their resolution, and the influence on the relationship.

Numerous theories are trying to describe, explain, and anticipate thoughts, feelings and behavior of males and females in the close relationships. According to socio-biological theory, the causes of the gender determined relational differences could be in different genetic predispositions, while constructivists understand gender as a social construct, and attribute these differences to the influence of the society (Hendrick & Hendrick, 2000). The most pertinent view is multideterminacy of gender differences that attribute the causes of differences to biological and personal dispositions, social and economic status, attitudes and stereotypes about gender roles (Impett & Peplau, 2006).

The importance of gender differences in close relationships sometimes seems to be overemphasized (Impett & Peplau, 2006; Jelić, Kamenov, & Huić, 2014). Although women attribute greater importance to close relationships than men (Cross & Madison, 1997), they equally value and expect honesty, trust, and responsiveness as the basic foundations of close relationships (Vangelisti & Daly, 1997). Certain gender specificities concern the behavioral level of relationships, and are most expressed in communication. Women prefer to talk about feelings and personal topics in order to develop intimacy and closeness, while men prefer impersonal topics and participation in joint activities as a way of developing relationships. In addition, women prefer to talk about relationships, which is less practiced by men (Winstok, Smadar-Dror, & Weinberg, 2018). When women support others, they tend to empathize and talk about problems, while men tend to support through specific problem-solving. Regarding the conflict resolution, men tend to minimize problems and withdraw, while women tend to talk about problems (Hendrick & Hendrick, 2000).

There is no agreement on gender differences regarding negative exchanges with the loved ones. In traditional societies, women tend to suppress their anger, and men express it more directly (Fischer & Evers, 2011). However, meta studies show that modern women are more prone to hostility and stress, while men are readier to withdraw from the quarrel and focus on the problem solving (Woodin, 2011). It seems that social roles in the conflict situation have changed. Women, on the other hand, have more negative, but also positive interpersonal exchanges as well as larger, more diverse and richer social networks, resulting in their better social integration (Schuster, Kessler, & Aseltine, 1990).

A review of the existing literature indicates that the gender specificities of the influence of personality traits, and communication styles on the negative exchanges with the loved ones are insufficiently explored. The aim of the research was to determine the existence of gender differences in expressing the dimensions of quality of close relationships, negative exchanges (conflicts and antagonism), with their relatives (a mother, a father, a sibling, a partner, a friend), as well as to determine the role of personality traits and communication styles as possible determinants of these differences.

## Method

### Sample and Procedure

The data were collected by the convenience sampling method on the territory of Novi Sad. The response rate was 75%. The sample consisted of 400 adult participants (69.3% women). The participants' age ranged from 19 to 51 ( $M = 29.12$ ,  $SD = 7.75$ ). Most participants finished high school (55.5%) or higher education (42.8%), and a small percentage of them finished just primary education

(1.8%). The participants responded on the questionnaires using the pen and paper method. Prior to administering the questionnaires, participants were clarified the purpose of the survey and guaranteed anonymity.

## Instruments

**Network of Relationship Inventory (NRI; Furman & Buhrmester, 1985).** This inventory was used to assess the participants' perceptions of supportive and negative interactions with a mother, a father, a sibling, a friend, and a partner. The NRI included 9 scales that measured various aspects of relational experience such as Affection, Admiration, Reliable alliance, Intimacy, Companionship, Instrumental help, Nurturance of the other, Conflict, and Antagonism. We used just subscales Conflict ("How much do you and this person disagree and quarrel?"), and Antagonism ("How much do you and this person get annoyed with each other's behavior?"). They consisted of three items, and ratings were done on the standard five-point Likert scales, and anchored points ranged from 1 (*little or none*) to 5 (*the most*). The Conflicts subscale measures the frequency of disagreements and the presence of feelings of anger, while Antagonism indicated the presence and expression of intolerance. Cronbach's alpha reliability for different types of the close relationships ranged from .72 to .81 for Conflicts, and .75 to .87 for Antagonism.

**Big Five Plus Two – Short Version (VP+2-70; Čolović, Smederevac, & Mitrović, 2014).** The questionnaire is based on the psycholexical approach to the structure of interpersonal traits in Serbian language. VP+2-70 is a shortened version of the questionnaire Big five plus two (Smederevac et al., 2010). VP+2-70 is consisted of seven scales: Neuroticism ("I often feel anxiety"), Extraversion ("I love people"), Conscientiousness ("I always finish what I start"), Aggressiveness ("I get angry often"), Openness ("I am a creative person"), Positive ("I am a born winner"), and Negative valence ("I sometimes think that I am a scary person"). Every scale is consisted of 10 items followed by five-point Likert scales for the response ranged from 1 (*I do not agree at all*) to 5 (*I totally agree*). In the present study, the reliability of subscales was satisfactory, and the Cronbach alpha values for each subscale's internal consistency were between .82 (Conscientiousness) and .88 (Neuroticism).

**Communicator Style Measure (CSM; Norton, 1983).** This questionnaire individually measured the specific communication style. The questionnaire contained 50 descriptions of the communication style, out of which only 45 items were scored, with the associated five-point Likert scales in range from 1 (*disagree*) to 5 (*completely agree*). Three items were reverse-scored to ensure positive responses and received higher scores. The following descriptors included the Friendly style ("I readily express my admiration for others."), Impression leaving style ("What I say usually leaves an impression on people."), Relaxed style ("I am very relaxed in communication."), Contentious style ("When I disagree with somebody, I am very quick to challenge them."), Attentive style ("I am a very careful communicator."),

Precise style ("I am very precise in communication."), Animated style ("I tend to constantly gesture when I communicate."), Dramatic style ("I dramatize a lot."), Open style ("I am an extremely open communicator."), and Dominant style ("I am dominant in social situations."), as well as the self-evaluative subscale Communication Image ("I am a good communicator").

Factor analysis, the principal component method using Promax rotation validated the latent structure of CSM questionnaire items (Appendix, Table A). Cattell's scree test and interpretability of obtained pattern matrix showed that the two-factor structure made the most sense. The items "I am very relaxed in communication.", "I am extremely open in communication.", "What I say usually leaves an impression on others.", "I am very precise in communication" had the highest loadings on the first factor, so it's called Assertiveness. This factor combined items from the subscales Relaxed, Open, Impressive, Friendly and Precise style, as well as from Communication image. This factor analysis showed that Communication image was not, as the Norton (1983) had assumed, construct dependent of all the other scales, but rather the indicator of the self-confidence that described Assertive communicators. The items "I often exaggerate as I speak to emphasize the essence", "I usually express what I want to say both physically and vocally", "Once I get wound up in a heated discussion I have a hard time to stop myself", had the loadings on the second factor. This factor combined the items in the Argumentative, Dramatic, Dominant, and Animated subscale, and was named Expressiveness. The correlation between Assertiveness and Expressiveness was .46. Other authors also identified similar dimensions (Waldherr & Muck, 2011). Assertiveness was found to be most significantly positively correlated with Extraversion and Openness, and negative with Neuroticism, while Expressiveness was correlated with Aggression, Negative Valence, and Neuroticism (Appendix, Table B). These relationships were gender independent. In the present study, internal consistency reliability coefficients for the CSM dimensions were .86 for Assertive communication, and .80 for Expressive communication.

## Data Preparation and Analysis

The Statistical Package for Social Sciences (SPSS, version 24.0, SPSS Inc., Chicago, IL, USA) was used for the data storage, tabulation, and analysis. The analyses used average summative scores based on the previous research and factor validations of individual scales. Missing data were substituted with expectation-maximization method. For VP5+2-70 and CSM scale scores, the missing percentage was below 1%. A significantly higher percentage of missing responses was observed for the NRI scale. The largest percentage of missing data was observed on the parts of NRI subscale, intended to evaluate relationships with friends (31%), followed by a mother (20%), a father (16%) and finally a brother and a partner (8%). The missing data on these scales were not replaced because the reasons for not answering them were not clear.

Descriptive statistics was used for the overview of the sample structure and study variables separately by gender. Given the significant deviation from the normal distribution of variables from the domain of the negative exchange, further choice of techniques in the analysis was limited to nonparametric methods. Gender differences were checked with Mann-Whitney test. Correlation analyzes were done separately for genders with the Spearman rho coefficient. The significance of gender differences between Spearman correlations was verified by the analysis of critical interval overlaps (Cumming & Finch, 2005). It turned out that there were no statistically significant differences despite differences in the strength that allowed for interpretation of the results, thus the obtained differences should be accepted with reservation.

## Results

### Descriptive Statistics

In this section we presented descriptive statistics for the researched variables from the domains of negative exchange with close persons, personality traits, and communication by gender (Table 1). In the domain of negative exchange, substantially positively asymmetric distributions were observed for the scores on Conflict and Antagonism with a mother, a father, a sibling and a friend, while significant negatively asymmetric distributions were observed only for Conflict with a partner in both genders. This indicated that respondents reported to a lesser extent that conflict and antagonism were present in relationships with a father, a mother, a sibling, and a friend. More extreme aberrations from normal distributions were found for females. They reported a higher degree of conflict with partners and less negative exchange with siblings. Antagonism with the partner was normally distributed in both groups. Negative valence was moderately positively skewed in the group of males. Only females had moderately positively skewed distribution of scores on the Neuroticism scale. Negatively skewed distribution was also observed for the scores on Extraversion, Openness, and Conscientiousness in both groups. Variables from the domain of communication were normally distributed. In the domain of personality traits, the severe positive skewness had distribution of females on the variable.

Table 1  
Descriptive statistics for study variables by gender

Variables	Males						Females								
	N	Min	Max	M	SD	z(Sk)	z(Ku)	N	Min	Max	M	SD	z(Sk)	z(K)	
Father	Conflict	99	1	5	2.05	0.71	5.80	7.54	236	1	4.67	2.25	0.79	4.97	2.08
	Antagonism	99	1	4.67	2.07	0.77	3.40	2.11	236	1	4.67	2.24	0.80	5.75	1.92
Mother	Conflict	99	1	4.67	2.12	0.84	3.61	1.39	219	1	4.67	2.08	0.78	6.07	2.83
	Antagonism	99	1	5	2.09	0.92	5.09	3.33	219	1	5	2.09	0.78	6.92	3.90
Sibling	Conflict	110	1	4	1.90	0.56	2.35	3.55	259	1	4.33	1.80	0.56	7.64	8.90
	Antagonism	110	1	4.33	1.92	0.61	3.26	3.39	259	1	4.67	1.92	0.58	8.91	14.02
Partner	Conflict	112	1	5	3.68	1.01	-2.68	-0.71	259	1	5	4.07	0.96	-6.81	0.95
	Antagonism	111	1	5	2.92	1.17	1.64	-1.71	259	1	5	3.51	1.14	-1.55	-3.52
Friend	Conflict	77	1	4.33	2.18	0.72	3.98	2.91	198	1	4.67	2.23	0.70	4.43	2.64
	Antagonism	77	1	4.67	2.17	0.76	4.01	2.21	198	1	4.67	2.19	0.69	5.42	3.53
Aggressiveness		123	1.1	4.8	2.75	0.80	0.11	-1.41	277	1	5	2.63	0.84	2.91	-0.93
Extraversion		123	1.5	5	3.93	0.69	-2.36	0.74	277	2	5	4.00	0.61	-4.14	1.13
Neuroticism		123	1	3.9	2.40	0.77	-0.21	-2.09	277	1	4.7	2.29	0.82	3.96	-0.60
Openness		123	1.2	5	3.92	0.71	-3.78	2.96	277	2.1	5	3.84	0.63	-2.89	-0.34
Conscientiousness		123	1.3	5	3.71	0.77	-1.56	-0.27	277	2	5.8	3.91	0.69	-2.80	-1.54
Negative Valence		123	1	4.7	2.05	0.77	4.25	1.68	277	1	4	1.73	0.65	9.33	6.53
Positive Valence		123	1.7	5	3.44	0.67	1.11	-0.81	277	1	5	3.26	0.74	-0.29	0.11
Assertiveness		123	1.76	5	3.70	0.53	-0.91	1.29	277	2.05	4.9	3.70	0.52	-1.25	0.30
Expressiveness		123	1.93	4.71	3.20	0.58	0.71	-0.76	277	1.21	4.93	3.07	0.62	-0.64	1.21

Note. N – number of participants; Min/Max – range; M – mean; SD – standard deviation; Sk – skewness, Ku – kurtosis; z – standardized values.

## Gender Differences

Mann-Whitney tests showed statistically significant gender differences in Conscientiousness,  $MWU = 14509.00$ ,  $z = -2.37$ ,  $p < 0.05$ , Negative valence,  $MWU = 12505.50$ ,  $z = -4.25$ ,  $p < .01$ , Positive valence,  $MWU = 14849.50$ ,  $z = -2.05$ ,  $p < .05$ , Conflict with a father,  $MWU = 9942.50$ ,  $z = -2.20$ ,  $p < .05$ , Conflict with a sibling,  $MWU = 12150.50$ ,  $z = -2.31$ ,  $p < 0.05$ , Conflict with a partner,  $MWU = 10893.50$ ,  $z = -3.85$ ,  $p < .01$ , and Antagonism with a partner,  $MWU = 10296.50$ ,  $z = -4.35$ ,  $p < .01$ . In the domain of negative exchange, females had significantly higher scores on the dimensions Conflict with a partner and Conflict with a father, and Antagonism with a partner only (Table 1). Males scored higher on the Conflict with a sibling. In the domain of personality traits, females had significantly higher scores on Conscientiousness and less on Negative and Positive valence.

Table 2  
*Gender differences in explored variables with Mann-Whitney test*

Variables	$MWU$	$Z$	$p$	$Me_m$	$Me_f$
Conflict with a father	9942.50	-2.20	.03	6.00	6.00
Antagonism with a father	10440.50	-1.57	.12	6.00	6.00
Conflict with a mother	10483.00	-0.48	.63	6.00	6.00
Antagonism with a mother	10537.00	-0.41	.68	6.00	6.00
Conflict with a sibling	12150.50	-2.31	.02	6.00	5.00
Antagonism with a sibling	14018.50	-0.25	.80	6.00	6.00
Conflict with a partner	10893.50	-3.85	.00	12.00	13.00
Antagonism with a partner	10296.50	-4.35	.00	8.00	11.00
Conflict with a friend	7146.00	-0.84	.40	6.00	6.00
Antagonism with a friend	7218.00	-0.71	.48	6.00	6.00
Aggressiveness	15338.00	-1.59	.11	2.70	2.60
Extraversion	16132.00	-0.85	.40	4.00	4.00
Neuroticism	15346.00	-1.58	.11	2.30	2.20
Openness	15662.50	-1.29	.20	4.00	3.90
Conscientiousness	14509.00	-2.37	.02	3.70	4.00
Negative valence	12505.50	-4.25	.00	1.90	1.60
Positive valence	14849.50	-2.05	.04	3.40	3.30
Assertiveness	16900.50	-0.13	.90	3.71	3.67
Expressiveness	15183.00	-1.74	.08	3.14	3.07

*Note.*  $MWU$  - Mann-Whitney-U statistic;  $p$  - significance level;  $Me$  - median.

## Relationships between Personality Traits, Communication Styles and Negative Exchanges with the Loved Ones by Gender

In order to check relationships of personality traits, communication styles, and negative exchanges with the loved ones by gender, we used Spearman rho correlations separately for males and females (Table 3). Strengths of correlations were in the range from weak to moderate.

Overview of correlations showed us that Aggressiveness, Neuroticism, and Negative valence had stronger positive correlations, while Conscientiousness had more negative correlations with dimensions of negative exchange in all types of relationships. Aggressiveness was positively weakly correlated to both dimensions of the negative exchange with a father, a mother, and a sibling in both genders. However, results showed that Aggressiveness was slightly more correlated with dimensions of negative exchanges in the group of women (.23-.40) than men (.20-.37), especially in the relationship with a mother. The only exception was the relationship with a father, where the correlation was slightly stronger for males. For women, there were observed positive correlations between Aggressiveness and both dimensions of negative exchange with friends, while the only positive correlation for men was in Conflicts with friends. The weakest correlation was found for the relationship between Aggressiveness and Antagonism with a partner in the group of females. A higher score on Neuroticism was followed by a higher degree of negative exchange on both dimensions in all types of relationships except in the relationship with a partner. We found a negative correlation between Neuroticism and Conflict with a partner in both genders. Neuroticism was more relevant for the negative exchange in relationships, especially conflict with fathers of males, than for women. Negative valence was positively correlated with both dimensions of negative exchange in all types of relationships except with a partner. Values of Pearson correlation coefficients were almost the same. Conscientiousness was negatively correlated with both dimensions of negative exchange with the father. Correlations of Conflict with the father and Antagonism with the father were quite stronger in the group of males than in the group of females, respectfully. Conscientiousness was negatively correlated with the Antagonism in the exchange of a mother and a friend. In the group of men, Conscientiousness was negatively correlated with Conflict and Antagonism with a sibling, as well as with Conflict with a friend. All significant correlations between Conscientiousness and dimensions of negative exchange were slightly stronger for men. Extraversion was very important personality trait for negative exchange with partners. Its correlations with Conflict and Antagonism in the group of males were stronger than its correlations with Conflict and Antagonism in the group of females. Higher scores on Extraversion were followed by higher scores on the negative exchange subscales with partners in both genders. We found negative correlations of Extraversion and both dimensions of negative exchange with the mother just for females.

Table 3  
Spearman correlations between constructs according to gender

Variable		Negative exchange											
		Father		Mother		Sibling		Partner		Friend			
		Conf	Antag	Conf	Antag	Conf	Antag	Conf	Antag	Conf	Antag	Conf	Antag
Aggressiveness	m	.37**	.25*	.30**	.23*	.28**	.20*	-.06	-.11	.23*	.14	.23*	.14
	f	.33**	.32**	.39**	.40**	.33**	.23**	.04	.13*	.30**	.27**	.30**	.27**
Extraversion	m	-.12	-.02	-.09	-.10	-.08	.00	.35**	.31**	-.13	-.16	-.13	-.16
	f	-.06	-.08	-.16*	-.17*	.04	-.05	.23**	.20**	-.03	-.06	-.03	-.06
Neuroticism	m	.35**	.26**	.25*	.21*	.26**	.09	-.24*	-.16	.23*	.23*	.23*	.23*
	f	.24**	.24**	.20**	.20**	.21**	.17**	-.14*	-.04	.31**	.26**	.31**	.26**
Openness	m	-.17	-.09	-.10	-.09	-.12	-.03	.20*	.15	-.17	-.23*	-.17	-.23*
	f	-.10	.00	-.14*	-.06	-.06	-.04	.07	.07	-.09	-.04	-.09	-.04
Conscientiousness	m	-.35**	-.32**	-.14	-.25*	-.25**	-.21*	.12	.14	-.24*	-.30**	-.24*	-.30**
	f	-.15*	-.21**	-.12	-.20**	-.10	-.10	.01	-.03	-.13	-.22**	-.13	-.22**
Negative valence	m	.35**	.33**	.24*	.29**	.34**	.26**	-.10	-.11	.31**	.26*	.31**	.26*
	f	.29**	.30**	.30**	.32**	.28**	.23**	-.06	.06	.29**	.27**	.29**	.27**
Positive valence	m	-.06	.00	.13	.09	-.01	.04	.20*	.18	-.09	-.24*	-.09	-.24*
	f	-.08	-.05	.02	.07	.02	-.02	.06	.06	.02	.04	.02	.04
Assertiveness	m	-.06	-.06	.02	-.04	-.02	-.03	.25**	.26**	-.07	-.15	-.07	-.15
	f	-.18**	-.13*	-.18**	-.08	-.05	-.08	.09	.14*	-.09	-.04	-.09	-.04
Expressiveness	m	.25*	.19*	.25*	.19*	.15	.11	.12	.03	-.01	-.10	-.01	-.10
	f	.07	.14*	.08	.16*	.14*	.11	.05	.17**	.04	.11	.04	.11

Notes. Conf – Conflicts; Antag – Antagonism.

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

Openness and Positive valence did not have many significant correlations with the dimensions of negative exchange. In the group of men, Openness was positively correlated with Conflict with a partner, and negatively with Antagonism with friends. In the group of women, greater Openness resulted in less Conflict with the mother. Males had a mild positive correlation between Positive valence and Conflict with the partner, and negative with Antagonistic exchanges with friends.

Men with higher Assertiveness had a greater degree of Conflict and Antagonism with the partner, while women just had a higher degree of Antagonism with the partner. In the group of women, Assertiveness was weakly negatively associated with both dimensions of negative exchange with the father, and only with Conflict with the mother. Expressiveness was slightly positively correlated with both dimensions of the negative exchange with the father and the mother in the group of men. In the group of women, Expressiveness was weakly positively associated with Antagonism in exchange with the father, the mother, and the partner. In addition, it was weakly positively associated with Conflicts in exchange with the sibling.

## Discussion

In this paper we explored the gender differences in the negative interpersonal exchange (conflicts and antagonism) with the loved ones (a mother, a father, a sibling, a partner, a friend), as well as gender's moderating role in the relationship of personality traits, communication style, and negative exchange. The study found gender differences in the degree of negative exchanges with the loved ones. In addition, it showed that gender weakly moderated effects of personality traits and communication styles on the degree of negative exchanges.

Positively skewed distribution of scores on the dimensions of negative exchange with members of the family of origin and friends for both genders, but especially for females, indicated that our participants had a tendency to avoid conflicts and antagonism with them. Family relationships continued to exist as a lifelong base of attachment, support, and assistance, to which individuals were directed almost daily (Lawton, Silverstein, & Bengtson, 1994), but negative exchanges declined with growing of distance and decreasing common tasks. However, females had obviously stronger tendency to confront more with their partners. These results showed that relational conflicts relocated from the family of origin to the family of procreation, or just to the relationship with the partner that dominate in adulthood (Collins & Madsen, 2006). This increased negative exchange was partly caused with the problems that cohabitation or functioning in dyad brought. Given that the partnership is a type of voluntary relationship and thus more sensitive to negative experiences, greater mutual attention and effort are needed. Voluntary in nature, a friendly relationship records a less negative ex-

change. Since adulthood, the social network of close friends has narrowed, but it retains an important role in providing support and assistance (Carstensen, 1992). In addition, developmentally viewed, in the adult friendships, friends are more supportive than competitive.

The study has pointed to certain gender differences in negative relational experiences. The main finding is that women have more pronounced negative exchanges with their partner and the father. The results could be partly attributed to the tendency of women to value and focus on close relationships (Cross & Madison, 1997). Their engagement encourages them to make the effort to maintain closeness and attachment which requires discussing relational problems and accepting changes (Winstok et al., 2018). Men, on the other hand, avoid discussing relational problems and tend to retreat in the face of the woman's efforts to change something. Findings that women tend to have more negative exchange with important male figures indicate their need for emancipation, as well as the protest against social roles of males as the authority that is still valid in our society (Petrović, 2006). It seems that the unconditional acceptance of the males' authority and demands is replaced with questioning their authority, conflict situations and intolerance. It is possible that women transfer the work model of relation from the father to the partner, continuing to practice a similar style of communication. A possible explanation of the increased negative exchange in the relationship daughter-father could be in the decline of interactions, and feelings of closeness and intimacy that starts in adolescence (Kapor Stanulović, according to Petrović, 2006).

The study indicates that the gender weakly moderates correlations between personality traits and negative exchange with the close ones. We can speak more about gender similarities concerning the relationships between certain personality traits and negative relational exchange. Aggressiveness, Neuroticism, and Negative valence have exerted adverse effects on close relationships, in both genders, which is in line with the previous research (Robins, Caspi, & Moffit, 2002). Their detrimental effects come out of the misinterpretation of relational events as overwhelmingly negative, threatening, and hostile (Bradbury & Fincham, 1991; Graziano et al., 1996). Consequently, more negative emotional states and reactions occur in an interpersonal situation, which diminishes the quality of the relationship (Furr & Funder, 1998). The obtained positive correlations of Negative valence with dimensions of negative exchange have been expected because of negative experiences of self that indicate lack of integration and unwillingness to engage more deeply with oneself, probably indicating an avoidance to deal with others as well. However, in this research, Neuroticism and Extraversion had generally stronger effects on the negative exchange of males, while Aggressiveness had more effects on the negative exchange of females. It was probably because the rejecting of gender determined social role, like in the case of more aggressive woman or neurotic men, led to unacceptance and various problems with the close ones. Extraversion was accompanied with more conflicts with a partner

regardless of gender. The fact that it was more correlated in the group of males was explained with their higher dominance and engagement in the relationship that probably resulted in stronger females' protest. In the group of females, Extraversion was a protector from negative exchanges with the mother. This could be explained with the positive effect of warmth, and the positive affect on the maintenance of relationships between mothers and daughters. Gender was not a moderator of relationships between negative valence and dimensions of negative exchange.

Conscientiousness has had a positive effect on close relationships in both genders, contradicting to the assumption that the ambition it incorporates would have a detrimental effect on relationships. It has a special role in the protection from Antagonism that is more detrimental type of the negative exchange. Conscientious persons are committed to close relationships and take relational obligations seriously (Heller, Watson, & Ilies, 2004). They are more likely to contact family members (Asendorpf & Wilpers, 1998), and to work on reducing conflicts with close persons (Parker, Lüdtke, Trautwein, & Roberts, 2012). This conflict solving orientation is probably partly due to their active and constructive approach to problems (Heller et al., 2004). This trait has been more important protector of negative exchange for males. Males that are more committed to relationships through solving actual problems and fulfilling their obligations report less negative exchange. It seems that their close persons accept them more as they accept their social roles to the greater extent.

Males with higher Openness and Positive Valence have had more conflicts with a partner and less antagonism with friends. The question is whether this finding can be explained by the atypical willingness of the more opened men to reconsider their relationship with a partner, and to unconditionally accept their friends due to increased tolerance. On the other hand, Positive valence, as an indicator of narcissism, certainly can lead to the humiliation of partners (Wurst et al., 2017). Females with higher openness have reported less conflicts with the mother, which is probably caused by their greater tolerance and orientation to understanding others. Earlier research suggests an inconsistent pattern of correlations between openness and close relationships (Asendorpf & Wilpers, 1998, Heller et al., 2004). This is partly explained by the fact that more open persons strive to understand others and approach problems constructively (Park & Antonioni, 2006). The reason for the insignificance of the other correlations can be partly attributed to the intellectual orientation of our Openness scale.

In the operationalization of the communication style, we have chosen the two-factor model of Assertiveness and Expressiveness (Waldherr & Muck, 2011). Their relationships with personality traits let us to understand them better. Assertiveness has indicated a constructive approach to communication and Expressiveness as a dysfunctional approach. The results of the study have indicated that both communication factors predominantly color relational experiences. In general, assertive style is protective for women while expressive style is a generator

of negative exchanges, especially in relationships with the family members. Males with higher assertive style have had more negative exchanges in the domain of partnerships, while females have only had higher antagonism with the partner. This probably stems from the fact that more involvement and honesty in the relationship leads to the orientation on problem-solving, and consequently to the dealing with existing conflicts. In the group of women, assertiveness has led to less conflict with their parents. This result may indicate that non-authoritarian family relationships and allowance to participate in the decision making have helped them to develop an assertive style, and also had a beneficial effect on the quality of closeness and attachment within the family of origin. This finding also confirms that engagement in communication and problem-solving has more positive effects in the long run (Sillars et al., 2004). The expressive style of communication in both genders proves to be unfavorable, especially for relationships with parents, especially in the group of men. It can be attributed to its accompanying negative relational messages in the form of stressing personal power and domination, disrespect for the interlocutor that can create the relational tension and intolerance (Dunbar & Burgoon, 2005). The expressive style does not follow the stereotype of male as a calm and intelligent authority, but rather as a nervous and instable, feminized person. Correlations of expressive communication with negative exchange have been weaker or insignificant in the group of males, but it also disturbs the quality of most relationships. The lesser importance of expressiveness is likely to stem from their orientation to maintain close relationships pleasant (Mihic & Petrović, 2009). Such a relationship requires an affective communication orientation, which provides ego support, listening, respect, comfort, as necessary for a sense of closeness and attachment (Burlison, 2003). Since the conflicts and antagonisms have been more expressed in the case of "gender-inappropriate behavior", we conclude that it confirms our expectations deduced from the social role theory that our social environment protest if we do not behave according to stereotype.

The generality of the study results is limited by weak to moderate correlations and statistically insignificant gender differences. On the other hand, interpreted differences are indicative from the point of significance level of correlations. A further problem is the transversal study design and collection of information just through a self-report. In the field of conflicts, techniques based on dyad research, collecting assessments of other conflict participants, or observing relationships may be more appropriate. Another issue is the uncontrolled effects of adulthood developmental stages and specificities of the family in which they currently live. A shortage of substantial differences in correlations of conflicts and antagonism with other variables has indicated that it should be worked on the discriminant validity of these concepts. There is a lack of relationship with own children in NRI (Furman & Buhrmester, 1985). Children are very important part of the social network of many adults, and it would be important to know if they, as members of the family of procreation, suffer because of frequent and destructive negative

exchange. There is vagueness of the reasons for not responding to the NRI for some roles, and further processing of such incomplete data is needed. It would be useful in the future to ask participants to explain why they decide to not answer questions concerning specific relationship type. It may be more convenient for the respondents to identify the individuals who make up the most important parts of their network, and to respond accordingly. It would be also good to explore gender specific determinants of negative exchange as mechanism to maintaining healthy boundaries with close persons.

Results can be used in creating the programs for supporting family in resolving marital conflicts. The result that partners are most exposed to the negative aspects of relationships indicates the need to build programs to strengthen partnerships through mastering constructive conflict resolution skills and assertive communication.

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## Appendix

Table A  
*Pattern matrix for two factors solution on the items of CSM*

Items	F1	F2
3 I readily express my admiration for others. (friendly)	.38	
4 What I say usually leaves an impression on people. (impression leaving)	.59	
5 I leave people with the impression of me which they tend to remember. (impression leaving)	.59	
6 To be friendly, I habitually acknowledge verbally other's contribution. (friendly)	.54	
7 I am a very good communicator (communication image)	.46	
8 I have some nervous mannerisms in my speech. (relaxed R)	.51	-.52
9 I am a very relaxed in communication. (relaxed)	.63	
10 When I disagree with somebody, I am very quick to challenge them. (contentious)		.46
11 I can always repeat back to a person exactly what was meant. (careful)	.52	
13 I am a very precise in communicator. (precise)	.59	
14 I leave a definite impression on people. (impression leaving)	.53	
15 The rhythm or flow of my speech is sometimes affected by my nervousness. (R) (relaxed)	.40	-.52
16 Under pressure I come across as a relaxed person. (relaxed)		
17 My eyes reflect exactly what I feel when I communicate. (animated)	.43	
18 I dramatize a lot. (dramatic)	-.36	.47
19 I always find it is very easy to communicate on one-on-one basis with strangers. (communication image)	.36	
20 Usually, I deliberately react in such a way that people know that I am listening them. (careful)		.45
21 I really like listening to people carefully. (careful)	.45	
22 Very often I insist that others attach documents or present some evidence of what they are saying. (precise)		.47
23 I'm trying to take control when I'm dominant. (dominant)		.61
24 It burdens me when a discussion is left during which there is something unclear. (contentious)		.48
25 In most social situations, I usually perform strongly. (dominant)		.47

26	My non-verbal communication is very expressive in social situations. (animated)	.45	
27	The way I speak usually impresses people. (impression leaving)	.56	
28	Usually in communication I act on people. (friendly)	.56	
29	While communicating I actively use a lot of facial expressions. (animated)	.37	
30	I often exaggerate while speaking to emphasize the substance. (dramatic)	.64	
31	I'm very careful while communicating. (careful)	.50	
32	As a rule, I openly express my feelings. (open)	.47	
33	I don't usually tell others much about myself until I get to know them well. (open)		
34	I regularly tell jokes, anecdotes and stories when I communicate. (dramatic)	.22	
35	I tend to constantly gesture when I communicate. (animated)	.42	
36	I'm extremely open communicator. (open)	.60	
38	I'm very good at communicating in a small group of strangers. (communication image)	.35	
39	During discussions, I insist on precise definitions (precise)		
40	In most social situations I often engage in communication. (dominant)	.36	.37
41	I find it extremely easy to maintain the conversation with members of the opposite sex whom I just met. (communication image)	.38	
42	I like to be precise in communication. (precise)	.48	
44	Usually both physically and vocally I express what I want to say. (dramatic)	.63	
46	It's easy to give away personal things about myself. (open)	.33	
47	I am dominant in social situations. (dominant)	.45	
48	I'm always ready for controversy. (contentious)	.55	
49	Once I get wound up in a heated discussion, I have a hard time stopping myself (contentious)	.61	
50	I am always very friendly in communication (friendly)	.56	
	Eigenvalue before rotation	8.88	3.15
	Eigenvalue after rotation	7.78	6.85
	Explained variance before rotation (%)	20.17	7.15

Table B  
*Correlations amongst dimensions of communication and personality traits by gender*

	Males (N=123)		Females (N=277)	
	Assertiveness	Expressiveness	Assertiveness	Expressiveness
Aggressiveness	-0.01	.50**	-0.03	.47**
Extraversion	.59**	.24**	.61**	.27**
Neuroticism	-.26**	.23*	-.20**	.07
Openness	.53**	0.16	.49**	.29**
Conscientiousness	.24**	-0.12	.17**	-0.05
Negative valence	-0.04	.43**	-.14*	.34**
Positive valence	.37**	.39**	.46**	.35**

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

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**RODNE RAZLIKE U NEGATIVNIM  
RELACIJSKIM ASPEKTIMA:  
ULOGA OSOBINA LIČNOSTI I  
KOMUNIKACIJE**

Istraživanjem su proverene rodne razlike u dimenzijama kvaliteta bliskih odnosa – negativnim razmenama (konflikti i antagonizam) sa bližnjima (majka, otac, sibling, partner, prijatelj), kao i utvrđivanje uloge osobina ličnosti i stilova komunikacije kao mogućih individualnih determinanti tih razlika. Uzorak je sačinjavalo 400 ispitanika iz Novoga Sada i okoline (69,3% ženskih), starosti od 19 do 51 godina. Prikupljanje podataka je realizovano putem skraćene verzije upitnika ličnosti Velikih pet plus dva (VP+2-70), upitnika kvaliteta bliskih odnosa Inventara mreže socijalnih odnosa (NRI) i skale za operacionalizaciju komunikacije Mera stilova komunikacije (CSM). Rezultati potvrđuju rodne specifičnosti izraženosti negativne razmene u pojedinim tipovima odnosa i njihovih veza sa osobinama ličnosti i stilovima komunikacije. Žene su imale veću negativnu razmenu s partnerom i ocem, a muškarci sa siblingom. Ekstravertnije žene se više sukobljavaju s majkom. Veću Otvorenost i Pozitivnu valencu muškaraca prate veći Konflikti s partnerom, a manji Antagonizam s prijateljima dok veću Savesnost prati veća negativna razmena sa siblingom. S roditeljima se sukobljavaju ćerke sa asertivnijom i sinovi s izražajnijom komunikacijom dok se s partnerima sukobljavaju asertivniji muškarci i izražajnije žene. Veća spremnost žena da se upuštaju u negativne razmene s očevima i partnerima verovatno proizlazi iz njihove veće usmerenosti na bavljenje relacijskim problemima i težnje ka emancipaciji. Sukobljavanje asertivnijih žena s roditeljima možda proizlazi iz negovanja iskrene komunikacije u primarnoj porodici. S obzirom da društvo forsira samostalnost muškaraca, očekivan je nalaz da će se s primarnom porodicom sukobljavati izražajniji muškarci. Ovaj rezultat ukazuje da je izražajnost i donekle izraz nezrelosti. Spremnost asertivnijih muškaraca na negativnu razmenu s partnerom ukazuje na njihovu veću uključenost u odnos.

**Ključne reči:** konflikti, osobine ličnosti, relacije sa bliskim osobama, rodne razlike, stil komunikacije

## UPUTSTVO AUTORIMA

Za objavljivanje u časopisu *Primenjena psihologija* prilažu se isključivo originalni radovi koji nisu prethodno štampani i nisu istovremeno podneti za objavljivanje negde drugde. U časopisu se objavljuju empirijski i pregledni radovi. Pregledni rad treba da sadrži originalan, detaljan i kritički prikaz istraživačkog problema ili područja u kome je autor ostvario određeni doprinos, vidljiv na osnovu autocitata. Radovi koji nisu pripremljeni prema ovom uputstvu, neće se recenzirati. Rukopisi se šalju isključivo putem platforme za prijavu, koja je dostupna na: <http://primenjena.psihologija.ff.uns.ac.rs/index.php/pp/about/submissions>.

U časopisu se mogu objavljivati radovi na srpskom i srodnim jezicima bivšeg srpsko-hrvatskog govornog područja, kao i na engleskom jeziku. Ukoliko rad nije na srpskom jeziku, autorova obaveza je da ga lektoriše. U slučaju jezika srodnih srpskom, redakcija zadržava pravo da pojedine termine prilagodi srpskom jeziku zarad boljeg razumevanja teksta. Sve predložene izmene se dostavljaju autorima na uvid i odobrenje.

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**Recenziranje i objavljivanje.** Svi radovi se anonimno recenziraju od strane dva recenzenta. Uredništvo na osnovu primljenih recenzija donosi jednu od sledećih odluka o rukopisu: **A** - prihvatanje, **B** - prihvatanje uz korekcije, **C** - odbijanje uz sugestiju da se rad u velikoj meri koriguje i ponovo pošalje ili **D** - odbijanje. Uredništvo pismeno obaveštava autora o odluci. Ukoliko autor ponovo podnosi korigovani rad, dužan je da u obrascu recenzije odgovori na sve sugestije upućene od strane recenzenta.

**Format rada.** Rad mora biti napisan u tekst procesoru Microsoft Word, na stranici formata A4, fontom Times New Roman (12 tačkica), latinicom, sa razmakom od 1.5 reda, sa marginama od 2.54 cm (odnosi se na sve margine). Rad treba da bude dužine do jednog autorskog tabaka (do 30000 znakova, sa razmacima, bez referenci i priloga), a ukoliko je reč o kratkom izveštaju, rad treba da bude do 5 000 znakova (s razmacima) bez referenci i priloga. Redni brojevi strana treba da budu dati u gornjem desnom uglu, zajedno sa zaglavljem koje sadrži skraćeni naslov rada (tzv. *running head*), pisan velikim slovima, bez imena autora. Zaglavlje ne sme imati više od 50 karaktera. Paginacija bi trebalo da počinje od prve strane.

Rad treba da bude strukturiran u skladu sa IMRAD formatom i pravilima koja su definisana u 6. izdanju Priručnika Američke psihološke asocijacije (*APA Publication Manual*). Shodno tome, rad treba da sadrži odeljke *Rezime* sa ključnim rečima, *Uvod*, *Metod*,

*Rezultati*, *Diskusija*, *Zaključak* (opciono), *Reference*, *Prilozi* (opciono), kao i naslov i rezime sa ključnim rečima na engleskom jeziku.

**Naslovna strana.** Naslov treba da bude što koncizniji, ali i dovoljno precizan. Preporuka APA standarda je da naslov ne sadrži više od 15 reči. Ukoliko se u članku izveštava o nekom instrumentu koji nije opštepoznat široj naučnoj i stručnoj javnosti, naziv instrumenta je potrebno navesti u celini u naslovu rada, a ne samo skraćenicu. Ukoliko je rad nastao u sklopu projekta, iza naslova rada treba staviti fusnotu koja sadrži naziv finansijera projekta i broj projekta. Ukoliko je deo rezultata izlagan na skupu, u fusnoti treba dati podatke o skupu. Iza naslova rada slede imena autora i njihove afilijacije. Iza imena autora za korespondenciju treba staviti fusnotu koja sadrži e-mail adresu autora. Naslov rada, imena autora i afilijacije autora daju se na prvoj strani, bez ostatka teksta. Ova strana se, kao poseban dokument, prilaže na platformu, odnosno odvojeno od samog rukopisa.

**Rezime.** Rezime treba da bude dužine do 250 reči. Na kraju rezimea treba dati ključne reči (do pet ključnih reči). Ukoliko je rad na srpskom jeziku, potrebno je priložiti naslov, rezime i ključne reči i na engleskom jeziku. Ukoliko je rad na engleskom jeziku, poželjno je priložiti duži rezime (do 2 strane) na srpskom jeziku. Rezime po pravilu ne sadrži reference, sem ukoliko je to neophodno.

**Naslovi odeljaka.** Naslovi odeljaka (*Metod*, *Rezultati* i sl.) pišu se **podebljanim** slovima, „rečeničnim“ formatom (velikim početnim slovom), centrirano. Podnaslovi se pišu **podebljanim** slovima, poravnato u levo i u „rečeničnoj“ formi. Prvi podnaslovi stoje na marginama, a njima subordinirani podnaslovi pišu se uvučeno (takođe **podebljano**, u „rečeničnoj“ formi, s tačkom na kraju). Naslovi četvrtog nivoa se formatiraju na isti način, ali se stavljaju u *kurziv*. Nazive instrumenata treba navoditi kao subordinirane podnaslove u okviru odeljka *Instrumenti*, dakle uvučeno, **podebljano**, u „rečeničkoj formi“, s tačkom na kraju. Referenca za instrument je deo ovog podnaslova. Na primer:

## Metod

### Uzorak i postupak

### Instrumenti

**Eysenckov upitnik ličnosti (Eysenck Personality Questionnaire - EPQ: Eysenck & Eysenck, 1975).**

## Skala zadovoljstva životom (Satisfaction With Life Scale - SWLS: Diener, Emmons, Larsen, & Griffin, 1985).

### Rezultati

#### Validnost Upitnika o veštinama komunikacije

##### Faktorska analiza.

##### Interkorelacije konstrukata.

##### *Korelacije veština komunikacije sa osobinama ličnosti.*

##### *Korelacije veština komunikacije sa emocionalnim kompetencijama.*

##### Analiza puta.

**Doslovno citiranje.** Svaki citat koji je direktno preuzet iz teksta, bez obzira na dužinu, treba da prati referenca sa brojem strane. Za svaki citat duži od 350 znakova autor mora imati pismeno odobrenje vlasnika autorskih prava koje treba da priloži.

**Tabele.** Tabele i grafikoni treba da budu sačinjeni u Wordu ili nekom Word-kompatibilnom formatu. Tabele i grafikone iz statističkih paketa treba prebaciti u Word. Iste podatke ne treba istovremeno prikazivati i tabelarno i grafički. Podaci koji su već dati u tabeli ili na grafikonu, ne smeju se ponavljati u tekstu, već se treba samo pozvati na njih. Tabele i grafikone je potrebno pozicionirati u samom radu, odnosno nije potrebno da se prilažu kao posebni dokumenti na platformu, već u sklopu rukopisa. Svaka tabela treba da bude označena brojem i adekvatnim nazivom. Broj tabele treba da bude napisan običnim slovima, a naziv tabele treba da bude dat u sledećem redu, *kurzivom*. Broj i naziv tabele nalaze se iznad tabele, poravnati u levo. Tabele ne smeju da sadrže vertikalne linije. Redovi tabele ne treba da budu razdvojeni linijama, ali zaglavlje tabele mora da bude linijom odvojeno od ostalih redova.

Vrednosti u tabelama bi trebale da budu date u sredini kolone, sa decimalnim mestima pozicioniranim levim tabulatorom.

Korektan prikaz tabele:

Tabela 1  
Korelacije nasilnog ponašanja i osobina ličnosti

EPQ-R	Nasilno ponašanje		
	Fizičko nasilje	Verbalno nasilje	Relaciono nasilje
Neuroticizam	.23	.26	.12
Ekstraverzija	.18	.25	.36
Psihoticizam	.45	.33	.39

Nekorektan prikaz tabele:

**Tabela 1: Korelacije nasilnog ponašanja i osobina ličnosti**

EPQ-R	Nasilno ponašanje		
	Fizičko nasilje	Verbalno nasilje	Relaciono nasilje
Neuroticizam	0.236	0.261	0.122
Ekstraverzija	0.187	0.255	0.361
Psihoticizam	0.454	0.336	0.397

**Grafikoni i slike.** Slike treba slati u elektronskoj formi sa rezolucijom od najmanje 300 dpi. Štampa časopisa je crno-bela, pa se autori mole da prilagode tabele, grafikone i slike crno-belju štampi. Ukoliko se koristi ilustracija iz štampanog izvora nužno je pismeno odobrenje vlasnika autorskih prava. Naziv slike treba da bude prikazan ispod slike nakon oznake rednog broja. Na primer:

*Slika 1.* Schwartzov model univerzalnih ljudskih vrednosti

**Rezultati statističke obrade.** Rezultati statističkih testova treba da budu dati u sledećem obliku:  $F(1, 9) = 25.35, p < .001$  i slično za druge testove (npr.  $\chi^2(5, N = 454) = 5.311, p > .10$  ili  $t(452) = 2.06, p < .05$ ). Treba navoditi manji broj konvencionalnih  $p$  nivoa (.05, .01 ili .001). Ukoliko je broj teorijski manji od 1 (npr.  $\alpha, r$ , opterećenja u faktorskoj analizi,  $p$  nivo i sl.), nula se ne stavlja ispred tačke. Po pravilu, nazivi statističkih testova i oznaka treba da budu napisani u *kurzivu*, sem ako je reč o grčkim simbolima koji se **ne pišu** u kurzivu.

**Decimalni brojevi.** Uvažavajući statističke konvencije, decimalne brojeve treba pisati sa tačkom. Sve decimalne zapise treba zaokružiti na dve decimale, sem

kada se navode indikatori fita, *p* nivo značajnosti i sl. gde je i podatak o razlikama na trećoj decimali bitan.

**Navođenje referenci u tekstu.** Imena stranih autora navode se u originalu, npr. Dimanche (1990), ili kada je potrebno u padežnom obliku „...rezultati Dimanchea (Dimanche, 1990)...“, s tim što je onda potrebno u zagradu staviti referencu.

Ukoliko referenca ima **dva autora**, oba se navode u tekstu, npr. (Costa & McCrae, 1992). Ukoliko je u pitanju domaća referenca, umesto znaka „&“ navodi se „i“, npr. (Jovanović i Petrović, 2011).

Ukoliko rad ima **3 do 5 autora**, u prvom navodu se pominju prezimena svih, a u kasnijim navodima samo prezime prvog autora i skraćenica „et al.“ za strane reference, ili „i sar.“ za domaće. Na primer, na engleskom jeziku, prvi navod bi imao formu (Roberts, Bogg, Walton, Chernyshenko, & Stark, 2004), a naredni (Roberts et al., 2004). Na srpskom jeziku, prvi navod bi imao formu (Novović, Biro i Nedimović, 2011), a naredni (Novović i sar., 2011).

Ukoliko dva rada iz iste godine imaju istog prvog autora, a ostali su različiti, treba navesti onoliko imena autora koliko je potrebno da bi se reference mogle jasno razlikovati u tekstu. Na primer, reference (Black, White, Brown, & Green, 1991) i (Black, Brown, White, & Green, 1991) imaju istog prvog autora i istu godinu izdanja. U ovom slučaju, u tekstu bi se navodile kao (Black, White, et al., 1991) i (Black, Brown, et al., 1991).

Ukoliko rad ima **šest ili više autora**, u tekstu se navodi samo prezime prvog i skraćenica „et al.“ ili „i sar.“.

**Spisak referenci.** U spisku literature navode se samo reference na koje se autor pozvao u radu, abecednim redom po prezimenima autora. Ukoliko rad sadrži nekoliko referenci čiji je prvi autor isti, najpre se navode radovi u kojima je taj autor jedini autor, po rastućem redosledu godina izdanja, a potom se navode radovi u odnosu na abecedni red prvog slova prezimena drugog autora (ukoliko ima koautore). Ukoliko se navodi više radova istog autora u jednoj godini, godine treba da budu označene slovima a, b, c, npr. (1995a), (1995b). Za svaku referencu u popisu literature potrebno je navesti i **DOI broj**, ukoliko je dostupan. Na stranici <https://www.crossref.org/requestaccount/>, nakon otvaranja svog naloga, možete pronaći DOI broj za većinu dostupnih članaka.

**Monografija (knjiga).** Bibliografska jedinica knjige treba da sadrži prezime i inicijale autora, godinu izdanja, naslov knjige (*kurzivom*), mesto izdanja i izdavača, odnosno:

Pantić, D. (1990). *Promene vrednosnih orijentacija mladih u Srbiji*. Beograd: Institut društvenih nauka.

Nazivi knjiga na engleskom jeziku pišu se u „rečeničnom“ formatu, takođe u *kurzivu*. Ukoliko naziv knjige ima podnaslov, on može počinjati velikim slovom.

**Zbornik u celini.** Ukoliko se kao referenca navodi zbornik radova u celini, referenca ima sledeću formu:

Biro, M., Smederevac, S. i Novović, Z. (Ur.) (2010). *Procena psiholoških i psihopatoloških fenomena*. Beograd: Centar za primenjenu psihologiju.

**Poglavlje u knjizi ili zborniku** navodi se na sledeći način:

Day, R. L. (1988). Measuring preferences. In R. Ferber (Ed.), *Handbook of marketing reasearch* (pp. 112-189). New York: McGraw-Hill.

Naslovi stranih knjiga i zbornika treba da budu dati u „rečeničnoj formi“, sa početnim velikim slovom i ostalim malim. Ukoliko rad ima podnaslov, on se od naslova odvađa sa dve tačke i počinje velikim slovom. Ukoliko zbornik ima samo jednog urednika, umesto Eds. se navodi oblik jednine Ed. U domaćim referencama ovog tipa, strana skraćena Ed. ili Eds. treba da glasi „Ur.“, a „In“ - „U“.

**Članak u časopisu** treba da sadrži prezimena i inicijale autora, godinu izdanja u zagradi, naslov članka, puno ime časopisa (*kurzivom*), volumen (*kurzivom*) i stranice, odnosno:

Jovanović, V. (2010). Validacija kratke skale subjektivnog blagostanja. *Primenjena psihologija*, 3(2), 175-190.

Dweck, C. S., & John, A. T. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.

Nazivi članaka pišu se u „rečeničnom“ formatu, u kom je samo prvo početno slovo veliko. Nazivi časopisa na engleskom jeziku pišu se tako da početna slova svih reči, izuzev veznika, budu velika. Nakon prezimena autora, uvek se stavlja zarez, kao i nakon inicijala (ukoliko ima više inicijala imena, zarez se stavlja nakon svih inicijala zajedno, a ne nakon svakog posebno). U domaćim referencama, znak „&“ treba zameniti veznikom „i“. Ukoliko se svi brojevi časopisa u okviru jednog volumena paginiraju sukcesivno, **ne treba** navoditi broj časopisa. Ukoliko se svaki broj časopisa u okviru volumena paginira odvojeno, referenca treba da sadrži i broj časopisa, pa izgleda ovako:

Dweck, C. S., & John, A. T. (1986). Motivational processes affecting learning. *American Psychologist*, 41(2), 26-37.

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Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology*, 2(2), 38-48. Retrieved from <http://ojs.lib.swin.edu.au/index.php/ejap>

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