#### Grand Valley State University ScholarWorks@GVSU

Papers from the International Association for Cross-Cultural Psychology Conferences

IACCP

2016

#### Interethnic Similarity of Anger Suppression-Aggression Association in Conflicts in Intimate and Non-Intimate Relationships Across Ethnic Groups in the Netherlands

Snežana Stupar-Rutenfrans NHTV University of Applied Sciences, Breda, the Netherlands, s.stupar@uvt.nl

Johnny R. J. Fontaine *Ghent University* 

Fons J. R. van de Vijver *Tilburg University* 

Follow this and additional works at: https://scholarworks.gvsu.edu/iaccp\_papers Part of the <u>Psychology Commons</u>

#### **Recommended** Citation

Stupar-Rutenfrans, S., Fontaine, J. R. J., & Van de Vijver, F. J. R. (2016). Interethnic similarity of anger suppression-aggression association in conflicts in intimate and non-intimate relationships across ethnic groups in the Netherlands. In C. Roland-Lévy, P. Denoux, B. Voyer, P. Boski, & W. K. Gabrenya Jr. (Eds.), *Unity, diversity and culture. Proceedings from the 22nd Congress of the International Association for Cross-Cultural Psychology.* https://scholarworks.gvsu.edu/iaccp\_papers/159

This Article is brought to you for free and open access by the IACCP at ScholarWorks@GVSU. It has been accepted for inclusion in Papers from the International Association for Cross-Cultural Psychology Conferences by an authorized administrator of ScholarWorks@GVSU. For more information, please contact scholarworks@gysu.edu.

# Interethnic Similarity of Anger Suppression-Aggression Association in Conflicts in Intimate and Non-Intimate Relationships Across Ethnic Groups in the Netherlands

## **Snežana Stupar-Rutenfrans**

NHTV University of Applied Sciences, Breda, the Netherlands (s.stupar@uvt.nl)

## Johnny R. J. Fontaine

Ghent University, Belgium

#### Fons J. R. van de Vijver

Tilburg University, the Netherlands North-West University, South Africa University of Queensland, Australia

## Abstract

This study examined associations between emotional suppression, anger, and aggression in intimate (parent and friend) and non-intimate (boss and shop assistant) conflicts in a vignette study conducted among immigrants and majority group members in the Netherlands. The sample consisted of 456 Dutch majority group members, 445 immigrants from non-Western, and 477 immigrants from Western countries. Path analyses showed that anger fully mediated the emotion suppression-aggression relationship in a similar way across groups and conflicts with a parent, boss, and shop assistant (only in a conflict situation with a boss, emotional suppression and anger were both directly related to aggression). As expected, non-Western immigrants experienced less anger in these conflicts. However, no interethnic differences were found in the tendency to suppress anger and aggression in any conflict situation. We could not replicate earlier observed cross-cultural differences in obedience, hierarchy, and

restriction of emotional expression among the samples. We concluded that non-Western immigrants do not seem to differ in management of anger in interpersonal conflict situations from Western groups.

## Introduction

We examined interethnic differences and similarities in emotion suppression-aggression relationships during conflicts with intimate and non-intimate others in a vignette study among majority group members and immigrants in the Netherlands. When investigating emotions in a cross-cultural setting, it is important to include the engaged-disengaged model of emotions (Markus & Kitayama, 1991; Matsumoto, Hee Yoo, & Fontaine, 2008) in research because cross-cultural differences in emotional suppression may be related to differences in (independent-interdependent) self-construal. Emotions are called engaged when their experience and expression promotes effective interpersonal relationships and as disengaged when their experience and expression is disruptive for these relationships. Whether an emotion will be suppressed or not, depends on the perception of emotion as engaged or disengaged, which is related to indepen-

dence-interdependence. For example, as interdependent, individuals in non-Western cultures place more emphasis on benefits for the group, expressing anger in conflicts can disturb others and thus endanger social relationships leading to more suppression of anger. Anger is therefore a typical example of a disengaged emotion that is more suppressed in non-Western cultures than in Western cultures. In contrast, individuals in Western groups value independence and therefore, expressing anger may be associated with reparation of own self-esteem; therefore anger is less suppressed in Western than in non-Western cultures. Based on this engaged-disengaged emotion framework, non-Western cultures are thought to be more prone to suppress anger and experience anger less, and display less aggression compared to Western cultures.

In the current study, we focus mainly on aggression that occurs in interpersonal conflicts as previous research demonstrated that suppressing anger can decrease aggression during conflicts (Sell, 2006; Sell, Tooby, & Cosmides, 2009). We are interested in differences in closeness between people involved in a conflict because closeness can influence how a conflict will be handled and thus whether a person will show aggression. Cooperation and coping attempts to preserve the relationship are more commonly found in intimate relationships (family and friends) than in non-intimate relationships (Whitesell & Harter, 1996). Furthermore, cross-cultural differences in rules governing intimate and non-intimate social relationships may influence how a conflict situation will be dealt with (Argyle, Henderson, Bond, Lizuka, & Contarello, 1986; Fry et al., 1998). Argyle et al. (1986) demonstrated that non-Western cultures hold more rules about obedience, maintaining harmonious relationships, and restraining emotional expression than Western cultures. This implies that non-Western groups are more likely to avoid interper-

sonal conflicts and therefore suppress their anger more during a conflict situation compared to Western groups. The current study set out to explore interethnic differences and similarities in regulation of anger and aggression in intimate versus non-intimate conflicts situations in (non-Western and Western) immigrants and Dutch majority group members and thus to test previously proposed engaged-disengaged emotion framework (Markus & Kitayama, 1991; Matsumoto et al., 2008) within a single cultural context.

# **Cross-Cultural Similarities and Differences in Aggression**

Aggression mechanisms are usually considered to be universal in their nature. We focus on the three commonly investigated types of aggression, namely behavioral, verbal, and relational aggression. Behavioral aggression refers to behaviors directed toward others with a purpose of harming the other such as hitting someone or taking revenge, whereas verbal aggression refers to verbal behaviors such as cursing or shouting (Eisenberg et al., 2000; Roberton et al., 2012). Relational aggression can be defined as social exclusion or harming the social status of the other (Archer & Coyne, 2005). Severance et al. (2013) demonstrated cross-cultural universality of aggression mechanism related to damaging one's self-worth (e.g., making someone feel powerless, humiliated, and

worthless) and of several dimensions of aggression related to the form of the aggressive behaviors (e.g., the distinction between physical and verbal aggression). However, these authors also provided support for cultural differences in the global meanings of the dimensions/mechanisms. Being ignored and social exclusion were viewed as relatively minor in terms of damage to self-esteem in the US (independent self-construct is prominent), but as a major source of damage in the samples originating from the Middle East and East Asia (interdependent construct is prominent). Additionally, groups from the Middle East perceived verbal behaviors such as using an aggressive tone or yelling to be more threatening compared to groups from United States and East Asia. In other words, interethnic differences are easier to find in the antecedents of aggression (e.g., meaning of aggressive behaviors (e.g., distinction between physical versus verbal aggression).

## How Culture Influences Aggression in Interpersonal Conflicts

Showing anger can be adaptive in interpersonal conflict situations as anger can protect an individual (Sell et al., 2009). Anger can serve as a negotiation tool for an individual as showing the anger can make others feel threatened and therefore not willing to impose costs on the angry person. However, strong anger drives aggression (Campbell, 1993). Previous emotion research showed that a stronger tendency to suppress anger is usually related to lower anger experience and thus less aggressive behavior in the short run (Eisenberg et al., 2000). Roberton, Daffern, and Bucks (2012) suggested that more anger suppression would immediately lead to less aggression because individuals who experience anger want to avoid, repair, or terminate this unpleasant emotion; in other words, the lower the anger, the lower the tendency to act upon it, and thus the lower the aggression. Whether individuals will show more emotional suppression tendency and less aggressive behaviors within interpersonal relationships, depends on the social rules related to intimacy that may differ cross-culturally. Argyle, Hendersen, and Furnham (1985) demonstrated the existence of universal rules in two types of relationships, highly intimate relationships (family, friends, and love relationships) where the relationship is primary and non-intimate relationships (work, professional, and service relationships) that are often characterized as task oriented. People usually respect the rules in their social relationships and if a person breaks these rules, their relationship will be endangered (Argyle et al., 1986). The authors demonstrated that there are rules for intimate and non-intimate relationships in non-Western and Western cultures and that the content and the number of these rules might differ cross-culturally. Non-Western individuals scored lower on expressing anger, distress, and public affection across all relationships when compared to Western participants. This is in line with the engaged-disengaged emotion framework. Expressing anger in conflicts can disturb others and thus endanger social relationships leading to more suppression of anger. In contrast, Western groups value independence more and therefore, expressing anger may be more associated with

reparation of own self-esteem. Argyle et al. (1986) found that interethnic differences in anger expression were largest in intimate relationships, with Western groups scoring higher than non-Western groups. The difference is in line with previous research findings that found a strong family orientation in non-Western immigrants, which is typically characterized by strong loyalty, connectedness, and solidarity among family members (Arends-Tóth & van de Vijver, 2008). This implies that non-Western immigrants would show higher respect for family members (and probably other intimate relationships such as friends) and express anger and aggression less toward intimate others compared to Western groups that would express more anger and aggression in intimate relationships.

## **The Present Study**

As far as we know, the current study is the first to assess interethnic differences and similarities in the suppression of aggression in conflicts with intimate versus non-intimate others. We investigated the relationships between emotional suppression, experienced anger, and aggression. In line with previous research (Sell, 2006; Sell, Tooby, & Cosmides, 2009), we expected that a stronger tendency to suppress anger in conflict situations would be related to less experienced anger, which would further be associated with less aggression (Hypothesis 1a). Additionally, we hypothesized that ethnic groups would not differ in the relationships between the variables as previous research (e.g., Severance et al., 2013) demonstrated the cross-cultural universality of dimensions/ mechanisms of aggression (Hypothesis 1b).

Based on the engaged-disengaged emotion framework of non-Western and Western cultures (Matsumoto et al., 2008), we expected that non-Western immigrants would overall suppress anger more and experience anger less, and display less aggression in both intimate and non-intimate conflict situations compared to Western groups (Hypothesis 2a). Finally, previous research suggested that non-Western individuals suppress anger more in intimate relationships when compared to Western individuals (Argyle et al., 1986). Therefore, we expected that the interethnic differences in suppression, anger, and aggression would be larger between non-Western and Western groups in interpersonal conflicts with intimate others than in conflicts with non-intimate others (Hypothesis 2b).

# Method

## **Participants**

The data were collected in January 2014 using the Immigrant panel of Centerdata in the Netherlands. The immigrant panel consists of a representative sample of immigrants and majority group members who participate in monthly internet surveys (Scherpenzeel & Das, 2010) and is an independent part of the LISS panel of the MESS project (Measurement and Experimentation in the Social Sciences; www.lissdata.nl). The current sample consisted of 1,378 participants: 456 Dutch majority group members, 445 im-

migrants from non-Western (e.g., Turkish and Moroccan Dutch), and 477 from Western countries (e.g., German and Belgian immigrants). We merged ethnic groups based on perceived cultural distance (Schalk-Soekar, Van de Vijver, & Hoogsteder, 2004) in order to obtain an adequate sample size for the statistical analyses. Ethnic groups did not significantly differ in gender composition (see Table 1 for more details on all demographic variables). The age varied from 16 to 88 years; non-Western immigrants were significantly younger (F(2, 1378) = 58.85, p < .001,  $\eta p 2 = .09$ ) and had on average a lower monthly net income (F(2, 1378) = 21.32, p < .001,  $\eta p 2 = .03$ ) than Dutch majority and Western immigrants. Non-Western immigrants were also less educated than Western immigrants, F(2, 1378) = 3.73, p < .05,  $\eta p 2 = .01$ . Immigrant groups differed significantly in generational status; most non-Western immigrants who were mainly second generation,  $\chi 2(1, N = 922) = 26.16$ , p < .001.

#### Table 1

Means, Standard Deviations (in Parentheses) per Ethnic Group and Significant Effect Sizes of their Differences (Results from MANCOVA)

Dutch Majority - -	<b>Western Dutch</b> 208 (44%)	Non-Western Dutch	Square (η <sub>p</sub> <sup>2</sup> )
	208 (44%)		(η <sub>p</sub> <sup>2</sup> )
-			
-			
-		269 (60%)	-
	268 (56%)	176 (40%)	-
224 (49%)	215 (45%)	207 (46%)	-
232 (51%)	262 (55%)	238 (54%)	-
49.00 (16.29) <sub>a</sub>	52.00 (16.52) <sub>c</sub>	40.00 (14.63) <sub>b</sub>	.09***
3.73 (1.55) <sub>a.b</sub>	3.91 (1.58) <sub>a.b</sub>	3.62 (1.56) <sub>a</sub>	.01*
1,571 (0-10,007) <sub>a</sub>	1,665 (0-33,274) <sub>a</sub>	1,141 (0-4,600) <sub>b</sub>	.03***
15.87 (4.58) <sub>b</sub>	15.49 (4.42) <sub>b</sub>	14.48 (5.09) <sub>a</sub>	.02***
14.72 (4.13)	14.89 (3.94)	14.32 (4.80)	.00
16.91 (3.64) <sub>b</sub>	16.77 (3.91) <sub>b</sub>	15.90 (5.04) <sub>a</sub>	.01**
17.26 (3.33)₀	17.31 (3.86) <sub>b</sub>	16.33 (4.88) <sub>a</sub>	.01*
9.94 (4.82)	10.46 (5.12)	10.62 (5.40)	.00
8.62 (4.45) <sub>b</sub>	9.12 (4.23) <sub>b</sub>	9.70 (5.05) <sub>a</sub>	.01**
10.46 (4.60)	10.96 (4.66)	10.61 (5.05)	.00
7.72 (4.26)	7.99 (4.28)	7.80 (4.65)	.00
5.78 (3.21)b	5.74 (3.28)b	5.42 (3.44) <sub>a</sub>	.01*
5.75 (3.01)	5.76 (2.90)	5.98 (3.37)	.00
			.00
	• •	• •	.00
• •	• •		.00
	• •		.00
	• •		.00
			.00
		• •	.00
	• •		.00
	• •		.00
		• •	.00
	• •		.00
• •			.00
			.00
• •			.00
	49.00 (16.29) <sub>a</sub> 3.73 (1.55) <sub>a.b</sub> 1,571 (0-10,007) <sub>a</sub> 15.87 (4.58) <sub>b</sub> 14.72 (4.13) 16.91 (3.64) <sub>b</sub> 17.26 (3.33) <sub>b</sub> 9.94 (4.82) 8.62 (4.45) <sub>b</sub> 10.46 (4.60) 7.72 (4.26)	224 (49%)215 (45%)232 (51%)262 (55%)49.00 (16.29)a52.00 (16.52)c3.73 (1.55)a,b3.91 (1.58)a,b1,571 (0-10,007)a1,665 (0-33,274)a15.87 (4.58)b15.49 (4.42)b14.72 (4.13)14.89 (3.94)16.91 (3.64)b16.77 (3.91)b17.26 (3.33)b17.31 (3.86)b9.94 (4.82)10.46 (5.12)8.62 (4.45)b9.12 (4.23)b10.46 (4.60)10.96 (4.66)7.72 (4.26)7.99 (4.28)5.78 (3.21)b5.74 (3.28)b5.75 (3.01)5.76 (2.90)6.27 (3.41)6.40 (3.48)6.71 (3.25)6.97 (3.44)3.16 (1.75)3.17 (1.90)3.25 (1.91)3.39 (2.14)4.43 (2.84)4.37 (2.88)3.82 (2.47)3.84 (2.52)5.09 (2.79)5.05 (3.01)7.56 (3.32)8.04 (3.17)7.69 (3.13)7.88 (3.29)9.98 (3.04)10.26 (2.81)14.03 (6.16)13.97 (6.47)16.55 (6.40)17.18 (6.20)18.38 (7.44)18.62 (7.55)	224 (49%)215 (45%)207 (46%)232 (51%)262 (55%)238 (54%)49.00 (16.29)a52.00 (16.52)c40.00 (14.63)b3.73 (1.55)a,b3.91 (1.58)a,b3.62 (1.56)a1,571 (0-10,007)a1,665 (0-33,274)a1,141 (0-4,600)b15.87 (4.58)b15.49 (4.42)b14.48 (5.09)a14.72 (4.13)14.89 (3.94)14.32 (4.80)16.91 (3.64)b16.77 (3.91)b15.90 (5.04)a17.26 (3.33)b17.31 (3.86)b16.33 (4.88)a9.94 (4.82)10.46 (5.12)10.62 (5.40)8.62 (4.45)b9.12 (4.23)b9.70 (5.05)a10.46 (4.60)10.96 (4.66)10.61 (5.05)7.72 (4.26)7.99 (4.28)7.80 (4.65)5.78 (3.21)b5.74 (3.28)b5.42 (3.44)a5.75 (3.01)5.76 (2.90)5.98 (3.37)6.27 (3.41)6.40 (3.48)6.34 (3.76)6.71 (3.25)6.97 (3.44)7.15 (3.83)3.16 (1.75)3.17 (1.90)3.18 (2.04)3.25 (1.91)3.39 (2.14)3.39 (2.16)4.43 (2.84)4.37 (2.88)4.56 (3.03)3.82 (2.47)3.84 (2.52)4.11 (3.01)5.09 (2.79)5.05 (3.01)4.54 (2.93)7.56 (3.32)8.04 (3.17)7.38 (3.68)7.69 (3.13)7.88 (3.29)7.48 (3.44)9.98 (3.04)10.26 (2.81)9.45 (3.04)14.03 (6.16)13.97 (6.47)13.13 (6.57)16.55 (6.40)17.18 (6.20)16.75 (7.08)18.38 (7.44)18.62 (7.55)18.38 (8.29)

*Note*. Education level varied from not having education at all (0) to university degree (6). Monthly net income is given in Euros (range). Means with different subscripts are significantly different (Bonferroni post hoc test).

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

## Measures

The questionnaires are administered only in Dutch in the immigrant panel as Dutch proficiency is high among the panel members. Instruments and data can be retrieved from <u>http://www.lissdata.nl/dataarchive/study\_units/view/</u>.

Interpersonal Conflict Vignettes. Vignettes depicting conflicts with intimate and

non-intimate others were used. Participants were asked to read the descriptions of four hypothetical interpersonal conflict scenarios (vignettes) and to answer the closed-ended questions regarding their expected anger experience, emotional suppression, and aggressive behaviors during these scenarios. All stimuli were presented in a fixed order. There were four types of conflicts presented in these vignettes, one type of conflict per vignette: conflict with parents (situation 1), a good friend (situation 2), a boss (situation 3), and an (unknown) shop assistant (situation 4). In this way we were able to capture the conflicts with intimate (1 & 2) and non-intimate others (3 & 4). The conflict scenarios described in the vignettes were selected from our previous study on motivations associated with emotional suppression conducted among members of the same Immigrant Panel (Stupar, Van de Vijver, & Fontaine, 2014b). The vignettes were tested in a pilot study among a convenience sample of 242 participants with diverse ethnic background, not members of the Internet Panel. We found there that the vignettes were easily recognized and understood by participants from different ethnic backgrounds.

*Anger.* We asked participants to report how likely it was that they would experience angerin the situations described in four vignettes. The following items were taken from the GRID study that focusses on the semantics of emotion terms using a componential approach (Fontaine, Scherer, & Soriano, 2013): "During this situation, I would feel...anger/irritation/rage" Response categories varied from 1 (highly unlikely) to 7 (highly likely). Our emotion assessment is based on the hierarchical organization of the cognitive structure of emotions (Fontaine et al., 2013; Fontaine, Poortinga, Setiadi, & Markam, 2010; Shaver, Schwartz, Kirson, & O'Connor, 1987) where anger is categories, such as irritation, rage, and anger.

*Emotional suppression*. We adjusted three items on emotional suppression from the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) in order to make the items applicable to the vignettes. An example of an adjusted suppression item was "During this situation...I would keep my emotions to myself". The response categories varied from 1 (highly unlikely) to 7 (highly likely).

*Aggression*. As we could not find an aggression questionnaire that includes verbal, behavioral, and relational aspects of aggression, we adapted the items from the Reactive-Proactive Aggression Questionnaire (Raine et al., 2006), Aggression Questionnaire (Buss & Warren, 2000), and Buss-Durkee Hostility Inventory-Dutch (BDHI-D; Lange, Dehghani, & Beurs, 1995). The final aggression scale consisted of six items regarding behavioral, verbal, and relational oriented aggression that would occur after the conflict took place.<sup>1</sup> The examples of items are: "After the conflict took place...I would break

<sup>&</sup>lt;sup>1</sup>The first version of Aggression scale consisted of nine items across three aggression dimensions (verbal, behavioral, and relational aggression). We confirmed the three-factor solution using CFA. However, three items did not differentiate well as they had strong cross-loadings. Therefore we deleted them from further analyses. The deleted items referred to "threatening the other", "gossiping about the other", and "showing understanding for other".

something that is from my parents/friend/boss/shop assistant" (behavioral aggression), "During the conflict situation...I would say something that would hurt (my) parents/ friend/boss/shop assistant" (verbal aggression), and "After the conflict took place...I would avoid (my) parents/friend/boss/shop assistant as much as possible" (relational aggression). The response categories varied from 1 (highly unlikely) to 7 (highly likely).

All scales used in the current study had moderate to high internal consistencies in all ethnic groups (Cronbach's alpha values varied from .74 to .88).

# Results

## Multigroup Path Models (Hypotheses 1a and 1b)

We tested whether emotional suppression is related to aggression through anger in four interpersonal conflict situations (parents, friend, boss, and shop assistant) in a multigroup analysis. Indicators of emotional suppression and anger were the six scale items. Aggression was constructed based on three latent variables: verbal, behavioral, and relational aggression where each aggression subscale consisted of item indicators (two items per subscale). The results showed that the hypothesized mediation model was the best fitting model. More specifically, the structural weights model showed an adequate fit and in three of the four situations the best fit (Hypothesis 1a is confirmed). This pattern holds in all ethnic groups (Hypothesis 1b is confirmed). So, we found support for a model in which anger fully mediates the relations between emotional suppression and aggression in the parent, friend, and shop assistant conflict situations (see Table 2 and Figures 1, 2, and 4). In all three conflicts we found that more emotional suppression was associated with less experienced anger and more anger was related with more aggression. Moreover, in the conflict situation with the shop assistant we found a strong additional direct relationship between anger and relational aggression; this relationship was positive and of a similar size as the relationship between the anger and aggression latent factor. However, we could not confirm the proposed mediation model in the conflict situation with the boss. In this situation, emotional suppression was unrelated to anger, and not only anger, but also suppression were both positively and directly related to aggression (see Figure 3). We explored all possible variations of models where the "causal" order of variables was different from our hypothesized model (with and without mediation included). We treated emotional suppression, anger, and aggression as latent variables; each of these latent variables was used as predictor, mediator, and outcome. We found that the emotional suppression—anger—aggression model was globally the best fitting model.

## Mean Group Differences across Contexts (Hypotheses 2a and 2b)

We conducted a Multivariate Analysis of Covariance (MANCOVA) to test interethnic differences (three levels: Dutch majority, non-Western, and Western immigrants) in emotional suppression, anger, verbal, behavioral, and relational aggression, with age, education level, and net month income as covariates (see Table 1 for more details on significant effects of ethnicity on variables). Note that we tested in our pre-analyses gender differences in aggression related variables (per ethnic group by using independent t tests); however we could not confirm gender differences in aggression scores and therefore we did not add gender as an independent variable in the current analyses. The results showed that the multivariate effect of ethnic group was significant (Wilks' Lambda = .94, F(40, 1378) = 2.00, p < .001,  $\eta p 2 = .03$ ). When further examining the univariate effects, we found small significant interethnic differences in five variables (Hypothesis 2a is partially confirmed). Non-Western immigrants scored lower on anger toward parent  $(F(2, 1378) = 10.24, p < .001, \eta p 2 = .02), boss (F(2, 1378) = 5.52, p < .01, \eta p 2 = .01),$ and shop assistant (F(2, 1378) = 3.24, p < .05,  $\eta p 2 = .01$ ) than the two other groups did. Moreover, non-Western immigrants scored significantly higher on suppression of conflict with friend (F(2, 1378) = 6.32, p < .01,  $\eta p 2 = .01$ ), but also on verbal aggression with parents (F(2, 1378) = 3.16, p < .05,  $\eta p 2 = .01$ ) compared to all other ethnic groups. We could not confirm interethnic differences in total aggression scores across interpersonal conflict contexts.

#### Table 2

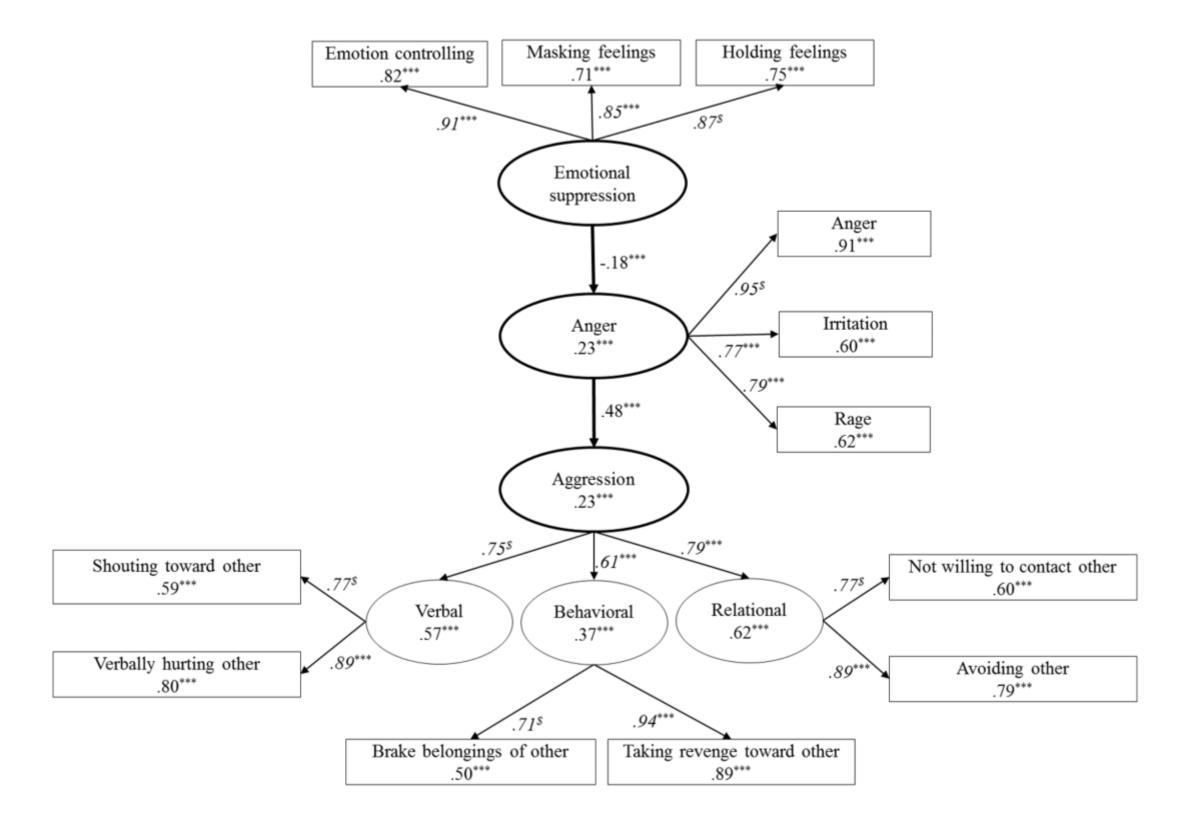
Results of the Multigroup Invariance Analysis of the Hypothesized Mediation Model

Model	$\chi^2 (df)$	CFI	RMSEA (CI)	Δχ²	∆df
Parents					
Unconstrained	601.594 <b>(</b> 147) <sup>***</sup>	.943	.047 (.044051)		
Measurement weights	636.000 (161)***	.941	.046 (.043050)	34.405**	14
Structural weights	657.078 (169) <sup>***</sup>	<i>.939</i>	.046 (.042050)	21.078**	8
Structural residuals	708.120 (181)***	.934	.046 (.042050)	51.042***	12
Measurement residuals	784.075 (205)***	.928	.045 (.042049)	75.955***	24
Friend					
Unconstrained	579.202 (147) <sup>***</sup>	.943	.046 (.042050)		
Measurement weights	622.107 (161) <sup>***</sup>	.939	.046 (.042049)	42.905***	14
Structural weights	632.807 (169)***	.939	.045 (.042048)	10.700	8
Structural residuals	677.331 (181) <sup>***</sup>	.935	.045 (.042048)	44.525***	12
Measurement residuals	785.452 (205)***	.924	.045 (.042049)	108.121***	24
Boss					
Unconstrained	443.889 (144)***	.962	.039 (.035043)		
Measurement weights	469.077 (158) <sup>***</sup>	.961	.038 (.034042)	25.189 <sup>*</sup>	14
Structural weights	486.872 (168) <sup>***</sup>	.960	.037 (.033041)	17.795	8
Structural residuals	568.296 (180)***	.951	.040 (.036043)	81.424***	12
Measurement residuals	630.082 (204) <sup>***</sup>	.947	.039 (.036042)	61.787***	24
Shop assistant					
Unconstrained	511.101 (147) <sup>***</sup>	.957	.042 (.038046)		
Measurement weights	560.686 (161)***	.953	.042 (.039046)	49.585***	14
Structural weights	572.729 (171)***	.953	.041 (.038045)	12.043	10
Structural residuals	689.494 (181) <sup>***</sup>	.940	.045 (.042049)	116.765***	10
Measurement residuals	762.449 (205)***	.934	.044 (.041048)	72.955***	24

*Note*. Most restrictive model with a good fit is printed in italics. CFI = Comparative Fit Index; RMSEA = Root Mean Square of Approximation. <math>CI = Confidence Interval. \*\*p < .01. \*\*\*p < .001

Additionally, we examined the significance of the two-way interaction between ethnicity and the context of the conflict (intimate versus non-intimate). This was done in to test the Hypothesis 2b according to which interethnic differences (specifically between non-Western and Western groups) on suppression, anger, and aggression would be stronger in intimate context when compared to non-intimate context. Weights of 1, -.5, and -.5 were used for the non-Western immigrants, Western immigrants, and Dutch majority group members, respectively (with age, education, and net income as covariates). The contrast yielded a significant, yet small interaction effect only for suppression, F(1, 1378) = 17.31, p < .001,  $\eta p2 = .01$ . The scores on suppression tendency were higher in non-Western immigrants in intimate contexts (conflict with parent and friend) when compared to the scores in both Western immigrants and Dutch majority within the same context. However, this difference in suppression was not present in a non-intimate context (conflict with boss and shop assistant). All other contrasts of interaction effects regarding anger and types of aggression (verbal, behavioral, and relational) were non-significant. Therefore, Hypothesis 2b was not confirmed for any dependent variable, with the exception of suppression.

#### PARENT



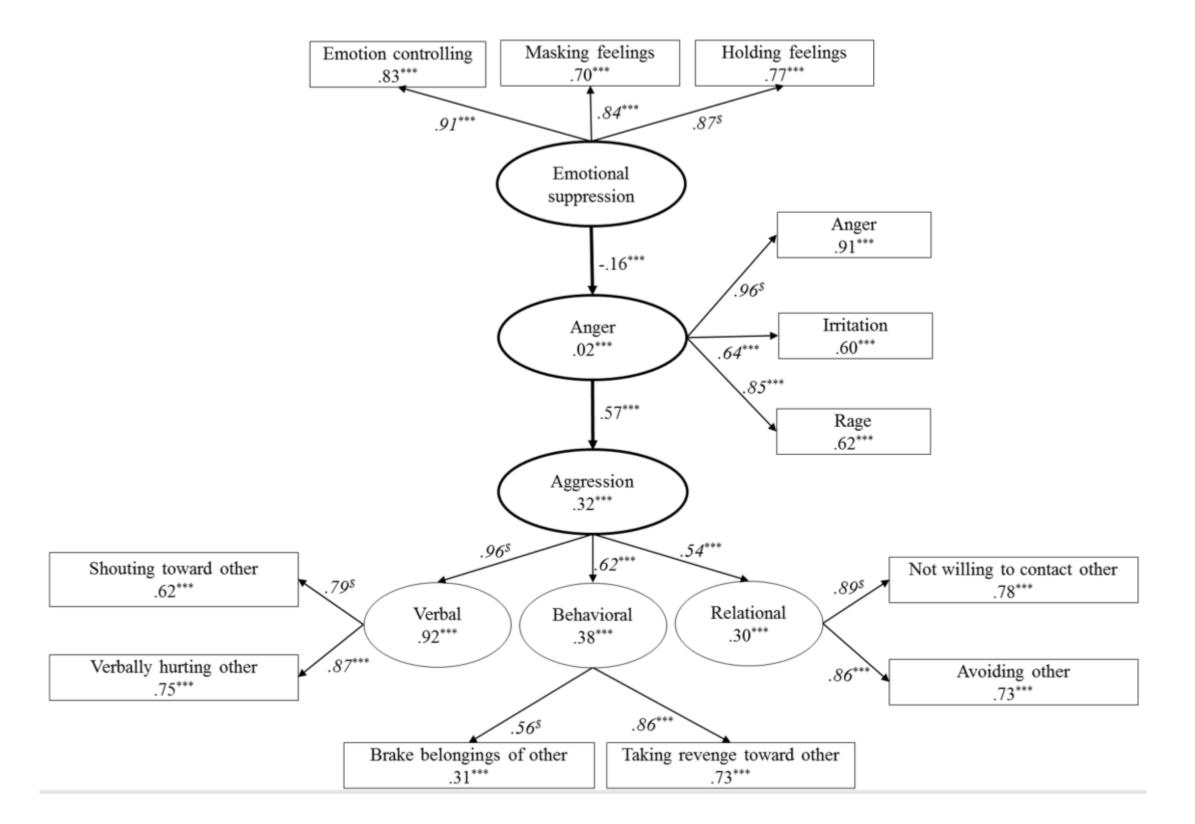
## Figure 1

A path model of emotional suppression, anger, and aggression in parent-context

*Note*. Standardized regression coefficients are given next to the arrows. Factor loadings are printed in italics, next to the arrows. Numbers below construct names represent proportions of variance explained.

\*\*\*p < .001. \$ Loading fixed at a value of 1 in the non-standardized solution.

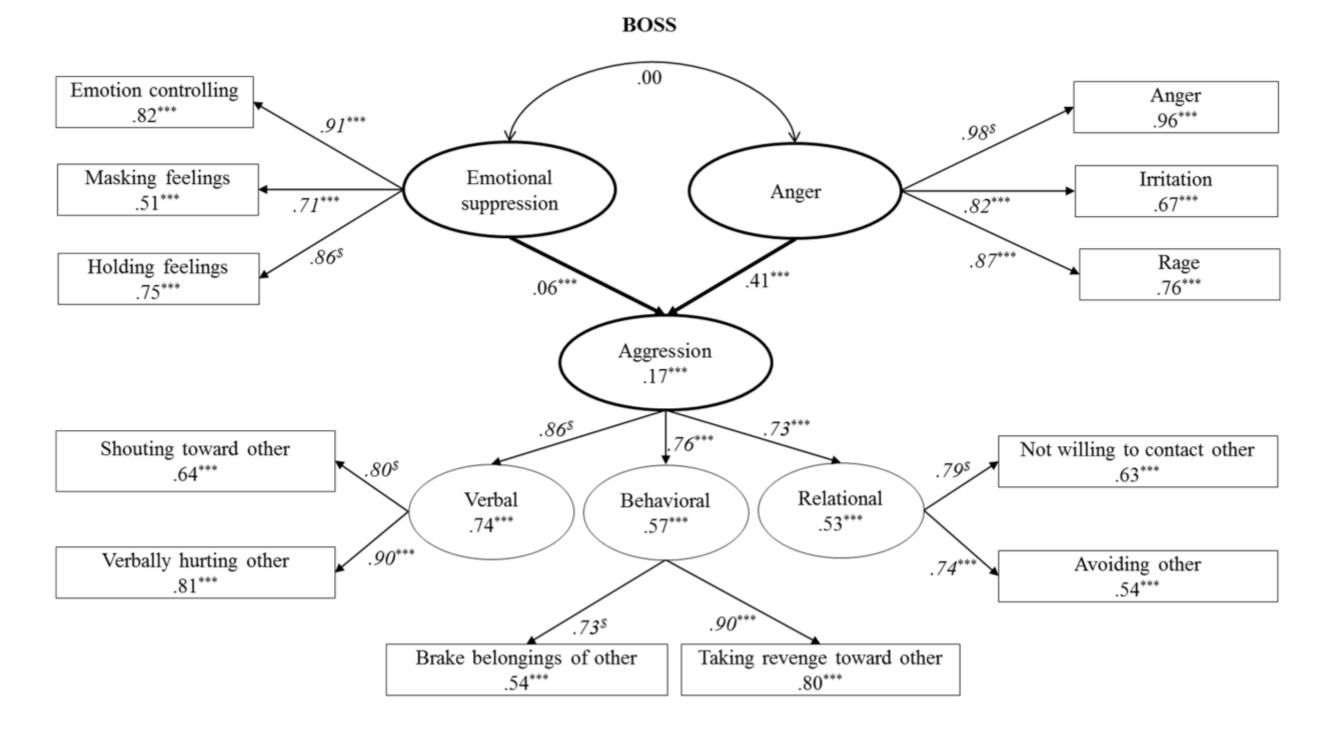
FRIEND



#### Figure 2

A path model of emotional suppression, anger, and aggression in friend-context Note. Standardized regression coefficients are given next to the arrows. Factor loadings are printed in italics, next to the arrows. Numbers below construct names represent proportions of variance explained.

\*\*\*p < .001. \$ Loading fixed at a value of 1 in the non-standardized solution



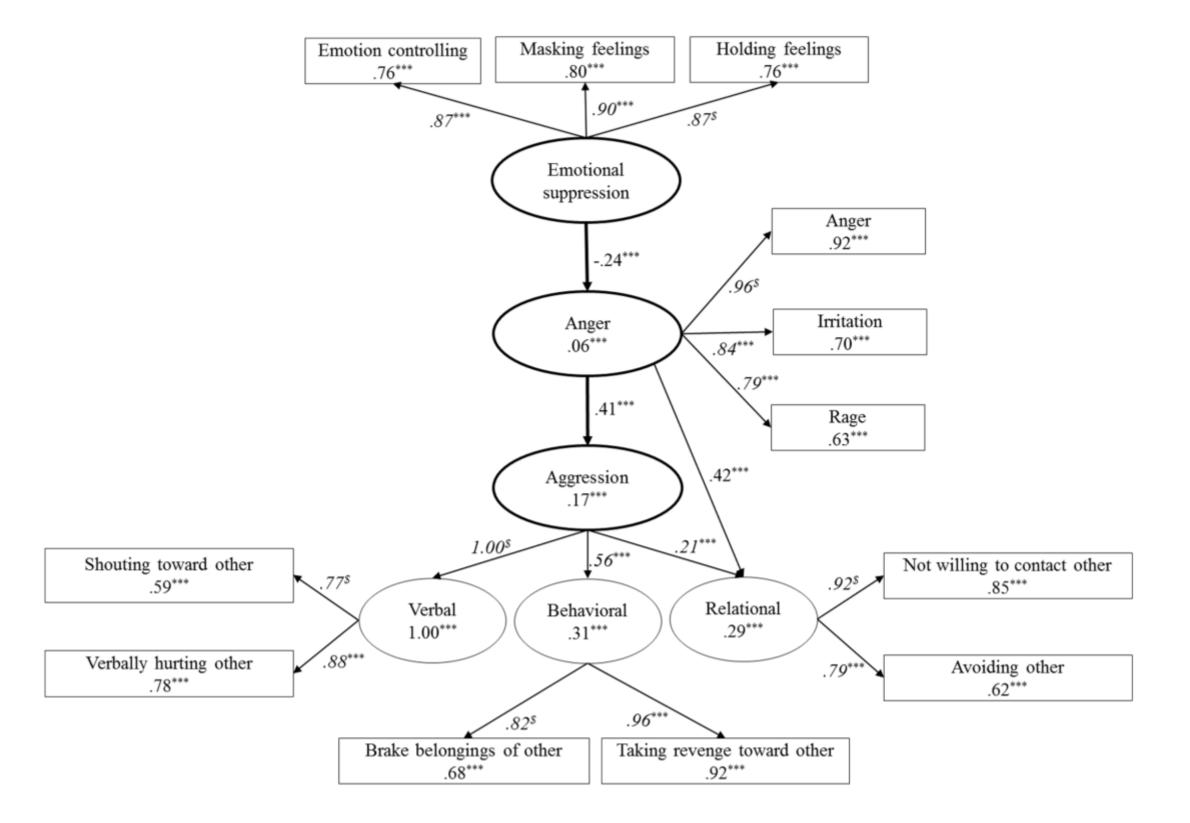
## Figure 3

A path model of emotional suppression, anger, and aggression in boss-context

*Note*. Standardized regression coefficients are given next to the arrows. Factor loadings are printed in italics, next to the arrows. Numbers below construct names represent proportions of variance explained.

\*\*\*p < .001. \$ Loading fixed at a value of 1 in the non-standardized solution

#### **SHOP ASSISTANT**



#### Figure 4

A path model of emotional suppression, anger, and aggression in shop assistant-context

Note. Standardized regression coefficients are given next to the arrows. Factor loadings are printed

in italics, next to the arrows. Numbers below construct names represent proportions of variance explained.

\*\*\*p < .001. \$ Loading fixed at a value of 1 in the non-standardized solution

## Discussion

We investigated interethnic differences and similarities in emotional suppression, experienced anger, and aggression, and their interrelatedness in interpersonal conflicts with intimate and non-intimate others in immigrants and majority group members in the Netherlands. We found that a stronger tendency to suppress anger in conflict situations is related with less experienced anger which is associated with less aggression (Hypothesis 1a was confirmed). Our findings suggest that ethnic groups do not differ in these relationships (Hypothesis 1b was also confirmed) and that the mechanisms underlying aggression in interpersonal conflicts are similar across the ethnic groups studied.

An interesting finding is that the hypothesized mediation model was most applicable to the intimate contexts whereas the relationships between suppression, anger, and aggression were slightly different in non-intimate contexts. Anger was strongly related to aggression in the conflict with the boss, whereas the relationship between suppression and aggression was direct, yet very weak compared to anger-aggression relationship (this applied for all ethnic groups that we investigated). This finding could indicate that in intimate relationships people try not only to bring the expression of their emotion in line with personal and social expectations, but also the way they feel about the situation, while the regulation attempts are more exclusively focused on the actual behavior rather than on the affective experience of the situation in important non-intimate relationships. Another interesting observation in the current study is a direct effect of anger on relational aggression in the shop context that also points to context specificity. In socially distant contexts, such as shopping, where it is fairly easy to avoid future contact, people are more likely to show aggression as the social cost is low (they do not need to preserve the relationships with the conflicting party).

The results could not support our expectations regarding interethnic differences in suppression, anger, and aggression (Hypothesis 2a). In particular, we found that ethnic groups are similar on suppression and aggression across four interpersonal conflicts, while non-Western groups experienced more anger than the other groups although the differences were very small. Additionally, we could not confirm that interethnic differences in anger and aggression are larger in interpersonal conflicts with intimate other than in conflicts with non-intimate other with exception of suppression (Hypothesis 2b is partially confirmed). As expected, we found that non-Western immigrants have a stronger tendency to suppress their anger in intimate relationships when compared to Western groups (Western immigrants and Dutch majority); however, this interethnic distinction in suppression is not found in a non-intimate context (Argyle et al., 1986). This may be due to the fact that non-Western immigrants hold stronger family orientation (Arends-Tóth & van de Vijver, 2008) that is associated with higher emotional suppression in order to preserve social harmony, connectedness, and solidarity among family members. However, the effects in the current study were very small; therefore, we can argue whether our theoretical expectations based on the framework of Markus and Kitayama (1991) could not be confirmed within the cultural context in the Netherlands. There are several possible explanations for the small (or even absent) interethnic differences found in suppression, anger, and aggression (and their interrelationships). First, the sample in the current study consisted probably of well-adjusted immigrants. In order to be able to participate in these studies, the participants needed a fair level of mastery of the Dutch language, which is in line with an idea of more adjustment of these immigrants even when non-Western immigrants in our sample were usually younger and had lower education and income levels than Dutch majority. Among non-Western immigrants who are not well adjusted to the Dutch society (and do not speak Dutch well), the interethnic differences could be much stronger. Second, and related to former explanations, Leersnyder et al. (2011) suggested that immigrants who engage themselves in relationships with mainstreamers show higher emotional acculturation compared to immigrants that were engaged less in the host culture. It may be the case that our immigrant

sample was somehow more engaged with the members of the host culture. Inclusion of less engaged immigrants would probably lead to stronger interethnic differences in emotion regulation. Note that engagement with the members of the host cultures can be also seen as a part of adjustment, together with acquisition of host language. Third, it is possible that the previous research mainly focused on the ethnic groups that are extremely culturally distant from each other such as majority members living in US versus majorities living in East Asia (Markus & Kitayama, 1991). Samples in the current study may be culturally less distant from each other than those used in previous studies. Finally, we addressed specific behaviors in our study and we found stronger cross-cultural differences in general tendencies than in specific behaviors, similar to previous studies conducted within the immigrant panel (Stupar et al., 2014a, 2015). Therefore, it is not unlikely that a study that would deal with more normative aspects of conflicts (such as the question of how people in a culture are supposed to deal with interpersonal conflicts) could have shown more expected cross-cultural differences.

It is a novel aspect of the current study that we investigated interethnic differences and similarities in suppression-aggression relationship in two types of interpersonal conflicts, intimate versus non-intimate, in a large sample of immigrants and majority members in the Netherlands. We found evidence for the invariance of the suppression-aggression relationship in interpersonal conflicts regardless of the intimacy of the relationships and the ethnic background. Although hierarchy and obeying authorities are usually more emphasized in non-Western cultures and non-Western groups are therefore expected to avoid the conflicts with others, our data suggest that non-Western immigrants do not differ in management of anger in interpersonal conflict situations from Western groups. The current study has some limitations that could be dealt with in future research. Our study is correlational in nature and therefore, our findings may not reveal causal relationships. Future research would benefit from manipulating distinct interpersonal conflicts in different ethnic groups in the laboratory. Considering that there is a large gap in emotion literature on the influence of situational context on cultural specific dimensions of aggression, we strongly recommend exploring the influence of conflict specificity in aggression mechanisms. It would be interesting to go beyond self-reports and examine whether the established associations can be confirmed in real conflicts.

# References

- Archer, J., & Coyne, S. (2005). An integrative review of indirect, social, and relational aggression. *Personality and Social Psychology Review*, *9*, 212-230. doi:10.1207%2Fs15327957pspr0903\_2
- Arends-Tóth J. V., & van de Vijver F. J. R. (2008). Family relationships among immigrants and majority members in the Netherlands: The role of acculturation. *Applied Psychology: An International Review*, 57, 466-487. doi:10.1111/j.1464-0597.2008.00331.x
- Argyle, M., Henderson, M., Bond, M., Iizuka, Y., & Contarello, A. (1986). Cross-cultural variations in

relationship rules. International Journal of Psychology, 21, 287-315. doi:10.1080/00207598608247591

- Argyle, M., Henderson, M., & Furnhan, A. (1985). The rules of social relationships. *British Journal of Social Psychology*, 24,125-139. doi:10.1111/j.2044-8309.1985.tb00671.x
- Buss, A. H., & Warren, W. L. (2000). *The Aggression Questionnaire manual*. Los Angeles, CA: Western Psychological Services.
- Campbell, A. (1993). *Men, women and aggression*. New York, NY / London, United Kingdom: Basic Books / Harpercollins.
- Eisenberg, N., Guthrie, I. K., Fabes, R. A. et al. (2000). Prediction of elementary school children's externalizing problem behaviors from attentional and behavioral regulation and negative emotionality. *Child Development, 5,* 1367-1382. doi:10.1111%2F1467-8624.00233
- Fontaine, J. R. J., Poortinga, Y. H., Setiadi, B., & Suprapti, S. M. (2002). Cognitive struture of emotion in terms of Indonesia and The Netherlands. *Cognition and Emotion*, *16*, 61-86. doi:10.1080/02699933014000130
- Fontaine, J. R. J., Scherer, K. R., & Soriano, C. (Eds.). (2013). *Components of emotional meaning: A sourcebook*. Oxford, United Kingdom: Oxford University Press.
- Fry, D. P. (1998). Anthropological perspectives on aggression: Sex differences and cultural variation. *Aggressive Behavior*, 24, 81-95. doi:10.1002/(SICI)1098-2337(1998)24:2%3C81::AID-AB1%3E3.0.CO;2-V
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348–362. doi:10.1037/0022-3514.85.2.348
- Lange A., Dehghani, B., & de Beurs, E. (1995). Validation of the Dutch adaptation of the Buss-Durkee Hostility Inventory. *Behaviour Research and Therapy*, *33*, 229-233. doi:10.1016%2F0005-7967%2894%2900044-K
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224-253.
- Matsumoto, D., Hee Yoo, S. & Fontaine, J. (et al.). (2008). Mapping expressive differences around the world: The relationship between emotional display rules and individualism versus collectivism. *Journal of Cross-Cultural Psychology*, *39*, 55-74. doi:10.1177/0022022107311854
- Raine, A., Dodge, K., Loeber, R., Gatzke-Kopp, L., Lynam, D. (et al.). (2006). The Reactive–Proactive Aggression Questionnaire: Differential correlates of reactive and proactive aggression in adolescent boys. *Aggressive Behavior*, 32, 159-171. doi:10.1002%2Fab.20115
- Roberton, T., Daffern, M., & Bucks, R. S. (2012). Emotion regulation and aggression. *Aggression and Violent Behavior*, 17, 72-87. doi:10.1016%2Fj.avb.2011.09.006
- Severance, L., Bui-Wrzosinka, L., Gelfand, M. J., Lyons, S., Nowak, A., & Borkowski, W. et al. (2013). The psychological structure of aggression across cultures. *Journal of Organizational Behavior*, 34, 835-865. doi:10.1002/job.1873
- Schalk-Soekar, S., Van de Vijver, F. J. R., & Hoogsteder, M. (2004). Migrants' and majority members' orientations toward multiculturalism in the Netherlands. *International Journal of Intercultural Relations*, 28, 533-550. doi:10.1016/j.ijintrel.2005.01.009
- Scherpenzeel, A. C., & Das, M. (2010). "True" longitudinal and probability-based internet panels: Evidence from the Netherlands. In M. Das, P. Ester, & L. Kaczmirek (Eds.), *Social and behavioral research and the internet: Advances in applied methods and research strategies* (pp. 77-104). Boca Raton, FL: Taylor & Francis.
- Sell, A. (2006). Regulating welfare tradeoff ratios: Three tests of an evolutionary-computational model of human anger. Ph.D. dissertation, University of California at Santa Barbara.
- Sell, A., Tooby, J., & Cosmides, L. (2009). Formidability and the logic of human anger. *Proceedings of the National Academy of Sciences*, *106*, 15073–15078. doi:10.1073/pnas.0904312106
- Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology*, 52, 1061-1086. doi:10.1037//0022-3514.52.6.1061
- Stupar, S., Van de Vijver, F. J. R., & Fontaine, J. R. J. (2015). Emotion valence, intensity, and emotion regulation in immigrants and majority members in the Netherlands. *International Journal of Psychology*, *50*,

312-318. doi:10.1002/ijop.12091

- Stupar, S., Van de Vijver, F. J. R., & Fontaine, J. R. J. (2014a). Emotional suppression and well-being in immigrants and majority group members in the Netherlands. *International Journal of Psychology*, 49, 503-507. doi:10.1002/ijop.12040
- Stupar, S., Van de Vijver, F. J. R., & Fontaine, J. R. J. (2014b). Self- and other-oriented motivations associated with emotional suppression of internalized and externalized negative emotions: A multiethnic self-report study in the Netherlands (accepted).
- Whitesell, N. R., & Harter, S. (1996). The interpersonal context of emotion: Anger with close friends and classmates. *Child Development*, *67*, 1345-1359. doi:10.1111/j.1467-8624.1996.tb01800.x