Ethnic outgroup aggression: A pilot study on the importance of emotion regulation, nationalism and susceptibility to persuasion

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ABSTRACT

The current pilot study investigated the psychological mechanisms behind ethnic outgroup aggression, a significant outcome of intergroup conflicts. While previous research suggested several impactful predictors of ethnic outgroup aggression, such as intergroup contact and nationalism, no attempt has been made to synthesize all these constructs into a single cross-cultural study. Building on existing research, this pilot study is the first to assess a refined framework where we tested a proposed mediation model according to nationalism and emotion regulation mediate the relationship between intergroup contact, susceptibility to persuasion, and intergroup anxiety on the one hand and ethnic outgroup aggression on the other hand within a cross-cultural sample. An online questionnaire was distributed using convenience sampling among 2482 students with an ethnic majority background living and studying in ten (European) countries. Multigroup path analysis supported the larger part of the hypothesized model where we found that emotion regulation partially mediated the relationship between susceptibility to persuasion as a predictor and aggression as an outcome. As expected, we found that the higher the susceptibility to persuasion, the higher the emotion regulation, and the higher the regulation, the lower the aggression in all countries. Our pilot study provided preliminary evidence that emotion regulation, nationalism and susceptibility to persuasion are critical for the understanding of ethnic outgroup aggression in ethnically diverse societies. Future research needs to be carried out.
Introduction

Ethnic outgroup aggression, defined as negative thoughts or behaviors that are explicitly directed towards the outgroup’s ethnic background (Smith & Mackie, 2005), is an important outcome of intergroup conflicts that are widely present in today’s society. Previous research confirmed that ethnic outgroup aggression is predicted by low intergroup contact (Schmid et al., 2014), high intergroup anxiety (Brown, 2011), one’s high susceptibility to persuasion (Kaptein et al., 2009), emotion regulation (Spanovic et al., 2010), and high nationalism (Mummendey et al., 2001). To the best of our knowledge, the attempt to synthesize and explain the relationships among all these predictors and ethnic outgroup aggression in one single study within a larger cross-cultural sample has not yet been undertaken. We seek to address this knowledge gap by proposing and examining a model (see Fig. 1) in ten countries in which nationalism and emotion regulation (ER) mediate the relationship between intergroup contact, susceptibility to persuasion, and intergroup anxiety on the one hand and (ethnic outgroup) aggression on the other hand.

Traditionally, ethnic outgroup aggression is predicted by intergroup contact (direct contact between members of different groups; Schmid et al., 2014), intergroup anxiety (concerns that intergroup contact will have adverse outcomes; Brown, 2011), and susceptibility to persuasion (an individual’s behavioral compliance to persuasive cues; Kaptein et al., 2009). Increased intergroup contact limits the polarization of intergroup relations and improves attitudes towards outgroups (Schmid et al., 2014). Furthermore, intergroup contact promotes intergroup acceptance (as it reduces prejudice whereas both in- and outgroups become aware of the similarities and collectiveness between the groups rather than characterizing them as different; Capozza et al., 2017). Intergroup anxiety, on the other hand, has substantial adverse effects, such as higher cognitive biases towards the outgroup, as well as polarized group judgements and prejudices; the resulting feelings of threat can lead to higher nationalism (Halperin et al., 2012). Intergroup anxiety, therefore, plays a significant role in the justification of these aggressive acts towards outgroups (Schaller & Neuberg, 2012). Susceptibility to persuasion is also essential for the expression of aggression (Carlson et al., 1999), and limits outgroup aggression (Saab, Harb, & Moughalian, 2017). Intergroup anxiety, on the other hand, has substantial adverse effects, such as higher cognitive biases towards the outgroup, as well as polarized group judgements and prejudices; the resulting feelings of threat can lead to higher nationalism (Halperin et al., 2012; Viki & Caliri, 2008) and outgroup aggression as fear causes an increase in ingroup members’ support of the use of violence (Brown, 2011). This is not surprising as fear is linked to defensive aggression to avoid being attacked (Mifune, Simunovic, & Yamagishi, 2017). Empirical studies show that fear can lead to defensive aggression if the costs of engaging in conflict are low enough (Iyer et al., 2015). Intergroup anxiety, therefore, plays a significant role in the justification of these aggressive acts towards outgroups (Schaller & Neuberg, 2012). Susceptibility to persuasion is essential for the expression of aggression (Carlson et al., 1999); however, the exact relationship between susceptibility to persuasion and (outgroup) aggression is still unclear. Individuals who already experience higher levels of prejudice towards an outgroup are more susceptible to persuasion, which creates stronger negative feelings towards the outgroup in question (Middleton, 1960). Because of the increasing pervasiveness of social media in determining public opinion, we can speculate that political propaganda can increase the effectiveness of persuasion when popular predispositions towards ethnic outgroups are used in this propaganda (Petrova & Yanagizawa-Drott, 2016). In addition, ethnic conflicts, which can take extreme forms like genocide, have been linked to attitudes towards authority and social hierarchy: increased authoritarianism in one’s personality increases the likelihood of endorsing social hierarchies and suppressing groups below one’s own (Green & Seher, 2003). These traits contribute to an individual’s susceptibility to persuasion by authorities in particular and make them more likely to develop negative attitudes towards outgroups. These negative attitudes then lead to outgroup aggression (DeWall et al., 2011). Further exploration of the susceptibility to persuasion-aggression relationship, therefore, contributes significantly to the existing body of literature.

We propose that ER (ability to manage one’s emotions through activation of strategies such as expressive suppression and cognitive reappraisal; Gross, 2015), has a mediating effect on the relationship between intergroup anxiety and outgroup aggression (Trawalter, 2015). This hypothesis is further supported by the increasing prevalence of social media in determining public opinion, as political propaganda can increase the effectiveness of persuasion when popular predispositions towards ethnic outgroups are used in this propaganda (Petrova & Yanagizawa-Drott, 2016). In addition, ethnic conflicts, which can take extreme forms like genocide, have been linked to attitudes towards authority and social hierarchy: increased authoritarianism in one’s personality increases the likelihood of endorsing social hierarchies and suppressing groups below one’s own (Green & Seher, 2003). These traits contribute to an individual’s susceptibility to persuasion by authorities in particular and make them more likely to develop negative attitudes towards outgroups. These negative attitudes then lead to outgroup aggression (DeWall et al., 2011). Further exploration of the susceptibility to persuasion-aggression relationship, therefore, contributes significantly to the existing body of literature.

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![Fig. 1: Hypothesized model of intergroup anxiety, nationalism, emotion regulation and ethnic outgroup aggression.](image)
Richeson, & Shelton, 2009), and the relationship between susceptibility to persuasion and outgroup aggression (Mackie, Smith, & Ray, 2008). Intergroup anxiety has been commonly operationalized as a degree to which people experience anxiety-related emotions/states (such as being anxious, nervous, tense, upset), as assessed during the hypothetical interaction with ethnic outgroups (Intercultural Anxiety Scale, IAS; Stephan & Stephan, 1992). In that sense, intergroup anxiety is a broader emotional experience similar to stress and negative affect (Stephan, 2014). Previous research shows that ER can in itself be subject to modification in a stressful situation where experienced stress diminishes ER due to the cognitive demand it requires (Kinner, Het, & Wolf, 2014). As this study focusses on ER strategies that are cognitively demanding (e.g. expressive suppression; Gross & John, 2003), it is expected that participants who experience high levels of intergroup anxiety will apply ER to a lesser extent. Subsequently, low ER, especially in response to strong negative emotions like (intergroup) fear, fuels intergroup aggression (Spanovic et al., 2010) while greater ER is negatively related to experience high levels of intergroup anxiety will apply ER to a lesser extent. Subsequently, low ER, especially in response to strong negative emotions like (intergroup) fear, fuels intergroup aggression (Spanovic et al., 2010) while greater ER is negatively related to racial prejudice, implying that higher ER could help to reduce negative behaviours toward outgroups (Mackie et al., 2008). Unsurprisingly, interracial interactions are appraised as stressful and thus facilitate intergroup anxiety; this can negatively affect ER as increased anxiety lowers the ability to suppress negative emotions (Trawalter et al., 2009). Building upon previous research indicating that ER is a mediating variable in the relationship between variables similar to constructs of our interests (e.g. ingroup identification and the generation of group emotions, such as pride; Goldenberg, Halperin, van Zomeren, & Gross, 2016), we hypothesize that intergroup anxiety predicts outgroup aggression via ER.

We also propose that nationalism has a mediating effect on the relationship between intergroup anxiety and outgroup aggression (Brown, 2011) and the relationship between intergroup contact and outgroup aggression (Tausch et al., 2010). Nationalism has commonly been operationalized as nationalistic attitudes (attitudes towards the importance of one’s country; Coryn et al., 2004) and nationalistic identity (strong feelings of group identification; Viki & Calitri, 2008). Both of these notions have been associated with higher outgroup aggression (Mummendey et al., 2001). The hypothesized mediation relationships are consistent with previous research, such as Spanovic’ model for the relationship between fear and outgroup aggression (2010).

The current pilot study

We proposed and tested a mediation model in which intergroup anxiety, susceptibility to persuasion, and intergroup contact are associated with ethnic outgroup aggression through nationalism and ER (Fig. 1). Thereby, we suggested that intergroup anxiety is positively correlated with nationalism (Viki & Calitri, 2008); that lower intergroup contact creates stronger nationalistic tendencies (Schmid et al., 2014); and that individuals susceptible for persuasion score higher on nationalism (Snyder & Ballentine, 1996). We also propose that intergroup anxiety leads to lower ER (Trawalter et al., 2009). Although susceptibility to persuasion is commonly associated with ER as well, the direction of this relationship is still unclear (Lewinski, Fransen, & Tan, 2014). Finally, we expect that low ER and high nationalism will be associated with high aggression (Mummendey et al., 2001; Spanovic et al., 2010). We tested the model in ten (European) countries and we expected the hypothesized model to be valid in all ethnic groups.

Method

Participants

The convenience sample consisted of 2482 university students with ethnic majority background situated in large cities in 10 countries: Russia, Albania, Turkey, Greece, Serbia, Montenegro, Kosovo, Croatia, Aruba, and The Netherlands. No ethnic minorities were included in the study. To obtain majorities, demographics of the participants were assessed with questions on country of birth (of student and their parents) and country of residence, a 10 point Likert scale asking the extent to which someone identifies as a mainstreamer of the country, a question asking whether students have the nationality of the country of residence, and an open question where students could enter if they have another (additional) nationality. Online (back-translated) questionnaires were offered in the country’s official languages. The participants were (77.5 % women) aged 16–40 (M = 22, SD = 1.75), with 398 Albanian (85.7 % women), 84 Aruban (73.8 % women), 174 Croatian (94.3 % women), 188 Dutch (66.0 % women), 168 Greek (48.8 % women), 394 Kosovars (88.1 % women), 205 Montenegrin (74.1 % women), 458 Russian (78.6 % women), 202 Serbs (75.2 % women), and 211 Turks (66.4 % women).

Measures

ER strategies, expressive suppression (four items) and cognitive reappraisal (six items), were assessed using the 10-item Emotion Regulation Questionnaire (ERQ; Gross & John, 2003). A 7-point Likert scale was used ranging from 1 (Strongly disagree) to 7 (Strongly agree). An example of an item is “When I want to feel more positive emotions, I change the way I am thinking about the situation”.

Nationalism was assessed using two separate scales, nationalistic attitudes that consisted of five items related to attitudes toward the importance of one’s own country, adopted from an empirical study in 22 countries (Coenders, 2001), and nationalistic identity, a 5-item National Identification Scale (NIS; Verlegh, 2001). Items were rated on a 5-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). An example of an item is: “I am proud to be [Dutch]”.

Intergroup anxiety was assessed using the 15 items of the Intercultural Anxiety Scale (IAS; Stephan & Stephan, 1992). A 10-point Likert scale ranging from 1 (Not at all) to 10 (Extremely) was used when participants were asked to report the degree to which they would experience 15 anxiety-related emotions/states during the hypothetical interaction with foreigners (people with a different ethnic background than one’s own) such as anxious, nervous, tense, and upset. A sample item reads: “Meeting strangers and introducing
you yourself, with a response ranging from 1 (not at all nervous) to 10 (extremely nervous).

Contact with ethnic outgroups was assessed with the question “How often do you have contact with foreigners (people from a different ethnic background than yours)?” on a 5-point Likert scale ranging from 1 (never) to 5 (every day).

Susceptibility to persuasion was assessed by the 12-item Susceptibility Questionnaire (Kaptein et al., 2009). Items were rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The scales covered six dimensions of susceptibility (two items per dimension), namely reciprocation (an example of an item: “When I am in a new situation, I look at others to see what I should do.”), scarcity, authority, commitment, consensus and liking.

Aggression was measured by 24 items of The Normative Beliefs about Aggression Scale (NOBAGS; Huesmann, Guerra, Zelli, & Miller, 1992), which assessed the acceptance of aggressive behaviour in two situations; 1) under varying specific conditions of provocation, namely retaliation belief questions (16 items) and 2) when no conditions are specified (the general aggression belief questions - eight items). The scale is also validated for older adults and various ethnic groups (Huesmann et al., 1992). The NOBAGS has been revised to assess interactions between ethnic groups (Shechtman & Basheer, 2005). Ethnic outgroup aggression was assessed during different hypothetical situations: native versus native, foreigner (a person with a different ethnic background than one’s own) versus foreigner, native versus foreigner, and foreigner versus native. Terms related to verbal (screaming and verbally hurting others) and relational (cutting off the contact and avoiding other) aggression responses were included. The final version of the aggression scale used in this study consisted of 24 items; ethnic outgroup aggression contained 16 items divided across four interaction situations as previously indicated, and the general aggression belief that contains eight items divided across the two subscales: general approval of verbal aggression and general approval of behavioural aggression, consisting of four items each. With the analysis, a 4-point Likert scale ranging from 1 (It’s perfectly OK) to 4 (It’s really wrong) was recoded into 1 (It’s really wrong) to 4 (It’s perfectly OK) to make the scores and extent of aggression proportional. An example of an item is: “Do you think it’s wrong for the [Dutch] to say something hurtful to the foreigner (person who has different ethnic background than one’s own)?”.

Internal consistency and factor analysis

Internal consistencies of all scales used in the current study were satisfactory (Cronbach’s alpha range: .67–.91) in all samples from all countries. Multi-group confirmatory factor analysis (CFA) was conducted in AMOS (Arbuckle, 2006) to explore dimensionality and to test for measurement invariance (Byrne, 2004) across all ethnic groups. Results related to measurement invariance and dimensionality are both promising and in line with previous literature. However, due to varying sample sizes from different countries (e.g. few samples are rather small to identify valid factor structure and measurement invariance), we were not able to examine whether respondents from different countries interpret the same measure in a conceptually similar way, and whether factorial structure is fully applicable for all samples.

Results

Emotion regulation, nationalism and outgroup aggression: the mediation model

First, a hypothesized model (Fig. 1) without mediators was tested in a multigroup path analysis using AMOS (Arbuckle, 2006). Aggression was constructed based on two variables, general approval of (verbal and behavioural) aggression, and approval of ethnic outgroup aggression. The structural weights model was the most restrictive model with a good fit, \( \chi^2(282, N = 2482) = 492.678, p < .001; \chi^2/df = 1.747 \), the Comparative Fit Index (CFI) being .975 and the Root Mean Square Error of Approximation (RMSEA) being .017. Higher scores on susceptibility to persuasion were significantly associated with lower aggression scores (general and ethnic outgroup related) in all groups. However, the hypothesized direct effects of intergroup anxiety and contact with ethnic outgroups on aggression were not confirmed as they were both non-significant.

![Fig. 2. The final model of susceptibility to persuasion, emotion regulation, nationalism and aggression.](image-url)

**Note.** Standardized regression coefficients are provided next to the arrows. The numbers inside the latent variable circles (emotion regulation and aggression) represent the proportions of variance explained. ***p < .001.
Second, a hypothesized mediation model was tested in which two predictors, namely intergroup anxiety and contact with ethnic outgroups, were excluded. ER and aggression were categorized as latent variables. Indicators of ER were the two subscales, reappraisal and suppression. The structural weights model was the most restrictive model with a good fit, \( \chi^2(460, N = 2482) = 886.251, p < .001; \) \( \chi^2/df = 1.927, \text{CFI} = .958 \) and \( \text{RMSEA} = .019. \) Additionally, the significance of the indirect effect of susceptibility to persuasion on aggression variable using bootstrapping was computed and was significant \( (\hat{\beta} = -.04; 95\% \text{ CI: } -.09 \text{ to } -.01; p < .001). \) Moreover, the direct effect of susceptibility to persuasion on aggression was weaker yet significant in the model with a mediator \( (\hat{\beta} = -.22, p < .001) \) compared to the model without a mediator \( (\hat{\beta} = -.30, p < .001). \) Therefore, it can be concluded that ER can be treated as a partial mediator in the susceptibility-aggression relationship.

Consequently, the final model with ER as a partial mediator was tested (see Fig. 2). The structural weights model was the most restrictive model with a good fit, \( \chi^2(459, N = 2482) = 879.556, p < .001; \) \( \chi^2/df = 1.916, \text{CFI} = .958 \) and \( \text{RMSEA} = .019. \) A model in which ER partially mediate the relationship between susceptibility to persuasion as a predictor and (general and ethnic outgroup) aggression as an outcome was supported. The higher the susceptibility to persuasion, the higher the ER, and the higher the ER, the lower the aggression. Additionally, this model showed that the higher the nationalistic attitudes and the lower the nationalistic identity, the higher the (general and ethnic outgroup) aggression. Results from multigroup path analyses confirmed similarities between structural parameters indicating no differences in the relationships between samples from different countries.

**Discussion**

We investigated a mediation model in which intergroup anxiety, susceptibility to persuasion, and intergroup contact are associated with ethnic outgroup aggression through nationalism and ER. We found support for a model (in all countries) in which ER partially mediates the relationship between susceptibility to persuasion as a predictor and aggression as an outcome. As expected, we found that the higher the susceptibility to persuasion, the higher the ER (Lewinski et al., 2014), and the higher the ER, the lower the aggression (DeWall et al., 2011).

Surprisingly, we found that the higher the nationalistic attitudes and the lower the nationalistic identity, the higher the aggression in all countries (Mummendey et al., 2001). Our findings suggest that the two different operationalizations of nationalism may lead to different relationships to aggression; high scores on nationalistic identity may indicate higher interpersonal stability that further leads to lower aggression in our participants. Being stable in terms of national identity could be predicted by coexisting high scores on personality traits such as openness that is typically related to higher multicultural attitudes and lower ingroup-outgroup distance (Stupar, Van de Vijver, Te Lindert, & Fontaine, 2014) which should be protective factors against outgroup aggression. When interpreting our findings we should also take into account recent transformations that many of sampled countries undergone last decades (e.g. collapse of USSR, Croatia gaining autonomy, socio-political changes in Turkey) which could have induced weakening of social bonds within society (Social Bond Theory; Hirschi, 1969) and the sense of nationalistic identity (strong feelings of group identification; Viki & Calitri, 2008) resulting in more aggression toward outgroups (Hirschi, 1969).

We could not confirm the mediating role of nationalism as hypothesized in the proposed model and the hypothesized direct effects of intergroup anxiety and contact with ethnic outgroups on (general and ethnic outgroup) aggression. A plausible explanation for this may be the lower quality of the measures. Specifically, contact with ethnic outgroups was measured by one single item assessing only the frequency of contact with people from a different ethnic background than one’s own, but we did not specify how and in which situations this contact took place. In previous research on intergroup contact, this construct has been assessed more explicitly utilizing information related to the type of ethnic outgroups, the type of contact (online versus face-to-face), and the quantity and quality of contact (Schmid et al., 2014). An additional limitation of this study may be the overgeneralization of the contact questions as different types of contacts have not been explored, subsequently, this may have led to a lower understanding of the item and therefore generated more invalid responses. Assessment of intergroup anxiety may also have been biased as we may have measured general arousal during the intergroup interaction instead of intergroup anxiety, which does not necessarily occur only during the interaction with ethnic outgroups. To our knowledge, there is no existing validated intergroup anxiety scale that specifically measures anxiety purely related to ethnic outgroup members, this limits the internal validity of this concept (Spanovic et al., 2010); one could also question whether the development of such scale is valid as the more experimental (exposure) approach may be more reliable in capturing objective aspects of experienced anxiety. The same applies for the assessment of ethnic outgroup aggression; we adapted NOBAGS in order to assess aggression during interactions between ethnic outgroups while no validated scale exists that assesses this construct. Finally, the current cross-sectional design can be seen as an important limitation for testing the causal relationships within our proposed mediation model, hence an experimental or longitudinal design would provide stronger evidence for the theoretically proposed model.

**Conclusion**

In conclusion, we found support for a model in which ER partially mediates the relationship between susceptibility to persuasion and aggression. We also made some surprising observations regarding the nationalism – ethnic outgroup aggression relationship that may warrant further exploration. Moreover, further development of the intergroup anxiety assessment and aggression related to ethnic outgroups is needed. Future research should focus on the development of an intergroup anxiety and ethnic outgroup aggression assessment tool in which only anxiety and specific ethnic aggression will be measured, ideally before, during, and after intergroup contact/conflict. Thereby, researchers should consider taking into account several other variables such as gender, age and personality. There may be gender differences in susceptibility to persuasion and aggression favoured by gender-related socialization; some studies have shown that men are more aggressive than women in interpersonal and intergroup relationships (Yokota, 2018). Nevertheless,
given the contemporary research on gender identity differentiation (e.g. cis versus non-cis genders), more research is needed in this area. Age may also be relevant for the formation of the social attitude with young adults being more exposed to media globalization possibly resulting in holding stronger multicultural attitudes and lower ingroup-outgroup distance (Stupar et al., 2014). Personality traits may also play an important role in the proposed mediation model as, openness that is related to higher multicultural attitudes and lower ingroup-outgroup distance (Stupar et al., 2014) may serve as a protective factor against outgroup aggression. Finally, it is recommended to take into account not only the perspective of ethnic majorities (as we did in the current study), but also of ethnic minorities when analysing data on intergroup relations, due to possible differences in contributions aimed at subordinating out-groups (out-group aggression) from those aimed at defending the in-group against possible out-group aggression (in-group defence) (Carsten et al., 2016).

Author’s contributions

Snežana Stupar-Rutenfrans: design; collection, analysis and interpretation of data; drafting the article and revising it critically
Petrouschka C. D. Verdouw: collection and analysis of data; drafting and revising the article
Jedidja van Boven: revising the article
Olga Aleksandrovnna Ryzhikova: collection of data
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Daniela Garbin Praničević: collection of data
Skerdi Zahaj: collection of data
Eric Mijts: collection of data

Ethical compliance statement

The authors have no funding to disclose. All procedures performed in the current study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. We declare that we have no conflict of interest. Informed consent was obtained from all individual adult participants included in the study.

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