

The Dimensions of Generalized Prejudice within the Dual-Process Model: the Mediating Role of Moral Foundations

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Abstract In our study we investigated how individualizing and binding moral foundations partially mediate the relationship between the attitudinal clusters of right-wing authoritarianism (RWA) and social dominance orientation (SDO), and the dimensions of generalized prejudice. We found that binding moral foundations partially mediate the association between RWA and negative attitudes towards dissident and dangerous groups, while individualizing moral foundations had a positive relationship with the evaluations of all three clusters of dissident, dangerous, and derogated outgroups, and partially mediated the effects of both SDO and RWA. Based on these results we claim that intergroup attitudes are at least partly determined by moral concerns, and different personal needs activate or inhibit different moral concerns. Furthermore, while individualizing moral foundations seem to have a universal prejudice reducing effect, the effect of binding foundations is selective, increasing prejudice principally against dangerous and derogated outgroups that threaten one's personal need for security and certainty.

Keywords Right-wing authoritarianism · Social dominance orientation · Moral foundations · Generalized prejudice · Intergroup attitudes

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When we have the opportunity to influence the situation of an outgroup either towards a more positive or a more negative outcome, we make a decision at least partly on moral grounds. For example, during the European refugee crisis in 2015, finding an adequate response to the situation became a controversial moral dilemma in many European countries. People felt that they had to choose between the moral responsibilities of defending their country from the harmful effects of mass immigration and of helping refugees from conflict zones in need. Another example for such dilemma is the debate about affirmative action. Supporters of affirmative action claim that the only morally acceptable choice is to provide help for those who cannot improve their own unfavourable situation while opponents believe that it is morally wrong to create unequal conditions for individuals even if it is in the form of positive discrimination.

At the same time, recent research findings from the field of motivated social cognition and moral psychology indicate that moral judgments are heavily influenced by personal motivations and psychological dispositions that also affect intergroup attitudes (Federico et al. 2013; Kugler et al. 2014; Milojevic et al. 2014). It can be therefore assumed that moral judgments are not necessarily impartial. Building upon the recent joint research of the *dual process model of prejudice and ideologies* (Duckitt 2001) and *moral foundations theory* (Haidt and Graham 2007), we intend to support the argument that the negative perception of outgroups is related to moral concerns that are derived from individual level dispositions.

Personal Attitudes and Motivations Explaining Prejudice

The question of personal motivations and types of motivations as the basis of intergroup attitudes has been thoroughly

studied during the past decades of prejudice research. The classical works related to authoritarianism identified this motivation mainly in the form of personal need for security, predictability, and certainty (e.g. Adorno et al. 1950; Allport 1954; Rokeach 1960). The common notion of these theories is that due to this personal need, the authoritarian person tends to adhere to the most dominant social and cultural norms and devalue outgroups that contradict these norms on the basis of their perceived threat to social order. Altemeyer (1998) refined this theory by arguing that this motivational pattern only characterizes the so called “submissive” authoritarians, while there is another “dominant” type of the authoritarian and prejudiced personality, the main motivation of whom is to achieve social domination over others. This notion was built upon the *social dominance theory* (Pratto et al. 1994; Sidanius and Pratto 1999), that describes achieving group-based dominance as an evolutionally effective way of enhancing group-efficiency.

These two motivations have been placed into a unified theoretical framework of the *dual process model* (DPM) of prejudice and ideologies (Duckitt 2001; Duckitt and Sibley 2009, 2010). According to the DPM, all our social, ideological, and intergroup attitudes can be arranged along two distinguishable attitudinal dimensions: *right-wing authoritarianism* and *social dominance orientation*. The authors argue that both of these dimensions have their unique motivational bases and origins in our personality and social environment.

For the first dimension, the main motivation is the establishment and maintenance of order, security, and stability in the social environment. Consequently, all beliefs and attitudinal preferences associated with this dimension have the purpose of achieving these goals. This attitude cluster can be identified by the concept of right-wing authoritarianism (RWA) as described by Altemeyer (1981) with the diagnostic characteristics of conventionalism, submission to conventional authorities, and hostility towards non-conventional outgroups. The second attitude cluster encompasses the motivation to enable one’s ingroup to seize and maintain power, superiority, and a dominant position within the existing social hierarchy. According to the DPM, this attitudinal dimension can be described by the concept of social dominance orientation (SDO, Pratto et al. 1994), as the degree of personal preference for hierarchical and unequal intergroup relations. In summary, according to the DPM, the negative perception of a particular outgroup can be originated in two motivational bases: RWA or SDO. While RWA predicts negative attitudes towards outgroups that are perceived as a threat to security and integrity of the society, SDO is associated with attitudes towards outgroups that are either perceived inferior or considered a competitive rival in the struggle for resources or dominance (Duckitt and Sibley 2009, 2010).

A recent line of research related to the DPM revealed the main dimensions of generalized prejudice. These studies

differentiated three broader categories as targets of prejudice – derogated, dangerous, and dissidents groups – and found that RWA and SDO predicted negative attitudes towards these categories independently from each other (see Asbrock et al. 2010; Cantal et al. 2015; Duckitt and Sibley 2007; Sibley et al. 2010). These studies show that SDO, but not RWA, is related to negative attitudes towards *derogated* groups which have low status and are often regarded as inferior (e.g. unemployed people, unattractive people, housewives). While RWA, but not SDO, is related to the devaluation of *dangerous* groups that are often perceived as a direct threat to societal safety and one’s personal well-being, and are usually connected to illegal activities (e.g. violent criminals, drug dealers, Satanists). A third type of social category is *dissident* groups that are regarded as challenging ingroup values and norms, and oppose the existing status quo (e.g. protestors, feminists, or those who cause disagreement). Prejudice against dissident groups is predicted by RWA and SDO simultaneously, which is not surprising, considering that they are threatening both the RWA-related societal harmony and the SDO-related group-hierarchy.

Beside influencing people’s intergroup attitudes, RWA and SDO can predict a wide range of other social beliefs like personal opinions about different policy solutions and ideological preferences (Duckitt and Sibley 2009; Pratto and Cathey 2002; Sidanius and Pratto 1999). Additionally, as recent research related to moral foundations shows, they are also associated with moral judgments (Bostyn et al. 2016; Federico et al. 2013; Jackson and Gaertner 2010; Kugler et al. 2014; Milojev et al. 2014).

Moral Foundations and their Relationship with RWA and SDO

Moral foundations theory (MFT) provides an explanation for the psychological mechanisms determining the different moral values and norms of social groups like conservatives and liberals, or members of individualist and collectivist cultures (Haidt and Graham 2007, 2009; Graham et al. 2013). According to MFT, our moral intuitions and judgments are primarily determined by our personal moral foundations. These foundations are innate, modular foundations of moral reasoning that have their evolutionarily determined roots but are also shaped by specific social and cultural influences. The theory describes five moral foundations that are related to five different moral domains: care, fairness, loyalty, authority, and sanctity.

Care and fairness are often referred to as *individualizing foundations*, while loyalty, authority, and sanctity constitute the broader category of *binding foundations* (Federico et al. 2016; Graham et al. 2009; Graham et al. 2011). The main evolutionary function of both forms of foundations is to

protect the community from individual selfishness, however, they serve this function by essentially different mechanisms. Individualizing foundations achieve this by direct disapproval and prohibition of doing harm to others, and by making people respect the rights of others, while binding foundations achieve this by binding people to cohesive groups and institutions, and by creating well-defined roles within these groups and their institutional systems.

Essential value differences between particular social groups are explained by the assumption that moral intuitions and judgments of members of some groups are determined by binding morality to a greater extent than judgments of other groups. For example binding moral values are more important to politically conservative people than to liberals, and they are more highly respected within collectivist cultures than within individualist ones (for a review see Graham et al. 2013).

Moral foundations are also related to intergroup attitudes and to individual-level characteristics that underpin these attitudes, like RWA and SDO. Recent research revealed that RWA is primarily associated with binding foundations, while SDO has a negative relationship with individualizing morality (Federico et al. 2013; Kugler et al. 2014; Milojev et al. 2014).

Furthermore, there is some evidence that moral foundations are directly related to the negative evaluation of outgroups. In the study of Kugler et al. (2014) binding moral foundations were positively related to anti-immigrant attitudes, while the associations with individualizing foundations were negative. Low and Wui (2015) reported negative relationships between individualizing foundations and negative attitudes towards the poor, whereas Smith and his colleagues (Smith et al. 2014) found that binding moral foundations correlated positively with personal support for the torture of outgroup members among respondents with a weak moral identity.

Based on these findings, we can assume that intergroup prejudice is determined at least partly by personal moral intuitions. Different characteristics and particular acts of relevant outgroups may be judged by personally important moral values and concerns, and the more these characteristics contradict one's moral standards, the more negative their attitude become towards the outgroup. However, it seems that these moral values and standards are not randomly applied, but they are determined by individual-level traits and motivations. We therefore argue that prejudice against different outgroups is partly a result of moralized motivated social cognition.

The Current Study

Our study aimed to find evidence supporting the assumption that RWA and SDO predicts negative attitudes towards well distinguished clusters of outgroups partly through distinguishable moral intuitions. In our attempt to integrate the research

areas of the dimensionality of generalized prejudice and the MFT, we presumed that personal attitudes towards the three clusters of dissident, dangerous and derogated outgroups are predicted by RWA and/or SDO through different moral intuitions.

Based on these two different lines of research on the motivational and moral explanations of prejudice, we predicted that RWA predicts negative attitudes towards dangerous and dissident groups via binding moral foundations because people high on authoritarianism see members of these groups as a presenting a threat to the core values that bond their ingroup in a cohesive unity, and therefore perceive them as a source of uncertainty and insecurity. We also predicted that SDO elicits negative views about derogated and dissident groups through (the lack of) individualizing moral foundations, because these moral criteria can be regarded as expendable for people with high SDO in order to keep inferior and rival groups in their underdog position. In sum, we predicted that the effect of RWA on the evaluation of dangerous and dissident groups is (partially) mediated by binding moral foundations, while the effect of SDO on the evaluation of derogated and dissident groups is (partially) mediated by individualizing morality.

Participants

Our sample consisted of 401 respondents from Hungary, recruited by convenience sampling by university students who took part in an introductory social psychology course (247 female, $M_{age} = 31.83$; $SD_{age} = 13.47$). In terms of their educational background, 39.0% held a “graduate or professional degree”, 31.5% indicated that they were “currently enrolled in university/college education”, 24.6% had a “high school diploma”, 3.0% completed “vocational school” and 2.0% “primary education”.

Measures

Participants completed an online questionnaire measuring right-wing authoritarianism, social dominance orientation, moral foundations, and attitudes towards different social groups.

Right-wing authoritarianism was measured by an 11-item Hungarian version of the RWA scale (Altemeyer 1981) translated and adapted by Enyedi (1996) ($M = 2.61$; $SD = .89$; $\alpha = .81$). For assessing social dominance orientation, we applied a shortened 11-item Hungarian version of the SDO scale (Pratto et al. 1994) adapted by Murányi and Sipos (2012) ($M = 2.57$; $SD = .82$; $\alpha = .83$). For measuring moral foundations, a shortened 10-item Hungarian version of the original Moral Foundations Questionnaire (MFQ; Graham et al. 2011) was used, designed to measure individualizing and binding morality reliably in the Hungarian language (Hadarics, M., & Kende, A., 2016, A closer look at intergroup threat within the dual process model

framework: the mediating role of moral foundations, manuscript submitted for publication). Responses were measured on a 6-point scale ($1 = \textit{strongly disagree}$; $6 = \textit{strongly agree}$) on all items of the RWA, SDO, and MFQ scales.

To measure intergroup attitudes and the generalized dimensions of prejudice, the technique of affective thermometer was applied where respondents were asked to indicate their feelings about 15 social groups on a 10-point scale ($1 = \textit{absolutely negative}$; $10 = \textit{absolutely positive}$). Personal attitudes were measured towards Roma people, Arabs, Blacks, Jews, immigrants, homosexuals, transvestites, homeless people, unemployed people, disabled people, pensioners, drug addicts, prostitutes, alcoholics, and ex-convicts.

When completing the questionnaire, our respondents indicated their attitudes towards the social groups mentioned above as the first step, which was followed by the MFQ items and then the RWA and SDO scales, while the final part of the questionnaire consisted of questions regarding demographic data. We applied this sequence to avoid the potential priming effect of the MFQ, RWA, and SDO scales on the indicated intergroup attitudes.

Hypothesis Testing

Dimensionality of Intergroup Attitudes As a first step, we checked whether the three categories of dissident, dangerous and derogated groups could be replicated by our respondents' thermometer evaluations. To answer this question, an exploratory factor analysis was conducted based on the evaluations with maximum likelihood extraction and direct oblimin rotation. We chose an oblique rotation method, because it seemed likely that such attitudes toward different group domains are correlated (e.g. Zick et al. 2008). We identified three factors, as presented in Table 1.

Mainly ethnic groups (Arabs, Jews, Roma people, Blacks, and immigrants) and sexual minorities (homosexuals and transvestites) loaded on Factor 1. These groups are often perceived by a notable proportion of the Hungarian public as opposing or directly challenging mainstream Hungarian norms and culture, and considered rivals in a fight for cultural influence and material resources (e.g. Ligeti 2006; Simonovits 2016). In this respect these groups show a remarkable resemblance to the cluster of dissident groups identified by other studies (e.g. Asbrock et al. 2010; Cantal et al. 2015; Duckitt and Sibley 2007; Sibley et al. 2010). Although the dissident cluster of previous studies consisted mainly of groups with an explicit political activity (e.g. feminists, protestors), while ethnic and sexual minorities were part of the derogated cluster, we nevertheless kept the label 'dissident' for this factor because intergroup relations with these particular outgroups are highly politicized in the current Hungarian context where ethnic and other subcultural minorities are often framed as direct competitors for symbolic or material resources (e.g. Bernáth and Messing 2015; Glózer 2013).

Table 1 Results of the exploratory factor analysis on the selected group evaluations

Group	Factor		
	Dissident	Dangerous	Derogated
Blacks	.872		
Jews	.858		
Homosexuals	.849		
Immigrants	.765		
Transvestites	.700		
Arabs	.665		
Roma people	.487		
Alcoholics		.826	
Prostitutes		.629	
Ex-convicts		.626	
Drug users		.603	
Pensioners			.677
Unemployed people			.528
Disabled people			.510
Homeless people		.398	.493
Proportion of explained variance	45.36%	8.41%	6.55%

Only coefficients above .30 are shown. Extraction method: Maximum Likelihood; Rotation method: Direct Oblimin

Groups involved in dangerous and/or illegal activities (ex-convicts, prostitutes, drug users, alcoholics, homeless people) loaded onto Factor 2. These groups represent a direct threat to the security and integrity of the society. This factor could be unequivocally paralleled with the cluster of dangerous groups. Finally Factor 3 consisted of groups that are usually regarded as inferior, and require the constant paternal help and care of the majority because of their incompetence (pensioners, unemployed people, disabled people, homeless people). Due to the clear similarities, this cluster was regarded as the derogated cluster.¹

Our results indicate that similarly to previous studies, three dimensions of generalized prejudice could be identified based on the evaluations of our Hungarian respondents. However, the specific groups constituting the three clusters of dissident, dangerous and derogated groups were somewhat different in our study than in previous research, but we explain this by the different target perceptions that different societies hold about particular social groups.

Based on the results of the factor analysis it became possible to construct a meaningful measure for the three dimensions of generalized prejudice. To create a measure representing personal attitudes towards the three clusters of

¹ As it can be seen, in case of homeless people we found a high cross-loading on Factor 2 and 3. As an explanation, it has to be noted that the Hungarian authorities made several legal steps towards the criminalization of the homeless in the recent years, that could result in an unfavourable image of this group as dangerous criminals.

social groups, we calculated the composite mean values of the group evaluations that contributed principally to the same factors ($M_{dissident} = 5.19$; $SD_{dissident} = 2.25$; $\alpha_{dissident} = .93$; $M_{dangerous} = 3.86$; $SD_{dangerous} = 1.68$; $\alpha_{dangerous} = .81$; $M_{derogated} = 6.50$; $SD_{derogated} = 1.65$; $\alpha_{derogated} = .76$).

RWA, SDO and Moral Foundations as Determinants of Intergroup Attitudes In order to reveal the mediating role of individualizing and binding moral foundations between RWA and SDO as an attitudinal-ideological base and respondents’ unfavorable views about the different clusters of outgroups, we ran structural equation modeling (SEM) using AMOS 22.0. Correlations between the variables of the model are presented in Table 2.

As a first step, a full mediation model was built, where RWA and SDO served as level-one independent variables and were assumed to influence intergroup attitudes exclusively indirectly (but not directly) via individualizing and binding moral foundations. This full mediation model showed a poor fit ($\chi^2 = 134.28$; $df = 6$; $CFI = .878$; $RMSEA = .231$; $SRMR = .080$) indicating that the direct effects of RWA and SDO cannot be neglected, but have to be integrated with their indirect effects through moral intuitions in a partial mediation model.

In order to set up the possibly most adequate partial mediation model, we applied the model building - model trimming technique (see e.g. Kugler et al. 2014; Shah et al. 2005). During this process we set up a saturated model, where RWA and SDO were allowed to affect intergroup attitudes both directly and indirectly through the two forms of moral intuitions. The saturated model, presented in Fig. 1, shows a perfect fit with χ^2 , RMSEA, and SRMR values of 0, and a CFI value of 1. This model showed that SDO predicted attitudes towards dissident ($b = -.51$; $SE = .098$; $p < .001$; $\beta = -.20$) and derogated groups ($b = -.46$; $SE = .093$; $p < .001$; $\beta = -.25$) but not the attitudes towards dangerous groups ($b = -.13$; $SE = .090$; $p = .152$; $\beta = -.07$), while RWA predicted attitudes towards dissident ($b = -1.17$; $SE = .127$; $p < .001$; $\beta = -.42$) and dangerous groups ($b = -.67$; $SE = .117$; $p < .001$; $\beta = -.32$) but not the attitudes towards derogated groups ($b = -.10$; $SE = .121$; $p = .417$; $\beta = -.05$). RWA was also a

significant positive predictor of binding morality ($b = .58$; $SE = .055$; $p < .001$; $\beta = .48$) and a negative predictor of individualizing morality ($b = -.27$; $SE = .051$; $p < .001$; $\beta = -.25$), but SDO predicted only individualizing morality ($b = -.29$; $SE = .047$; $p < .001$; $\beta = -.29$) and not binding morality ($b = .01$; $SE = .050$; $p = .861$; $\beta = .01$).

The saturated model also showed that binding moral foundations predicted personal evaluations of dangerous ($b = -.28$; $SE = .094$; $p = .003$; $\beta = -.16$) and dissident groups ($b = -.46$; $SE = .103$; $p < .001$; $\beta = -.20$) but not the attitudes towards derogated groups ($b = -.12$; $SE = .098$; $p = .214$; $\beta = -.07$), while individualizing foundations positively predicted the attitudes towards all three outgroup clusters (dissident: $b = .49$; $SE = .110$; $p < .001$; $\beta = .19$; derogated: $b = .42$; $SE = .105$; $p < .001$; $\beta = .22$; dangerous: $b = .32$; $SE = .101$; $p = .001$; $\beta = .17$).

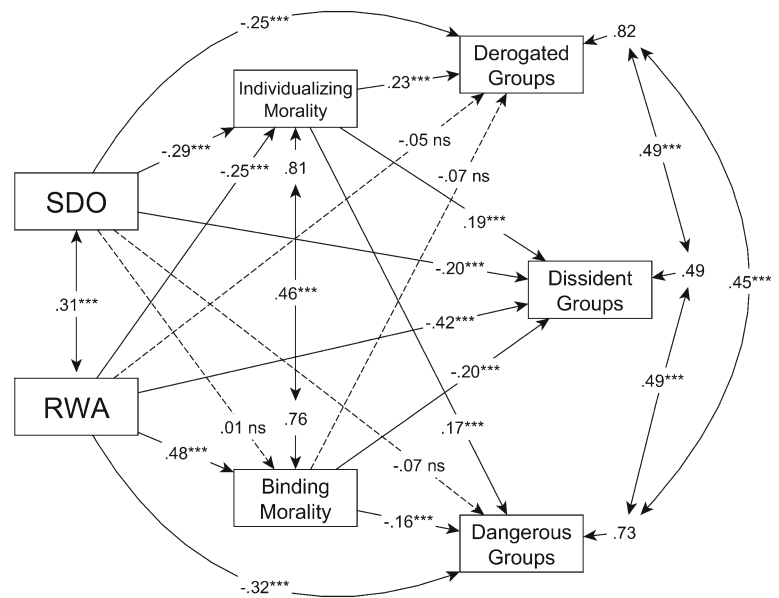
To create a simultaneously sufficient and parsimonious final mediation model that enables us to test the mediated effects of RWA and SDO, we took our saturated model as a base and trimmed the non-significant pathways between SDO and binding morality, SDO and attitudes towards dangerous groups, RWA and attitudes towards derogated groups, and the non-significant connection between binding morality and attitudes towards derogated groups. The resulting trimmed model, illustrated in Fig. 2, showed good fit to our data ($\chi^2 = 7.93$; $df = 4$; $CFI = .996$; $RMSEA = .049$; $SRMR = .033$). This model was not significantly different from the saturated model ($\Delta\chi^2 = 7.93$; $\Delta df = 4$; $p = .094$). In the model SDO negatively predicted attitudes towards derogated ($b = -.44$; $SE = .081$; $p < .001$; $\beta = -.24$) and dissident groups ($b = -.46$; $SE = .085$; $p < .001$; $\beta = -.19$) and individualizing morality ($b = -.29$; $SE = .042$; $p < .001$; $\beta = -.29$), while RWA negatively predicted attitudes towards dangerous ($b = -.64$; $SE = .104$; $p < .001$; $\beta = -.32$) and dissident groups ($b = -1.09$; $SE = .111$; $p < .001$; $\beta = -.41$), and individualizing morality ($b = -.27$; $SE = .051$; $p < .001$; $\beta = -.25$), while positively predicting binding morality ($b = .58$; $SE = .052$; $p < .001$; $\beta = .49$). Binding morality negatively predicted attitudes towards dangerous ($b = -.25$; $SE = .084$; $p = .003$; $\beta = -.15$) and dissident groups ($b = -.41$; $SE = .090$; $p < .001$; $\beta = -.18$), and

Table 2 Correlations between variables

Variable	1.	2.	3.	4.	5.	6.	7.
1. RWA	1.00	.309***	.486***	-.340***	-.644***	-.484***	-.237***
2. SDO		1.00	.158***	-.367***	-.437***	-.257***	-.358***
3. Binding moral foundations			1.00	.192***	-.399***	-.301***	-.092
4. Individualizing moral foundations				1.00	.373***	.274***	.320***
5. Evaluation Of dissident groups					1.00	.660***	.561***
6. Evaluation of dangerous groups						1.00	.522***
7. Evaluation of derogated groups							1.00

*** = $p < .001$

Fig. 1 Saturated path model showing relationships between right-wing authoritarianism, social dominance orientation, moral foundations, and intergroup attitudes. Path coefficients are standardized regression coefficients of the full model. *** = $p < .001$; ns = not significant paths at $p > .05$



individualizing morality positively predicted all intergroup evaluations again (dissident: $b = .51$; $SE = .106$; $p < .001$; $\beta = .21$; derogated: $b = .43$; $SE = .090$; $p < .001$; $\beta = .23$; dangerous: $b = .37$; $SE = .093$; $p = .001$; $\beta = .20$).

As the results of our final trimmed model indicate, RWA and SDO was also presumed to have a mediated indirect effect on intergroup attitudes beyond their direct effects through binding and/or individualizing morality. To reveal these indirect relationships, a mediational analysis was conducted with the bootstrapping technique suggested by Macho and Ledermann (2011), where we requested 95% confidence intervals using 2000 resamples. An indirect effect is considered to be significant if the unstandardized 95% confidence interval around the estimate does not contain 0. Indirect effects,

presented in Table 3, show that individualizing morality mediated the indirect effects of both RWA and SDO on every intergroup evaluation, while binding morality mediated the effects of RWA on attitudes towards the dangerous and dissident groups.

Discussion

Our results supplement the existing literature on the DPM and moral foundations theory on several points. First of all, we revealed the previously identified dimensions of generalized prejudice within the Hungarian context. The emerging three clusters of outgroups can similarly be interpreted as dangerous, derogated, and dissident groups as described by Duckitt

Fig. 2 Trimmed path model showing relationships between right-wing authoritarianism, social dominance orientation, moral foundations, and intergroup attitudes. Path coefficients are standardized regression coefficients of the full model. *** = $p < .001$; ** = $p < .01$; $\chi^2 = 7.93$; $df = 4$; CFI = .996; RMSEA = .049; SRMR = .033

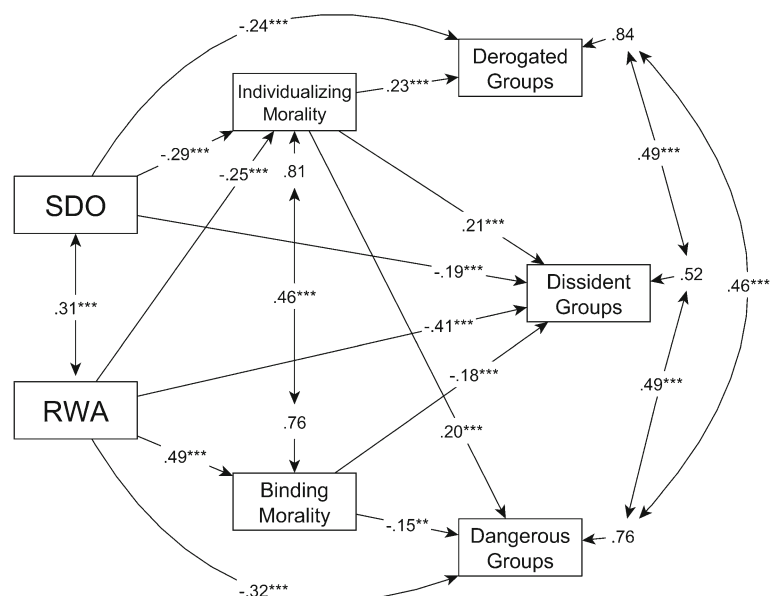


Table 3 Indirect effects of SDO and RWA on intergroup attitudes mediated by moral foundations

Indirect pathway	Indirect effect	<i>p</i>	Lower bound of confidence interval	Upper bound of confidence interval
SDO → IM → DE	-.12	.001	-.22	-.06
SDO → IM → DA	-.11	.001	-.19	-.05
SDO → IM → DI	-.15	.001	-.25	-.07
RWA → IM → DE	-.11	.001	-.20	-.05
RWA → IM → DA	-.10	< .001	-.17	-.05
RWA → IM → DI	-.14	.001	-.23	-.07
RWA → BM → DA	-.14	.004	-.28	-.04
RWA → BM → DI	-.23	< .001	-.38	-.14

IM Individualizing Morality, BM Binding Morality, DE Derogated, DA Dangerous, DI Dissident

and Sibley (2007). RWA and SDO was also related to the evaluation of these outgroup clusters in the same way as it was identified by the DPM line of research. The cross-cultural applicability of these dimensions is further supported by the fact that in our study we applied a somewhat different pool of social groups as targets of evaluation than previous studies (e.g. Asbrock et al. 2010; Cantal et al. 2015; Duckitt and Sibley 2007; Sibley et al. 2010) to adapt to the social realities of the Hungarian context.

We found that the specific outgroups belonging to the three clusters were somewhat different. Most importantly, in the original study of Duckitt and Sibley (2007) conducted in New Zealand, ethnic and sexual minorities (e.g. immigrants, Africans, gay people) belonged to the derogated cluster, while they were associated with the dissident group in Hungary. Presumably these groups are perceived to intentionally compete for symbolic and/or material resources with the majority in Hungary, as intergroup relations with these minority groups are heavily politicized, reinforcing the image of these groups as competitive rivals.

Another important result of our study is that intergroup attitudes are influenced by personal moral standards and concerns. Furthermore, prejudice against different kinds of outgroups evolve due to different sets of moral concerns. Our results support the assumption that binding morality serves as a moral base for negative attitudes towards groups that are perceived as a threat to the ingroup's norms, values, and institutions that bind people together into a coherent and stable community. In terms of the dimensions of generalized prejudice, this refers to the clusters of dissident and dangerous groups whose acts and behavior seem morally wrong according to the standards of binding moral foundations.

But this kind of moral disapproval or condemnation is not impartial, because binding moral principles are more important for those who have a higher motivation for maintaining

social harmony, certainty, and security, as indicated by a higher level of RWA. The connection between RWA and binding morality is not surprising since authoritarians make their moral judgements based on the exact values they aspire to: predictable and well-proven rules and guidelines for the social environment (tradition and sanctity), a coherent group that shares these rules (ingroup loyalty), and a leader who can guarantee the everyday functioning of these rules (authority). Since dissident and dangerous groups seemingly frustrate authoritarian people's enhanced need for security and certainty, they can easily become targets of moral condemnation according to their moral standards.

The case is a little bit different with the foundations of individualizing morality, as it is related to all intergroup attitudes in the same way, enhancing intergroup evaluations in the case of all three clusters. This universal effect on prejudice can be explained by the assumption that if someone attempts to maintain the moral standards of individualizing morality, she might feel unjust and harming to judge others exclusively on the grounds of mere group membership. That is why individualizing moral foundations of fairness and care can decrease the tendency of being generally prejudiced.

Furthermore, we have also seen that the two attitudinal dimensions of RWA and SDO showed the same directional relationship with individualizing morality: simultaneously extenuating it. This result indicates that moral concerns related to the individualizing foundations are less accessible for people with higher RWA and/or SDO when they are making their judgments about particular outgroups. Perhaps, in order to keep an outgroup in its place, the moral principles of justice and harm avoidance might be expendable for both the submissive and the dominant authoritarians. If a particular outgroup threatens either one's RWA-related need for security and predictability or the SDO-related need for superiority and dominance, that outgroup might expect to be a target of devaluation and prejudice, partly because it won't be perceived as entitled for the moral concerns of justice and care.

To put it in another way, these relationships indicate a motivated form of moral disengagement or moral exclusion. The concept of moral disengagement refers to the process by which people convince themselves by different cognitive strategies that they don't have to stick to personally important moral standards in a particular context (Bandura 1999, 2016), while moral exclusion occurs if people consider an outgroup outside the boundaries of moral values and standards (Opotow 1990). Common in both concepts is that people can reach a point where they no longer perceive a member of a particular outgroup as worthy of moral considerations. According to our findings, this mechanism can be motivated, and these points are much easier reached if people think that these outgroups threaten their personal needs, like RWA-related need for security or SDO-related need for superiority.

There are of course some caveats to this study, mainly related to our intergroup attitude item pool and research design. We could replicate some of the most important predictions of the DPM in the Hungarian context, which is a notable support for the universality of the DPM. However, our measure of intergroup attitudes was based on the evaluation of different groups than in previous studies (Asbrock et al. 2010; Cantal et al. 2015; Duckitt and Sibley 2007; Sibley et al. 2010), and the emerging factors consisted of different groups as well. Although the social and political circumstances and the perceived characteristics of these groups in the Hungarian context supported the decision to keep the original terms for the three factors, this decision was post-hoc. Therefore, it would be beneficial to test the conceptual equivalency of these clusters and those found in other cultural contexts in future research.

Furthermore, we did not test a causal connection between the measured variables, therefore we are unable to establish the direction of the effect between them. Future research should test it experimentally whether it is possible to influence moral judgements regarding different outgroups by manipulating RWA- and/or SDO-based individual motivations.

Conclusion

Our results support the assumption that both RWA-based and SDO-based motivations influence the perception of different outgroups partly through personally relevant moral concerns. When people decide whether the acts of a particular outgroup are morally acceptable or not, their personal needs can heavily influence which specific moral criteria are applied. This can explain why particular outgroups can be perceived in a strikingly dissimilar way by people with different individual characteristics and different moral standards that are based on these characteristics. For example, those applying the criteria of individualizing foundations (harm and justice) might see immigrants and refugees as victims of injustices who are in need of help and support, while those relying on binding morality, these groups might seem much more of a threat to the existing social order, harmony, and ingroup cohesion, and therefore react to them with hostility.

It is also important to note that different outgroups, depending on their unique characteristics, can activate different sets of moral intuitions while others remain irrelevant (like binding morality in the case of the evaluation of derogated outgroups). However, there are some moral criteria which have a universal effect on intergroup evaluations in connection with all kinds of outgroups (as those based on individualizing moral foundations). Accordingly, a moral conflict can emerge within the person if an outgroup activates contradicting moral concerns simultaneously. For instance, for people with a strong need for egalitarian group relations, but at the same time high need for security and certainty, it can be a pressing moral dilemma how

to relate to dissident groups like immigrants. In this way, personal evaluations of a particular outgroup might be the result of a complex interplay between individual motivational characteristics that define personal moral intuitions, and the way these motivated moral intuitions are related to perceived characteristics of that particular outgroup.

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Compliance with Ethical Standards

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Conflict of Interest Márton Hadarics declares that he has no conflict of interest.

Anna Kende declares that he has no conflict of interest.

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