A meta-analytic integration of research on the relationship between right-wing ideological attitudes and aggressive tendencies

Alain Van Hiel , Emma Onraet , Dries H. Bostyn , Jonas Stadeus , Tessa Haesevoets , Jasper Van Assche & Arne Roets

To cite this article: Alain Van Hiel , Emma Onraet , Dries H. Bostyn , Jonas Stadeus , Tessa Haesevoets , Jasper Van Assche & Arne Roets (2020) A meta-analytic integration of research on the relationship between right-wing ideological attitudes and aggressive tendencies, European Review of Social Psychology, 31:1, 183-221, DOI: [10.1080/10463283.2020.1778324](https://doi.org/10.1080/10463283.2020.1778324)

To link to this article: <https://doi.org/10.1080/10463283.2020.1778324>

Published online: 18 Jun 2020.

Submit your article to this journal [↗](#)

View related articles [↗](#)

View Crossmark data [↗](#)

ARTICLE

A meta-analytic integration of research on the relationship between right-wing ideological attitudes and aggressive tendencies

Alain Van Hiel, Emma Onraet, Dries H. Bostyn , Jonas Stadeus, Tessa Haesevoets, Jasper Van Assche and Arne Roets

Department of Developmental, Personality, and Social Psychology, Ghent University, Ghent, Belgium

ABSTRACT

Many studies have investigated the relationship between ideological attitudes and aggressive tendencies. The present meta-analytic integration of research on this relationship included data of 177 samples (total $N = 47,933$ participants). The results revealed that this relationship was substantial, $r = .31$, 95% CI [.27 to .35], $p < .001$. Such a relationship emerged for both attitudes towards violence and behavioural indicators, although the former relationship was stronger. Moreover, with respect to the different types of attitudes towards violence, we obtained equally strong relationships for attitudes towards war and military action, intergroup hostility and aggression, punitive attitudes, and intimate violence. Among the behavioural measures, context-specific aggression bore out a stronger effect size than chronic aggressive behaviour. Finally, type of right-wing attitude did not moderate the relationship under study. In the discussion, we argue that the pattern of results indicates that the greater aggressive tendencies among right-wing individuals are manifested both attitudinally and behaviourally.

ARTICLE HISTORY Received 24 May 2019; Accepted 29 May 2020

KEYWORDS Interpersonal aggression; attitudes towards violence; right-wing ideological attitudes; authoritarianism

About 70 years ago, Adorno et al. (1950) published their book “The Authoritarian Personality”. This work advanced a host of hypotheses that have inspired much follow-up research until today. In the present contribution, we specifically focus on the relationship between right-wing ideological attitudes and aggressive tendencies. We do so by collecting all available studies that relate right-wing attitudes to aggression, and by calculating effect sizes to estimate the magnitude of this relationship.

CONTACT Alain Van Hiel Alain.VanHiel@UGent.be Department of Developmental, Personality and Social Psychology, Ghent University, Ghent, Belgium
Supplemental data for this article can be accessed [here](#).

© 2020 European Association of Social Psychology

In the recent past, our research team has already conducted several meta-analytic integrations of findings in order to verify whether or not the original hypotheses of Adorno et al. (1950) hold true and can be further specified. For instance, as can be anticipated from the work of Adorno et al., a relationship between cognitive style variables such as rigidity and intolerance of ambiguity, and right-wing attitudes was confirmed (Van Hiel et al., 2010, based on 124 samples and a total of 29,209 participants), although this relationship proved to be considerably stronger for self-report studies than for studies that derive cognitive style from problem solving behaviour in a test setting (Van Hiel et al., 2016, 103 samples, 12,714 participants). Partially in line with expectations, threat and right-wing attitudes also yielded a substantial effect size, although this turned out to be especially the case for external threats from the environment, and less so for internal threats and fears from within the person (Onraet, Van Hiel, Dhont et al., 2013, 109 samples, 22,086 participants). However, somewhat unexpected because it was hardly given attention by Adorno et al., the relationship between cognitive abilities and right-wing attitudes yielded a significantly negative effect-size (Onraet et al., 2015, 90 samples, 111,028 participants). Finally, whereas the reading of Adorno et al. would certainly lead one to conclude that right-wing adherents are unhappy, the empirical relationship between right-wing attitudes and well-being turned out to be trivial and even non-significant for most indicators (Onraet, Van Hiel, Dhont et al., 2013, 97 samples, 69,221 participants). With the present contribution, our aim was to further provide a meta-analytic empirical test of key assumptions made in the seminal work of Adorno and colleagues.

Introduction

Over the last seven decades, scholars have hypothesised that there is a relationship between right-wing attitudes and aggressive tendencies (e.g. Altemeyer, 1981; Adorno et al., 1950). Ample empirical evidence has accumulated showing a relationship between right-wing attitudes and multiple indicators of ideology-based aggression, such as support for hostile actions against outgroups (e.g. A. Golecde Zavala et al., 2010; Thomsen et al., 2008) and military actions against adversary nations (Crowson, 2009a, 2009b; Crowson et al., 2005). However, and this is the more puzzling observation, right-wing attitudes have also been reported to relate to indicators of aggression tendencies that are not straightforwardly tied to any ideology, such as interpersonal aggression (e.g. Epstein, 1965, 1966).

The many studies in this domain have merely aimed to demonstrate a significant relationship between right-wing attitudes and specific aggressive tendencies. To the best of our knowledge, however, no integration of these piecemeal findings has yet been attempted; as a result, the relative strength of

these relationships is unclear. However, to understand right-wing-based aggression, one should have a view of exactly which attitudes favouring violence and which aggressive behaviours are implied, as well as of the extent to which their relationship with right-wing attitudes is similar in magnitude. In addition to this lack of empirical integration, theory development has lagged far behind. The present meta-analytic integration of studies therefore aims to contribute to the literature by investigating the relative weight of the relationships between right-wing attitudes and various aggressive tendencies. A more comprehensive insight into how different right-wing attitudes relate to various forms of aggressive tendencies should provide a necessary first step and will, hopefully, form the basis of what can become a theory of right-wing aggression.

In the present Study, we distinguished between several right-wing attitudes and we used a comprehensive view on aggression. Specifically, there is a broad consensus that ideological attitudes constitute two broad dimensions (see Duckitt, 2001; Lipset, 1981; Middendorp, 1978). The first dimension—social-cultural attitudes—relates to social conservatism and traditionalism at one pole versus openness, autonomy, liberalism, and personal freedom at the other pole. According to Duckitt (2001), Right-Wing Authoritarianism (RWA) is a typical indicator of this pattern of broad social attitudes. The second dimension—the economic-hierarchical dimension—relates to power, belief in hierarchy and inequality at one pole versus egalitarianism, humanitarianism, and concern with social welfare at the other pole. Scales such as Toughmindedness (Eysenck, 1954) and Social Dominance Orientation (SDO; Pratto et al., 1994; Sidanius & Pratto, 2001) are typical indicators of the latter broad social attitude (Duckitt, 2001). Importantly, previous studies have shown that both social-cultural and economic-hierarchical attitudes relate to indicators of aggressive tendencies (e.g. Cohrs, Moschner et al., 2005; Eysenck, 1954; Sibley et al., 2007), but their effect sizes are still unclear.

Moreover, we also advanced a comprehensive perspective on aggressive tendencies. Aggression is defined as behaviour intended to harm others (Harré & Lamb, 1983), but we do not limit ourselves to this behavioural component. Specifically, in the present meta-analysis we also include attitudes and beliefs that indicate a favourable orientation towards aggression and violence. Such attitudes may promote behavioural aggression, and it has been argued that they can be considered to be part of an aggressive personality structure that “includes a well-developed network of aggression-related knowledge structures (e.g. schemas and scripts), affect, and reflexive motor responses” (Anderson et al., 2006, p. 122; see also Anderson & Bushman, 2002a; Dodge & Crick, 1990). Moreover, such attitudes not only allow the person him- or herself to aggress, they may also facilitate other persons or societal actors to behave aggressively, thereby indirectly promoting

aggression. That being said, it should be acknowledged that the majority of studies on right-wing aggressive tendencies included attitudes that favour aggression rather than behavioural indicators of aggression. Moreover, the latter type of studies often included behavioural measures based on self-reports, and only a few studies used observational measures of actual behaviour.

An important limitation that we should mention before presenting the literature on the relationship between right-wing attitudes and aggression pertains to the scientific case of left-wing aggression (see Van Hiel et al., 2006). History proves that any ideology—political, religious, or philosophical—which is (too) strongly adhered to can be a source of aggression.¹ However, to the very best of our knowledge, we are not aware of any empirical study that has investigated typical targets of left-wing aggression, such as police officers, bankers, rich people, conservatives, etc. (for a similar rationale, see Brandt et al., 2014). It is possible that high-scoring left-wingers are more aggressively inclined towards members of such groups, but because of the lack of relevant studies we are not able to test this assumption.

The relationship between right-wing attitudes and aggressive tendencies

Right-wing policies typically involve a more forceful stance towards other countries and other groups. The imposition of brute force or violence is considered to be a valid way of managing international relationships. For instance, on the right-wing side of the political spectrum, “Hawks” who advocate an aggressive foreign policy based on strong military power typically outnumber “Doves” who try to more peacefully resolve international disputes. Conversely, on the left-wing side, the “Doves” outnumber the “Hawks” (Holsti, 1996; Hurwitz & Peffley, 1990). Not surprisingly, then, theorising has considered support for aggressive policies—especially in the context of international conflicts—to be a typical characteristic of those on the right-wing side of the political spectrum.

Right-wing adherents not only tend to show more support for aggression in international disputes, but scholars have even considered such aggressive tendencies to constitute a core aspect in the psychology of right-wing attitudes. Authoritarianism theory constitutes the clearest example of this perspective (Altemeyer, 1981; Adorno et al., 1950). From the early days of authoritarianism research, a facet called “authoritarian aggression” has been

¹Stalin, Mao, or Pol Pot were communist leaders who have been accountable for millions of deaths. These horrific examples of what might be called “left-wing” aggression, however, are probably more akin to right-wing aggression, in the sense that the persons who supported those regimes most strongly seem to be psychologically similar to right-wing persons living in Western democracies (Altemeyer & Kamenshikov, 1991; McFarland et al., 1996; Van Hiel et al., 2006).

included in the broad authoritarianism concept. According to Adorno et al., authoritarian aggression refers to “the tendency to be on the lookout for, and to condemn, reject, and punish people who violate conventional values” (p. 255). Authoritarian aggression items refer to a hostile orientation to “radicals”, “deviants”, “troublemakers”, “criminals”, “homosexuals”, and so on, which may possibly spill over to the aggression attitudes we investigate in the present study. In more recent theorising about authoritarianism, the role of aggression as one of the most important components has been reiterated repeatedly, and it has also been explicitly included as an important facet scale in more recent measurements of the concept (e.g. Stellmacher & Petzel, 2005; Van Hiel et al., 2007). In case of authoritarianism, it is therefore important to check for the presence of possible predictor-criterion overlap (as presently has been done in our pilot study, see below).

Although Adorno et al. (1950), and many scholars after them, conceptualised authoritarian aggression in terms of aggression towards norm-violating people and outgroups, their work also contains references to interpersonal aggression. For instance, according to Adorno and colleagues, responses to projective questions showed that authoritarian people demonstrated “concrete, impersonal, aggressive acts, usually directed against ‘irritating’ people” (p. 557). Moreover, in their well-known case study of Mack, it is mentioned that “the aggression appears to be out of touch with the rest of the personality; it is something which is entirely disclaimed, but which might suddenly explode in a blindly impulsive way” (p. 814). According to Altemeyer (2006), “while on the surface high RWAs [i.e. those scoring high on Right-Wing Authoritarianism] can be pleasant, sociable, and friendly, they seemingly have a lot of hostility boiling away inside them” (p. 52). As these citations clarify, aggression in right-wing people was hypothesised to be directed not only towards norm-violating people and outgroup members but can also manifest itself in interpersonal aggression. In the remainder of this literature review section, we address the relationship between right-wing attitudes and attitudes favouring violence on the one hand, and aggressive behaviour on the other hand.

The relationship between right-wing attitudes and attitudes favouring violence

As already mentioned, right-wing aggression has been primarily studied in relation to people who do not conform to conventional societal norms, as well as members of outgroups. Not surprisingly, the types of aggression measures that are typically studied in the domain of ideological attitudes, and which have been found to reveal strong correlations, include, among others, hostile attitudes against outgroups (e.g. Golecde Zavala et al., 2010) and violence against minority groups. We will refer to this type of aggression

with the term “intergroup aggression”. Other types of violence related attitudes have been discerned in the literature as well, and some of them have also been related to right-wing attitudes. For instance, Anderson et al. (2006) distinguished four dimensions of violence related attitudes: violence in war, penal code violence, corporal punishment of children, and intimate violence. Below, we elaborate in more detail on these four types of violence related attitudes.

Regarding the first type, pro-attitudes towards war have been frequently studied in relationship with right-wing attitudes and include support for military programmes (e.g. Pratto et al., 1994), for going to war in Iraq (e.g. McFarland, 2005), for militarism and for taking military actions in Afghanistan (Bonanno & Jost, 2006), and for military aggression as part of the war on terror (e.g. Crowson, 2009a, 2009b; Van Hiel & Kossowska, 2007).

With respect to the second type of violence related attitudes, right-wing attitudes are also typical of a “law-and-order mentality”. In line with this, previous studies have generally revealed a positive relationship between right-wing attitudes and penal code violence, as indicated, among others, by a pro-attitude towards capital punishment (e.g. Feather & Souter, 2002; McKee & Feather, 2008; Moran & Comfort, 1986) and corporal punishment (e.g. Benjamin, 2006), as well as harsh punishment goals (e.g. Colémont et al., 2011; Tam et al., 2008) and desire for retribution (e.g. Feather & Souter, 2002; McKee & Feather, 2008).

The third dimension of violence related attitudes—corporal punishment of children—has hardly been studied in the context of right-wing attitudes. This is rather surprising because theoretical accounts of right-wing attitudes often stress child-rearing (see Altemeyer, 1981; 2006; Feldman & Stenner, 1997, Stenner 2005), but focused on the fundamental values conveyed by childrearing in terms of parental authority versus autonomy, not on harsh, punitive childrearing behaviours in themselves as, for example, the use of corporal punishment.

The fourth dimension of violence related attitudes, intimate violence and woman-unfriendly attitudes, has also been repeatedly documented in the literature to correlate with right-wing attitudes. These aggressive tendencies prevail in the form of, for example, greater acceptance of rape myths (e.g. Walker et al., 1993).

The relationship between right-wing attitudes and aggressive behaviour

Right-wing attitudes have not only been related to attitudes favouring violence, but to aggressive behaviour as well. We distinguish between two types of aggressive behaviours, which we call “chronic” and “context-specific”, respectively. “Chronic aggression” is based on so-called measures of trait

aggression, which probe into self-reported aggressive behaviour in general, across situations. A number of studies have investigated the relationship between right-wing attitudes and measures of trait aggression, most notably Buss and Durkee (1957) Hostility Inventory and Buss and Perry (1992) Aggression Questionnaire, which are considered to be gold standards in aggression research (Gerevich et al., 2007). These measures include a number of statements about the occurrence of aggressive acts, such as “I get into fights a little more than the average person,” and the experience of anger, such as expressed in the item “Some of my friends think I’m a hothead.” These items do not refer to a specific context or situation, but rather probe into the frequency of aggression elicited across multiple contexts.

The context-specific aggression component refers to aggressive behaviours that are mobilised within a specific context. Some of the studies that include such an aggression measure are based on the registration of actual behaviours, which often takes the form of delivering electroshocks to another participant in a lab context (e.g. Dambrun & Vatiné, 2010; Epstein, 1965, 1966). Other instances of context-specific interpersonal aggression associated with right-wing attitudes include bullying behaviour (Parkins et al., 2006), and maltreatment behaviour enacted by officers (Barron & Ogle, 2014).

Besides the investigation of the realm of interpersonal contexts, some context-specific aggression studies have been conducted in the context of intimate, intergroup and war. With respect to intimate violence, these behavioural indicators are based on self-reports of behaviours enacted in the past, or on intentions and future plans in real or in hypothetical situations (e.g. Hogben et al., 2001; Kelly et al., 2015; LeeChai & Bargh, 2001). In the latter category, individuals indicate whether or not they would enact intimate violence in situations in which they cannot get punished for such acts. With respect to intergroup aggression, a number of behavioural studies has been conducted as well, among these Altemeyer’s (1988) “posse studies” in which participants expressed their agreement with actions against outgroups if these would be outlawed in the future (see also Thomsen et al., 2008). Finally, some studies have investigated participants’ willingness to go to war (Besta et al., 2015; Bizumic et al., 2013).

The studies that included interpersonal and intimate aggressive behaviours are typically “non-ideological”, as the target of aggression has no relationship whatsoever with any political outgroup or politically relevant group. Conversely, intergroup aggression and going to war target “ideological” relevant groups, that is, groups which are often explicitly targeted by right-wing propaganda, politics and politicians.

Right-wing aggressive tendencies: four specific comparisons

The comparison of the magnitude of the relationships between right-wing attitudes, on the one hand, and the specific aggression types on the other hand, is important as it allows us to move forward in terms of theory. At least four possible comparisons are interesting and can help to solve the scientific puzzle of whether right-wing attitudes relate to aggression, as well as the contexts and targets that elicit such aggression.

Attitudes versus behaviour

First, we compare the magnitude of the relationship between right-wing ideological attitudes and attitudes favouring violence on the one hand, versus aggressive behaviours on the other hand, across all included samples in our meta-analysis. A possible outcome of the present meta-analysis could be that the effect sizes for all attitudinal and behavioural aggression types are substantial, which would imply that right-wing adherents possess the inherent characteristic to aggress. In other words, right-wing attitudes could coincide with a general, deeply rooted inclination towards aggression at large. However, other outcomes may also be possible. For instance, it is possible that the relationships for attitudes favouring violence is strong, whereas it is weak for behaviour, which would indicate that such a relationship is merely about “beliefs” and less about enacted aggression in daily life.

On the basis of these theoretical considerations, the following Research Question 1 has been formulated: Does the magnitude of the relationship between right-wing attitudes and aggressive tendencies depend on type of measurement, i.e. attitudes versus behaviour?

Variation in terms of type of attitude favouring violence

A second important comparison is among the different attitudinal indicators of aggression (intergroup aggression, intimate violence, punitive attitudes, and support of war and the military). As we already stated above, violence related attitudes are often “ideological”. Specifically, a tough stance in the international arena and support of the military is often advocated by right-wing politicians and are part of the political programme of such parties. This can also be said about the harsh treatment of criminals, and the rather negative stance towards groups that do not abide to the conventional norms. The case of intimate violence, however, is not easy to classify in terms of ideologically-driven aggression. On the one hand, we agree that right-wing politics often favour traditional gender roles, which in turn may be related to intimate violence. On the other hand, such roles do not necessitate nor imply, of course, the enactment of intimate violence. Right-wing politicians do not call for any such

violence, neither does it constitute a part of any political party program. It is therefore an interesting question if attitudes towards intimate violence yields relationships of different magnitude with right wing ideology, compared to relationships with aggression attitudes towards more ideologically inspired targets.

Hence, Research Question 2 has been formulated: Does the magnitude of the relationship between right-wing attitudes and attitudes favouring aggressive tendencies depend on target group?

Variation in terms of type of behaviour

A third interesting comparison is among the behavioural indicators (chronic aggression and context-specific aggression in the interpersonal, intimate violence, intergroup and war domains). An intriguing possibility is that chronic aggression is poorly related to right-wing attitudes, whereas context-specific aggression invariably yields the stronger effect sizes. Such a result would indicate that high scores on right-wing attitudes do *not* correlate with a greater inherent, trait-wise tendency, as expressed in the chronic occurrence of aggression, anger and hostility-related thoughts. Conversely, the increased levels of specific aggressive tendencies would then be suggestive of the operation of general processes that increase the readiness of right-wing adherents to perceive specific contexts as aggression-eliciting.

We therefore formulate Research Question 3: Does the magnitude of the relationship between right-wing attitudes and aggressive behaviour depend on chronic versus context-specific aggression?

Variation in terms of type of right-wing attitude

A fourth and final issue, that is highly relevant in terms of theory, is the extent to which all right-wing attitudes are similarly related to different types of aggressive tendencies. If these relationships were to emerge for only one dimension of right-wing attitudes, then the basis of right-wing aggression is much more specific; only processes related to this one dimension of right-wing attitudes should then be considered relevant. Conversely, if all right-wing attitudes were to show a relationship with aggressive tendencies, only processes that apply to all right-wing attitudes could be at the basis of such tendencies.

Finally, Research Question 4 has been formulated as follows: Does the magnitude of the relationship between right-wing attitudes and aggressive behaviour depend on type of ideological attitude?

The present studies

As demonstrated in the previous sections, scholars have related right-wing attitudes to various types of aggressive tendencies. However, it remains unclear whether the relationship between right-wing attitudes and aggression is significant for various aggression types and, if this were the case, whether differences in the magnitude of this relationship would arise. Before proceeding to the meta-analysis, we wanted to ascertain that the right-wing ideological measures are truly distinctive from aggressive tendencies. In a pilot study reported in the Online Appendix, we therefore investigated the potential predictor-criterion overlap between the ideological variables and several aggression variables. To the best of our knowledge, and somewhat surprisingly, no such study has been conducted before. It is, however, necessary to ascertain that overlap is not an issue here. Authoritarianism scales especially may fall short in terms of predictor-criterion overlap because of the presence of some items that describe authoritarian aggression, which may lead to tautological relationships. Indeed, it is possible that authoritarianism and aggression show strong correlations not because of their true relationship, but merely because of sheer item overlap. Or put otherwise, one cannot use aggression (included in authoritarianism) as a predictor of aggression (as the criterion variable), unless one is able to show that these two aggression concepts do not overlap (see Lemery et al., 2002; Lengua et al., 1998). As can be seen in the Online Appendix, the mild levels of predictor-criterion overlap allowed us to proceed with the meta-analysis.

As such, we subsequently conducted our planned meta-analysis, based on relevant studies, which were classified in the broad categories of attitudes favouring violence, and aggressive behaviours. These categories were further divided in more fine-grained classes. Specifically, the attitudes favouring violence category has been further divided into attitudes towards war and military aggression, intergroup hostility and aggression, punitive attitudes, and intimate violence. The behavioural category was further divided into chronic and context-specific aggressive behaviour, and the context-specific category could include interpersonal, intimate, intergroup and war aggression. We thus computed an overall effect size across all studies and investigated whether the aggression types yield relationships of different magnitude with right-wing attitudes. Moreover, we investigated the impact of possible moderator variables, such as the type of scale measuring right-wing attitudes, and of study and publication characteristics. Publication bias was investigated as well.

Method

Selection and coding of studies

We searched for studies for this meta-analysis in different ways. Specifically, we searched for studies using a variety of keywords in various combinations in the databases of ISI Web of Knowledge, Google Scholar, and ProQuest. Keywords for aggression were: aggression, violence, anger, hostility, revenge, punitive attitudes, punishment, penal code, war, military, rape, harassing/harassment. Keywords for right-wing ideological attitudes were: authoritarianism, conservatism/conservative, liberal, social dominance orientation, left/right-wing, Democrat and Republican. We also checked reference lists of the obtained studies to look for additional studies of relevance. Besides looking for published studies, we also contacted researchers in the field to share relevant unpublished data. We contacted individual researchers who previously did research on aggression and right-wing ideological attitudes and we also distributed a call for unpublished data via the websites or mailing lists of the International Society of Political Psychology, European Association of Social Psychology and Social Psychology Network. Twelve unpublished samples were obtained. We ended our search for studies in July 2017.

To be included in the meta-analysis, studies had to administer at least one measure of right-wing ideological attitudes and at least one measure of aggression. Studies meeting these criteria were coded for several design, sample, and publication characteristics. First, we coded according to the specific type right-wing ideological attitudes: authoritarianism, social dominance orientation, conservatism, and political self-placement (measured with a conservative-liberal, or democrat-republican self-placement item). We also coded for the type of aggression, based on the following types: attitudes favouring aggression and aggressive behaviour, chronic and context-specific aggressive behaviour, attitudes favouring intergroup aggression, support for war and military action, punitive attitudes, and intimate violence (see Anderson et al., 2006). Because coding the samples into type of aggression was not always straightforward, in a limited number of cases, the two first authors separately coded each study, and the final coding was decided after deliberation between the two authors.²

We also coded some sample characteristics. First, we coded for type of sample, that is, in which group of individuals was the study conducted? The different types of samples were: adolescents, students, adults, and a “mixed” category in the case that different groups were combined. We also coded for

²The ideology and aggression classifications were cross-validated by the third author. We selected 25 samples. Twenty three classifications of the ideology measure were correct (two self-placement scales with “conservative” as an anchor were incorrectly assigned to the conservatism category). All aggression classifications were correct.

the geographic location of the sample: United States/Canada, Europe, Middle East & North-Africa, South-America, Australia & New Zealand, and International (one study included participants from all over the world). As an indicator of publication characteristics, the year of data acquisition was coded into three categories: before 1990, 1990–2009, 2010–present.

Because samples included in a meta-analysis have to be statistically independent (Mullen, 1989), a sample can only be included once in the meta-analysis. Because many of the obtained samples included several indicators of ideological attitudes or aggression, we constructed several “selection rules” to select a single data point for each sample (see also, Onraet et al., 2015; Van Hiel et al., 2010). When multiple indicators of a single type of right-wing ideological attitudes (e.g. two authoritarianism scales) or aggression (e.g. two indicators of interpersonal aggression) were administered, the mean correlation was calculated and used for further analyses. In the case that multiple indicators of aggression were administered in the same sample, we selected the type least prevalent across the other samples. The same rule was applied in the case that multiple indicators of ideological attitudes were included in the same sample, except when a sample included a measure of authoritarianism and social dominance orientation. Although we had more samples including authoritarianism ($N = 96$ compared to social dominance orientation ($N = 47$), we alternated between selecting the data point with authoritarianism and the one with social dominance orientation, because many samples ($N = 60$) included both at the same time. After this selection of studies, we obtained a final collection of 177 samples with a total of 47,933 participants. All studies are displayed in the online Appendix.

Statistical analyses

For the statistical meta-analyses, we used the metafor package in R (R Core Team, 2013; Viechtbauer, 2010). Because effect sizes are expected to vary across studies and in order to produce results that can be generalised to future studies with different designs (Hedges & Vevea, 1998), we used a random effects model with a Hunter-Schmidt estimator to model heterogeneity of the true effect sizes. The data and statistical code for all reported meta-analyses are available on <https://osf.io/wjy94/>.

Pearson product-moment correlation coefficients (r s) were used as effect size estimates. For studies that did not report correlation coefficients, but mean differences in scores on aggression across groups with low or high right-wing ideological attitudes, we used the reported test statistics (F -, t - or p -values) and/or the means and standard deviations for each group to calculate the effect sizes (Borenstein et al., 2005). First, Fisher- Z coefficients were calculated to permit an unbiased comparison of effect sizes. Next, mean weighted effect sizes and 95% confidence intervals around the point estimate

of the combined estimates were computed. Next, the effect size estimates were transformed back to correlations.

We also examined the role of potential moderator variables. Therefore, we conducted homogeneity analyses to test whether the sets of effect sizes were heterogeneous, and moderation analyses using categorical testing procedures (Lipsey & Wilson, 2001). A significant within-groups Q (Q_w) estimate indicates that the effect sizes within each moderator category are heterogeneous. A significant between-groups Q (Q_b) estimate indicates that the effect sizes of the moderator subgroups are significantly different. I^2 indices (Higgins & Thompson, 2002) indicate the percentage of variability in point estimates due to between-study heterogeneity, rather than sampling error (I^2 -values in the order of 25, 50, and 75 represent low, moderate, and high between-study heterogeneity).

Finally, we also checked for publication bias. Publication bias refers to the increased likelihood that a study gets published because of the presence of statistically significant results. Because non-significant results are less likely to get published (and hence unlikely to be included in a meta-analysis), publication bias can potentially jeopardise the representativeness of a meta-analytical sample set and might overestimate the meta-analytical effect sizes (Kepes et al., 2012, 2013). In the current manuscript, we checked for publication bias in three ways. First, we used a trim-and-fill approach to impute the effect sizes for “missing” studies (Duval & Tweedie, 2000). Secondly, we explicitly tested if the effect size for published studies differed significantly from those of the unpublished studies. Finally, we used the p -uniform method to test for the possibility of publication bias (Van Assen et al., 2015). The p -uniform method uses only the statistically significant findings in a set of studies and is based on the rationale that the distribution of p -values should be uniform conditional on the population effect size. As such, the method tests if the distribution of significant p -values within a set of studies deviates from the uniform distribution, hereby assuming that the population level effect equals the meta-analytic effect estimate of a fixed-effects model. Research by Van Aert et al. (2016) suggests that when the check for publication bias through the p -uniform method turns out to be non-significant, one can subsequently run a fixed or random-effects meta-analysis.

Results

Overall meta-analysis: right-wing ideological attitudes and aggressive tendencies

First, we performed a meta-analysis of the overall relationship between right-wing ideological attitudes and aggressive tendencies. Twelve samples

Table 1. Moderators of effect sizes for studies on the relationship between right-wing ideological attitudes and aggression.

Moderator	<i>N</i>	<i>k</i>	<i>r</i>	95%CI	<i>Q_b</i>	<i>Q_w</i>	<i>I₂</i>
Type of Aggression					8.73 **		89.78
Behavioural	13,578	67	.24	*** .19 to.29		472.32 ***	85.69
Attitudinal	34,355	110	.34	*** .29 to.38		1274.70 ***	91.29
Attitudinal subcategory					7.02		89.47
Intergroup Aggression	5495	16	.33	*** .25 to.41		101.41 ***	83.64
Intimate Violence	2328	11	.38	*** .31 to.46		46.10 ***	75.46
Attitudes towards Penal Code	12,268	38	.27	*** .19 to.34		292.06 ***	86.51
Attitudes towards War/Military Action	14,264	45	.40	*** .33 to.47		634.34 ***	92.74
Behaviour subcategory					18.48 ***		79.36
Chronic	5614	30	.13	*** .07 to.20		138.70 ***	78.03
Context-specific	7964	37	.31	*** .26 to.36		190.87 ***	80.31
Type of Ideological Attitude					1.20		90.08
Authoritarianism	22,162	96	.32	*** .27 to.37		989.58 ***	90.17
Social Dominance Orientation	12,734	47	.33	*** .27 to.39		524.02 ***	90.91
Conservatism	3623	12	.32	*** .21 to.43		121.05 ***	89.57
Political self-placement	9414	22	.26	*** .17 to.35		196.86 ***	88.14
Sample Type					3.21		90.07
Adolescents	572	2	.14	* .02 to.27		4.59 *	54.83
Students	23,558	104	.29	*** .25 to.34		790.84 ***	86.71
Adults	20,586	64	.32	*** .26 to.39		1018.68 ***	93.63
Mixed	3217	7	.39	*** .33 to.45		17.73 **	54.21
Location					12.99 *		89.98
USA/Canada	32,892	124	.31	*** .27 to.36		1235.89 ***	89.88
Europe	11,455	35	.34	*** .27 to.40		320.79 ***	88.69
Australia/New Zealand	1550	8	.25	*** .11 to.39		69.11 ***	88.16
Middle East/North Africa	1214	7	.18	-.07 to.43		164.12 ***	95.58
South America	397	2	-.04	-.15 to.07		2.57	22.14
International	425	1	.40	*** .32 to.48		0.00	0.00
Time of publication					0.66		90.48
Before 1990	7353	33	.34	*** .27 to.40		205.02 ***	83.53
1990–2009	14,415	60	.30	*** .23 to.36		611.81 ***	90.00
2010–present	26,165	84	.31	*** .25 to.37		1072.79 ***	92.07
Total Set	47,933	177	.31	*** .27 to.35		1897.26 ***	90.61

Note. *N* = number of participants; *k* = number of studies; CI = confidence interval; *Q_b* = homogeneity statistic between classes; *Q_w* = homogeneity statistic within classes. *I₂* = homogeneity statistic (percentage of heterogeneity).

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

revealed negative relations, a single sample showed a correlation of approximately 0, and 164 samples showed positive relations. The meta-analysis (for all results see Table 1) revealed an overall strong positive relation, $r = .31$, 95% CI [.27 to .35], $p < .001$. In other words, right-wing ideological attitudes were associated with higher scores on aggression.

We then tested for publication bias. Trim-and-fill suggests that 2 studies were missing on the left side of the effect size distribution. Importantly, including these studies did not impact the estimate for the effect, $r = .31$, 95% CI [.27 to .34], $p < .001$. A comparison of published versus non-published

studies did not reveal significant differences, $Q(1) = 1.35$, $p = .25$. Finally, the p -uniform method did not suggest the presence of publication bias, $p = 1$.

The overall effect size was heterogeneous, $Q(176) = 1897.26$, $p < .001$, $I^2 = 90.61$, which allowed us to test the influence of potential moderators. We first looked into the results in terms of our Research Questions. Pertaining to Research Question 1, type of aggression (attitudinal vs. behavioural), $Q(1) = 8.73$, $p = .003$, yielded a significant moderator effect. More specifically, the effect size of attitudes favouring aggression, $r = .34$, $p < .001$, 95% CI [.29 to .38], was stronger compared to the effect size for behavioural aggression, $r = .24$, $p < .001$, 95% CI [.19 to .29]. With respect to Research Question 2, the moderator effect of type of violence attitude was non-significant, $Q(3) = 7.02$, $p = .071$. In answer of Research Question 3, the moderator effect of type of aggressive behaviour (chronic versus context-specific), $Q(1) = 18.48$, $p < .001$, was significant, with a smaller effect size for chronic aggressive behaviour, $r = .13$, $p < .001$, 95% CI [.07 to .20], than for context-specific aggressive behaviour, $r = .31$, $p < .001$, 95% CI [.26 to .36]. Finally, in answer of Research Question 4, type of ideological attitude did not reveal a significant moderator effect, $Q(3) = 1.20$, $p = .754$. Next, we analysed the impact of 3 additional moderators: sample type, location of the sample, and time of publication. Only location of sample yielded a significant effect, but this was due to the few South-American samples that showed a negative effect.

We performed an additional meta-analysis solely including samples containing attitudes favouring violence, and an additional meta-analysis including solely samples using a measure of behavioural aggression. Our aim was to further test the moderator effect of type of ideology (Research Question 4) for attitudes and behaviour separately. Moreover, we wanted to further check whether the various types of context-specific aggressive behaviour yielded effect sizes of different magnitude.

Separate meta-analysis: right-wing attitudes and attitudes favouring violence

The meta-analysis of violence favouring attitudes (for all results see [Table 2](#)) was based on 110 samples.¹ Only five samples showed negative relations, whereas 104 showed positive relations. Again, in answer of Research Question 4, type of right-wing attitudes was not a significant moderator of the effect, $Q(3) = 3.56$, $p = .313$. Specifically, there were no significant differences between the effect sizes for authoritarianism, $r = .36$, $p < .001$, 95% CI [.30 to .43], social dominance orientation, $r = .38$, $p < .001$, 95% CI [.30 to .46], conservatism, $r = .35$, $p < .001$, 95% CI [.23 to .46], and political self-placement, $r = .26$, $p < .001$, 95% CI [.17 to .35].

Table 2. Moderators of effect sizes for studies on the relationship between right-wing ideological attitudes and attitudes favouring violence.

Moderator	<i>N</i>	<i>k</i>	<i>r</i>	95%CI	<i>Q_b</i>	<i>Q_w</i>	<i>I₂</i>
Type of Ideological Attitude					3.56		90.04
Authoritarianism	14,232	53	.36 ***	.30 to .43		497.76 ***	89.09
Social Dominance Orientation	7880	28	.38 ***	.30 to .46		366.87 ***	92.18
Conservatism	3069	9	.35 ***	.23 to .46		88.83 ***	89.32
Political self-placement	9174	20	.26 ***	.17 to .35		192.47 ***	88.96
Total Set	34,355	110	.34 ***	.29 to .38		1247.70 ***	91.29

Note. *N* = number of participants; *k* = number of studies; CI = confidence interval; *Q_b* = homogeneity statistic between classes; *Q_w* = homogeneity statistic within classes. *I₂* = homogeneity statistic (percentage of heterogeneity).

*** *p* < .001

Table 3. Moderators of effect sizes for studies on the relationship between right-wing ideological attitudes and behavioural indices of interpersonal aggression.

Moderator	<i>N</i>	<i>k</i>	<i>r</i>	95%CI	<i>Q_b</i>	<i>Q_w</i>	<i>I₂</i>
Type of Aggression					26.22 ***		75.75
Trait	5614	30	.13 ***	.07 to .20		138.70 ***	78.03
Context-specific Intimate	1903	9	.25 ***	.16 to .33		30.70 ***	69.70
Context-specific Interpersonal	1183	10	.21 **	.08 to .34		43.12 ***	76.17
Context-specific Intergroup	3893	13	.38 ***	.32 to .44		58.46 ***	77.18
Going to War	985	5	.30 ***	.17 to .43		15.43 **	60.93
Ideology					1.19		85.04
Authoritarianism	7930	43	.24 ***	.17 to .32		388.71 ***	88.75
Social Dominance Orientation	4854	19	.24 ***	.19 to .30		66.60 ***	70.92
Conservatism	554	3	.14 **	.06 to .22		0.79	0.00
Political self-placement	240	2	.15 *	.03 to .27		0.08	0.00
Total Set	13,578	67	.24 ***	.19 to .29		472.32 ***	85.69

Note. *N* = number of participants; *k* = number of studies; CI = confidence interval; *Q_b* = homogeneity statistic between classes; *Q_w* = homogeneity statistic within classes. *I₂* = homogeneity statistic (percentage of heterogeneity).

* *p* < .05; ** *p* < .01; *** *p* < .001

Separate meta-analyses: right-wing attitudes and aggressive behaviour

The separate meta-analysis of aggressive behaviour (for all results see Table 3) was based on 67 samples. Seven samples revealed negative relations, 61 showed positive relations. The moderator effect for type of aggression was significant, $Q(4) = 26.22$, $p < .001$, further illuminating Research Question 3. The effect size for context-specific aggression was strong for intergroup aggression, $r = .38$, $p < .001$, 95% CI [.31 to .44]), and going to war, $r = .30$, $p < .001$, 95% CI [.17 to .43], whereas it was moderate for interpersonal, $r = .21$, $p = .001$, 95% CI [.08 to .34], and intimate behaviour, $r = .25$, $p < .001$, 95% CI [.16 to .33], as well as rather small for chronic aggression, $r = .13$, $p < .001$, 95% CI [.07 to .20].

Again, in answer of Research Question 4, type of right-wing attitudes did not yield a significant moderator effect, $Q(3) = 1.19$, $p = .756$. Specifically, there were no significant differences between the effect sizes for authoritarianism, $r = .24$, $p < .001$, 95% CI [.17 to .32]), social dominance orientation, $r = .24$, $p < .001$, 95% CI [.19 to .30], conservatism, $r = .14$, $p < .001$, 95% CI [.06 to .22], and political self-placement, $r = .15$, $p = .018$, 95% CI [.03 to .27]).

Subsidiary analysis: comparison of attitude and behaviour within aggression domains

Finally, we have conducted three meta-analyses which compared studies that administered attitudinal measures with those which used behavioural indicators within the domains of war, intergroup aggression, and intimate violence (for all results see Table 4). We were not able to conduct such direct comparisons for studies in the punitive and interpersonal domains as the former category only includes studies with attitudinal measures of aggression, and the latter category only studies with behavioural indicators.

The meta-analysis of war was based on 50 samples. Three samples revealed negative relations, 47 showed positive relations. The moderator effect for type of measure (attitudinal versus behavioural) was not significant, $Q(1) = .73$, $p = .394$. The effect sizes for the attitudinal measures, $r = .40$,

Table 4. Moderation by behaviour versus attitudes of effect sizes for studies in the domain of war aggression, intergroup aggression, and intimate aggression.

<i>War Aggression</i>							
Moderator	<i>N</i>	<i>k</i>	<i>r</i>	95%CI	Q_b	Q_w	<i>I</i> ²
Behaviour versus Attitudes					0.73		92.12
Behaviour	985	5	.30 ***	.17 to.43		15.43 ***	60.93
Attitudes	14,264	45	.40 ***	.33 to.47		634.34 ***	92.74
Total Set	15,249	50	.39 ***	.32 to.46		666.04 ***	92.33
<i>Intergroup Aggression</i>							
Moderator	<i>N</i>	<i>k</i>	<i>r</i>	95%CI	Q_b	Q_w	<i>I</i> ²
Behaviour versus Attitudes					0.83		81.28
Behaviour	3893	13	.38 ***	.31 to.44		58.46 ***	77.18
Attitudes	5495	16	.33 ***	.25 to.41		101.41 ***	83.64
Total Set	9388	29	.35 ***	.30 to.40		165.12 ***	82.15
<i>Intimate Aggression</i>							
Moderator	<i>N</i>	<i>k</i>	<i>r</i>	95%CI	Q_b	Q_w	<i>I</i> ²
Behaviour versus Attitudes					5.36 *		73.19
Behaviour	1903	9	.25 ***	.16 to.33		30.70 ***	69.70
Attitudes	2328	11	.38 ***	.31 to.46		46.10 ***	75.46
Total Set	4231	20	.32 ***	.26 to.39		103.88 ***	80.43

Note. *N* = number of participants; *k* = number of studies; CI = confidence interval; Q_b = homogeneity statistic between classes; Q_w = homogeneity statistic within classes. *I*² = homogeneity statistic (percentage of heterogeneity).

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

$p < .001$, 95% CI [.33 to .47]) and going to war, $r = .30$, $p < .001$, 95% CI [.17 to .43] did not differ significantly. The meta-analysis of intergroup aggression based on 29 samples (all showing positive relations) neither showed a significant moderator effect for type of measure, $Q(1) = .83$, $p = .364$. The effect sizes for the attitudinal measures, $r = .33$, $p < .001$, 95% CI [.25 to .41]) and the behavioural measures, $r = .38$, $p < .001$, 95% CI [.31 to .44] did not differ significantly. Finally, the meta-analysis based on 20 samples (one sample revealed a negative relation, 19 showed positive relations) revealed a significant moderation effect of type of measurement for intimate violence, $Q(1) = 5.36$, $p = .021$. The effect size for the attitudinal measures, $r = .38$, $p < .001$, 95% CI [.31 to .46]) was stronger than for the behavioural measures, $r = .25$, $p < .001$, 95% CI [.16 to .33].

General discussion

To the best of our knowledge, a meta-analytic integration of research on the relationship between right-wing attitudes and aggressive tendencies has not been conducted yet. An important but unanswered question, therefore, pertained to the general relationship between right-wing attitudes and aggressive tendencies, as well as the more specific relationships for the various aggression types. The present study sought to establish the importance of all these relationships in terms of their effect size.

Main conclusions

In the pilot study reported in the online Appendix, we first have investigated possible item overlap between the right-wing attitudes and the aggression indicators. The resulting negligible levels of item overlap allowed us to proceed with the meta-analysis, which yielded at least five important results. First, the present effect size across all included samples, $r = .31$, revealed a substantial link between right-wing attitudes and aggressive tendencies. Since the classic work of Adorno et al. (1950) such a relationship has been hypothesised and then substantiated by a host of empirical studies (e.g. Altemeyer, 1981; Epstein, 1965, 1966; Crowson, 2009a; Thomsen et al., 2008). Moreover, because of the resurgence of interest in the relationship between right-wing attitudes and aggression, many studies included in the present meta-analysis have been published very recently, that is, after 2010. According to the guidelines of Funder and Ozer (2019) and Gignac and Szodorai (2016) for meta-analytic effects sizes in psychological research, effect sizes of about .10, .20, and .30 should be considered small, moderate, and large effects, respectively. The relationship between right-wing attitudes and aggressive tendencies thus qualifies to be labelled large. Also, compared to other

effect sizes in the broad literature on aggressive behaviour, the present effect size cannot be said to be trivial. For instance, smaller effect sizes have been obtained for antecedents of aggression which have rightfully been considered as problematic, such as in case of the consumption of media violence (r between .17 and .23 across different methodologies, see Anderson & Bushman, 2002b).

Attitudes favouring aggression versus aggressive behaviour

A second important result pertains to the difference between attitudes favouring aggression and aggressive behaviours, which was referred to as Research Question 1. Samples that included attitudes favouring violence yielded a considerably stronger effect size than studies which included behavioural aggression indices. Specifically, the relationship between right-wing attitudes and violence attitudes, $r = .34$, should be considered large, whereas the relationship with aggressive behaviour, $r = .24$, should be considered moderate. This result thus clarifies that right-wing individuals particularly adhere to various attitudes that support violence. It is not very surprising that, if a relationship between right-wing attitudes and aggression exists, it should primarily manifest itself in the aggression types of violence related attitudes towards war and military action, intergroup hostility and aggression, and punitive attitudes and the like. All these aggressions have a clear link to ideology. The relationship in terms of enacted behaviour is less pronounced, but this is mainly caused by the studies that included chronic aggression. In other words, in their personal life, right-wing individuals are less chronically aggressive than suggested by their attitudes and beliefs.

Nevertheless, subsidiary analyses revealed that in terms of the context specific aggression measures, the relationship under study is about equally strong for the attitudes favouring violence than for the corresponding behavioural indices, at least for the categories war and intergroup aggression. A significant difference was obtained for intimate violence, with studies including attitudinal measures yielding the stronger effect size as compared to the behavioural studies. But, even in the case of intimate violence, the relationships for the behavioural measure were still significant and by no means trivial.

The curious case of intimate violence

A third interesting finding pertains to Research Question 2, that is, the magnitudes of the relationships between right-wing attitudes and the various attitudes favouring aggression. The moderator effect for these different aggression types did not yield a significant difference. Especially, the comparison between intimate violence on the one hand, and the other attitudes favouring aggression towards ideological groups on the other hand elicited our interest. The observation that the effect size of the relationship between

right-wing attitudes and intimate violence was almost at the same level is surprising. The severity and harshness of the kinds of aggressive imagery included in these measures is worthy of further reflection. Indeed, some of the measures for intimate violence probe the acceptance of very serious transgressions, such as acceptance of interpersonal violence and rape myth acceptance (e.g. Walker et al., 1993). These are indeed among the boldest manifestations of sexual aggression. One could have hoped that the tendency to accept such fierce expressions of intimate violence would not be tied to any ideological attitude, but our results instead testify that the acceptance of such severe forms of sexual aggression tend to go along with right-wing attitudes.

Particularly troublesome in this respect is that the studies which included a behavioural measure of intimate violence also yielded a significant, albeit weaker relationship. This finding thus indicates that right-wing adherents may also show less restraint in enacting such aggressive behaviours. These behavioural indicators are based on self-reports of behaviours enacted in the past, or of intentions and future plans in real life or in hypothetical situations where they cannot get caught.

Aggressive behaviour: chronic versus context-specific

A fourth interesting finding concerns Research Question 3 and pertains to the effect-size for chronic aggressive behaviour, $r = .13$, as compared to the context-specific aggressive behaviours, $r = .31$. Subsequent analyses of the context-specific aggressive behaviours also yielded a significant effect, with the intergroup aggression and the going to war variables as the strongest ones, $r = .38$ and $.30$, respectively, whereas the interpersonal and intimate aggression types yielded moderate effect sizes, $r = .21$ and $.25$, respectively. These results suggest that when a “good reason” is present, people scoring high on right-wing attitudes may behave aggressively, and this to a larger extent than the level suggested by their trait-wise chronic aggressive tendencies. This finding also attunes well with the writings of Altemeyer (1996) who stated that: “Right-wing authoritarianism is an individual difference variable, a personality trait if you like, developed on the premise that some individuals need little situational pressure to ... attack others, while others require significantly more” (p. 8).

It should also be noted that there is a lot of heterogeneity in the magnitude of relationships among the context-specific aggression studies, which vary in the interpersonal domain between .06 (Parkins et al., 2006) and .58. (Epstein, 1965) and in the intimate domain between .06 (Hogben et al., 2001) and .40 (Tang & Fox, 2016). A closer look at some of these studies is therefore warranted. Specifically, those studies that investigated situations in which participants delivered shocks to another student (Berke & Zeichner, 2016; Epstein, 1965, 1966; Lipetz & Ossorio,

1967), often in the context of unprovoked aggression, yielded substantial effects. In these studies, the experimenter proclaimed that he or she was interested in the effects of electroshocks on learning processes. Two other included shock studies have been conducted in the context of obedience using a Milgram-like paradigm (Altemeyer, 1981; Dambrun & Vatiné, 2010). From these behavioural studies, it can thus be inferred that people scoring higher on right-wing attitudes are more inclined to deliver shocks to another person and that this effect occurs both in situations where an authority is present as well as when such an authority is lacking.

The perpetrators of interpersonal aggressions might explain their aggressive behaviours in many ways and may even think of such behaviours as being non-aggressive. For instance, high scorers on right-wing attitudes may have considered the deliverance of electroshocks to be “the necessary thing to do” for the success of the study in which they participated. They might have been surprised were they to have been told that such shocks were, in fact, a measure of aggression, as in their eyes, they only did what was expected from them. High scorers might say that harassment behaviour in video games is something that people normally do in such a situation, and they may discredit this behaviour as aggression because it occurred in a game context, not the real world. They may also consider the use of aggression for self-protection to be legitimate and much needed. Regardless of all these rationalisations, which, in fact, closely mirror the observations of Adorno et al. (1950); see also Altemeyer, 1981, 1996, 2006, the suggestion here is that high scorers on right-wing attitudes typically seem to easily “find a reason” to react aggressively when situations—in their eyes—calls for such a reaction.

Different right-wing attitudes

A final important finding, in answer of Research Question 4, is that type of right-wing measure did not moderate the effect, meaning that the relationship between right-wing attitudes and aggressive tendencies occurred for both the social-cultural and economic-hierarchical domains.³ This result is important in terms of theory development, because it clarifies that any theory of right-wing aggression should

³It should be noted that our results do not reveal significant differences between RWA and SDO in relationship with aggressive tendencies. Such differential relationships have been obtained for some other constructs that broadly fall into the cluster of prosocial versus antisocial tendencies. For instance, in a meta-analysis conducted by Sibley and Duckitt (2008), SDO was clearly the stronger correlate of the Five-Factor Model dimension Agreeableness, although part of this effect can be attributed to self-presentation (Ludeke et al., 2016). However, in other domains, like in social dilemma research, RWA and SDO have been found to bear relationships of more or less similar magnitude (e.g. Haesevoets et al., 2015).

incorporate processes that can be linked to both social-cultural and economic-hierarchical attitudes. Many previous studies building on the Dual Process Model (Duckitt, 2001; Duckitt et al., 2010) have shown that social-cultural and economic-hierarchical right-wing attitudes have different sources and distinctive effects, but aggressive tendencies seems to represent an exception to this.

Towards the development of a theoretical framework

How can we best explain the present findings? What processes should play a role in a general model of right-wing aggression? Such processes should fulfill at least three criteria. A first and quite obvious criterion is that potential candidates on the list are variables that have been related in the literature to *both* right-wing attitudes and to aggressive tendencies. Given that our meta-analysis reveals that aggressive tendencies are directed to a whole range of targets, a second criterion is that relevant processes should apply to a similar diversity in contexts as well. Specifically, well-known aggression cues such as the presence of weapons or increased temperatures only apply to well-defined situations and do not occur across a range of contexts, which makes them unlikely candidates as possible sources of right-wing aggression. A third criterion relates to the present finding that the aggression relationships were replicated across various right-wing attitudes. Hence, variables that are typical to one type of right-wing attitude but not to other right-wing attitudes are not the ideal candidates to explain right-wing aggression. With these three criteria in mind, we looked for variables included in integrative models of aggression (e.g. Anderson et al., 1996; Denson et al., 2012; DeWall et al., 2011) that may contribute to right-wing aggression.

As an illustration, we consider a variable that is considered to be very important in both aggression models and right-wing attitudes but is nevertheless unlikely to explain right-wing aggression because it does not fit the third criterion. Specifically, aggression models include higher-order cognition and self-control as important inhibitory mechanisms that counteract the expression of aggression. Impaired cognitive resources, such as being intoxicated (Laplace et al., 1994) or fatigued (Denson et al., 2010), have been related to increased aggression. Chronic levels of lower cognitive abilities have also been related to social-cultural ideology (for meta-analytic evidence, see Onraet et al., 2015; Van Hiel et al., 2010). However, and this is problematic in light of the present evidence that all right-wing attitudes relate alike to aggression, there is increasing evidence that the relationship between right-wing attitudes and intelligence does not hold for economic-hierarchical right-wing attitudes (e.g. Carl, 2014). Hence, cognitive capacity variables are unlikely bases of general right-wing aggression, precisely

because the capacity to process information is not consistently related to all right-wing attitudes.

Variables to be included in the study of right-wing aggression

As we explained above, to be a viable candidate as a relevant variable to explain right-wing aggression, at least three criteria must be fulfilled. Lower levels of emotional intelligence and high provocation proneness fulfill all criteria and are thus very likely to be important in this respect, whereas the status of negative affect is more uncertain and should be further investigated. Finally, we assume that a variable that curbs the relationship between right-wing attitudes and aggression is also relevant in this particular domain of study. In this respect, we advance the tendency of those higher on right-wing attitudes to avoid aggression-eliciting situations or to psychologically distance themselves from aggressive tendencies as a variable to be included in the study of right-wing aggression. In the remainder of the discussion, we go into depth into each of these potentially interesting variables.

Emotional intelligence

People higher in emotional intelligence are typically better able to manage, understand, interpret, use, and deal with emotions (Petrides, 2009) and are more able to identify and describe them (Bagby et al., 1994). They show higher levels of empathy as well. Emotional intelligence relates negatively to aggression (García-Sancho et al., 2014; Richardson et al., 1994) and negatively to indicators of both social-cultural and economic-hierarchical attitudes (Onraet, Van Hiel, De keersmaecker, & Fontaine, 2017; Van Hiel et al., 2019). Hence, based on their low scores on emotional intelligence, right-wing adherents may show increased aggressive tendencies.

Provocation proneness

Another potential interesting variable resides in one's personal life history. According to the social learning perspective, people scoring high on right-wing attitudes are more likely to have experienced a punitive parental style as a child (Altemeyer, 1981, 2006). It has been argued that a punitive instead of a permissive parental style may lead to the perception of one's environment as unsafe (Duriez et al., 2007), which may result in heightened levels of threat proneness and an increased probability to chronically interpret cues as aggressive (Coccaro et al., 2007). An important contribution made in the aggression literature involves the distinction between reactive and proactive aggression (Dodge & Coie, 1987). Reactive aggressive behaviours occur in response to perceived provocation or threat, whereas proactive aggression is enacted to achieve particular benefits. We thus argue that right-wing aggression is a form of reactive

aggression, not proactive aggression. Another important aspect of punitive parenting that has not granted much attention among scholars investigating ideological attitudes is the effect of corporal punishment in itself. The literature mentions many examples of “copycat” aggression: Those who witnessed aggression themselves at an early age, are more prone to use aggression themselves later on in life (see Kemme et al., 2014).

Regulation of negative affect

A third potentially interesting variable involved in right-wing aggression might reside in negative affect, which has been considered an important input factor of aggression (Berkowitz, 1989, 1993). Right-wing attitudes are hypothesised to go together with negativity bias, or the tendency to react with greater physiological responses to negative stimuli and to devote more psychological resources to them (Hibbing et al., 2014). People with right-wing attitudes are also more likely to believe that negative life events will happen to them (Lambert et al., 1999). However, the role of negative affect in right-wing attitudes is not yet well understood. It is still debated whether high scorers on right-wing attitudes are better able to cope with negative events (Van Hiel & De Clercq, 2009) or not (Duriez et al., 2012). Emotion regulation—especially in case of negative emotions—has been considered to lie at the basis of aggressive behaviour (Burt & Donellan, 2008), and therefore certainly needs to be addressed in greater detail in future research on right-wing aggression.

Avoidance

An integrated model of right-wing aggression should include a mechanism that explains why context-specific aggression yields the stronger relationships whereas the relationship with chronic aggression is curbed. Avoidance can be taken literally in terms of attempting not to confront aggression-eliciting social contexts, but it can also be understood in terms of psychological distancing, that is, minimising one’s own contribution in aggression. Such additional avoidance mechanisms are necessary because they explain why the effect size of the relationship between right-wing attitudes and trait aggression is curbed, whereas it is often strong in the form of aggression in specific contexts.

Avoidance has been used to describe right-wing ideology in general, that is, the focus on preventing harm and negative outcomes in general has been conceived as the hallmark of right-wing ideology (Janoff-Bulman, 2009). High scorers on right-wing attitudes also avoid new, possibly other-minded people, which may reduce the likeability of conflicts. Specifically, they prefer familiar individuals in their social network (Altemeyer, 1981, 2006; Oesterreich, 2005; Pettigrew, 2016). They also tend to avoid contact with people of other ethnicities (Allport, 1954), a relationship that has been

found to be valid for both social-cultural and economic-hierarchical attitudes (Dhont & Van Hiel, 2009). Hence, despite their increased reactivity in aggression-eliciting situations, avoidance tendencies may explain why high-scoring people on right-wing attitudes do not report higher levels of physical and verbal aggression in general.

Another avoidance mechanism might reside in psychological distancing. According to Adorno et al. (1950), right-wing adherents typically attribute aggression episodes to external sources, a phenomenon that these authors labelled scapegoating. They thus externalise blame for negative outcomes that would otherwise incriminate themselves; therefore, their self-image remains unaffected and intact (Rothschild et al., 2012). In other situations, people or institutions behaving badly are considered to have total responsibility and can therefore be blamed themselves for being treated harshly (Feather, 1996). Right-wing adherents are thus more “likely to blame victims of misfortune for the calamities that befall them” (Altemeyer, 2006, p. 52) than to consider themselves as causing the inflicted aggression. Any action inflicted on targets of aggression can be seen as legitimate and rightful (see Altemeyer, 2006) and is therefore ascribed not to the self but to the target, thus leaving the self-concept in terms of aggression unchanged.

Future studies

The present study draws attention to a number of processes that have hardly been studied empirically in the literature about right-wing aggression, and which are nevertheless worthwhile to investigate. The role of the four above-mentioned variables—emotional abilities, provocation proneness, regulation of negative affect, and avoidance—certainly merits further scholarly attention. The lack of theoretically guided studies in the investigation of the dynamics of right-wing aggression is remarkable and unfortunate. We hope that the present meta-analysis helps investigators to select variables that may explain right-wing aggression. The present list of potentially interesting process variables is not meant to be limitative, but instead we hope to have illustrated how such variables can be selected.

Another call for future studies is based on the observation that there is an underrepresentation of studies that administer behavioural measures of aggression, and this pertains to both self-reported indicators of aggression well as the observation of actual aggressive behaviour. This relative lack of research attention is also clearly present in the domain of intimate and interpersonal aggression. Especially the studies using electroshocks in a lab context (e.g. Dambrun & Vatiné, 2010; Epstein, 1965, 1966) represent a very useful paradigm to implement.

A final important issue pertains to left-wing aggression. As mentioned in the Introduction, left-wing aggression has not yet been investigated

empirically. But, do the present results imply that left-wing aggression does not exist? This is certainly not the message we want to convey. It is definitely possible that typical targets of left-wing negativity, like police officers, rich people, and Evangelical Christians, elicit aggression among high scoring left-wingers. However, and this is an important point, people scoring higher on left-wing attitudes (or, put otherwise, those scoring low on right-wing attitudes) are expected to demonstrate less aggressive tendencies towards non-ideological groups, such as in interpersonal contexts and in case of intimate aggression. The fundamental distinction between right-wing and left-wing aggression thus does not reside in the fact that one of these two ideological groups were to show no aggression whatsoever whereas the other would, but instead in the observation that right-wing aggression (but not left-wing aggression) is also manifested towards non-ideological groups. Left-wing aggression is, however, an understudied phenomenon that deserves more scholarly attention.

Conclusion

From the review of accumulated evidence from 177 samples collected in different countries over a time period of six decades, we are inclined to conclude that right-wing attitudes are indeed related to aggressive tendencies. Right-wing adherents tend to agree with aggression that targets adversary countries and particular social groups and categories, and even seem to accept and enact aggression, some of which is only loosely connected to any ideology. Having said this, it should be acknowledged that more research is needed to understand why these aggressive tendencies occur. Moreover, more scholarly attention is needed to identify the aggression potential of left-wing ideologies towards typical right-wing targets.

ORCID

Dries H. Bostyn <http://orcid.org/0000-0001-9994-4615>

Jasper Van Assche <http://orcid.org/0000-0002-2570-2928>

References

References preceded by ° † have been included in the meta-analysis.

Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. Harper and Row.

Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.

† Altemeyer, R. A. (1981) *Right-wing authoritarianism*. University of Manitoba Press.

† Altemeyer, R. A. (1988). *Enemies of Freedom*. Jossey Bass.

† Altemeyer, R. A. (1996). *The authoritarian specter*. Harvard University Press.

- [†]Altemeyer, R. A. (2006). *The authoritarians*. University of Manitoba. <http://theauthoritarians.org/Downloads/TheAuthoritarians.pdf>
- [†]Altemeyer, R. A., & Kamenshikov, A. (1991). Impressions of American and Soviet behaviour: RWA changes in a mirror. *South African Journal of Psychology*, 21 (4), 255–260. <https://doi.org/10.1177/008124639102100409>
- Anderson, C. A., Anderson, K. B., & Deuser, W. E. (1996). Examining an affective aggression framework weapon and temperature effects on aggressive thoughts, affect, and attitudes. *Personality and Social Psychology Bulletin*, 22(4), 366–376. <https://doi.org/10.1177/0146167296224004>
- Anderson, C. A., Benjamin, A. J., Jr., Wood, P. K., & Bonacci, A. M. (2006). Development and testing of the velicer attitudes toward violence scale: Evidence for a four-factor model. *Aggressive Behavior*, 32, 122–136. 2 <https://doi.org/10.1002/ab.20112>
- Anderson, C. A., & Bushman, B. (2002b). The effect of media violence on society. *Science*, 295(5564), 2377–2379. <https://doi.org/10.1126/science.1070765>
- Anderson, C. A., & Bushman, B. J. (2002a). Human aggression. *Annual Review of Psychology*, 53, 27–51. 1 <https://doi.org/10.1146/annurev.psych.53.100901.135231>
- [†]Anisfeld, M., Munoz, S. R., & Lambert, W. E. (1963). The structure and dynamics of the ethnic attitudes of jewish adolescents. *The Journal of Abnormal and Social Psychology*, 66(1), 31–36. <https://doi.org/10.1037/h0040287>
- Bagby, R. M., Parker, J. D., & Taylor, G. J. (1994). The twenty-item toronto alexithymia scale—I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research*, 38(1), 23–32. [https://doi.org/10.1016/0022-3999\(94\)90005-1](https://doi.org/10.1016/0022-3999(94)90005-1)
- [†]Barnes, C. D., Brown, R. P., & Osterman, L. L. (2012). Don't tread on me: Masculine honor ideology in the US and militant responses to terrorism. *Personality and Social Psychology Bulletin*, 38(8), 1018–1029. <https://doi.org/10.1177/0146167212443383>
- [†]Barnes, T. N., Smith, S. W., & Miller, M. D. (2014). School-based cognitive-behavioral interventions in the treatment of aggression in the United States: A meta-analysis. *Aggression and Violent Behavior*, 19(4), 311–321. <https://doi.org/10.1016/j.avb.2014.04.013>
- [†]Barron, L. G., & Ogle, A. D. (2014). Individual differences in instructor attitudes underlying maltreatment and effective mentoring in basic military training. *Military Psychology*, 26(5–6), 386–396. <https://doi.org/10.1037/mil0000053>
- [†]Begany, J. J., & Milburn, M. A. (2002). Psychological predictors of sexual harassment: Authoritarianism, hostile sexism, and rape myths. *Psychology of Men and Masculinity* 3(2), 119–126. <https://doi.org/10.1037/1524-9220.3.2.119>
- [†]Benjamin, A. J., Jr. (2006). The relationship between right-wing authoritarianism and attitudes toward violence: Further validation of the attitudes toward violence scale. *Journal of Social Behavior and Personality*, 11(6), 625–632. doi: 10.2224/sbp.2016.44.6.881
- [†]Benjamin, A. J., Jr. (2016). Right-wing authoritarianism and attitudes toward torture. *Social Behavior and Personality: An International Journal*, 44(6), 881–887. <https://doi.org/10.2224/sbp.2016.44.6.881>
- [†]Berke, D. S., & Zeichner, A. (2016). Testing a dual process model of gender-based violence: A laboratory examination. *Violence and Victims*, 31(2), 200–214. <https://doi.org/10.1891/0886-6708.VV-D-14-00060>

- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, 106(1), 59–73. <https://doi.org/10.1037/0033-2909.106.1.59>
- Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. McGraw-Hill Book Company.
- [†]Besta, T., Szulc, M., & Jaśkiewicz, M. (2015). Political extremism, group membership and personality traits: Who accepts violence?/Extremismo político, pertenencia al grupo y rasgos de personalidad: ¿Quién acepta la violencia? *Revista de Psicología Social*, 30(3), 563–585. <https://doi.org/10.1080/02134748.2015.1065085>
- [†]Bizumic, B., Stubager, R., Mellon, S., Van der Linden, N., Iyer, R., & Jones, B. M. (2013). On the (in) compatibility of attitudes toward peace and war. *Political Psychology*, 34(5), 673–693. doi: 10.1111/pops.12032
- [†]Blumberg, H. H., Zeligman, R., Appel, L., & Tibon-Czopp, S. (2017). Personality dimensions and attitudes towards peace and war. *Journal of Aggression, Conflict and Peace Research*, 9(1), 13–23. <https://doi.org/10.1108/JACPR-05-2016-0231>
- Bonanno, G. A., & Jost, J. T. (2006). Conservative shift among high-exposure survivors of the September 11th terrorist attacks. *Basic and Applied Social Psychology*, 28(4), 311–323. https://doi.org/10.1207/s15324834baspp2804_4
- Borenstein, M., Hedges, L. V., Higgins, J., & Rothstein, H. (2005). *Comprehensive meta-analysis version 2*. Biostat.
- Brandt, M. J., Reyna, C., Chambers, J. R., Crawford, J., & Wetherell, G. (2014). The ideological conflict hypothesis: Intolerance among both liberals and conservatives. *Current Directions in Psychological Science*, 23, 27–34. doi: 10.1177/0963721413510932
- Burt, M. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, 38(2), 217–230. doi: 10.1037/0022-3514.38.2.217
- Burt, S. A., & Donellan, M. B. (2008). Personality correlates of aggressive and non-aggressive antisocial behavior. *Personality and Individual Differences*, 44(1), 53–63. <https://doi.org/10.1016/j.paid.2007.07.022>
- Buss, A. H., & Durkee, A. (1957). An Inventory for assessing different kinds of hostility. *Journal of Consulting Psychology*, 21, 343–349. 4 <https://doi.org/10.1037/h0046900>
- Buss, A. H., & Perry, M. (1992) The aggression questionnaire. *Journal of Personality and Social Psychology*, 63, 452–459. 3 <https://doi.org/10.1037/0022-3514.63.3.452>
- [†]Çamaş, G. G., & Mese, G. (2016). Sosyal Hiyerarşi: Cinsel Şiddet Mitlerini Anlamak. [Social hierarchy: Understanding the myths of sexual violence] *Türk Psikoloji Dergisi*, Aralık 2016, 31, 62–74.
- [†]Campbell, M. (2015). *The complex role of religious beliefs in supporting peaceful or violent policies: A multi-method study in the U.S. Christian context* [Unpublished doctoral dissertation]. Clark University
- [†]Campbell, M., & Vollhardt, J. R. (2014). Fighting the good fight: The relationship between belief in evil and support for violent policies. *Personality and Social Psychology Bulletin*, 40(1), 16–33. <https://doi.org/10.1177/0146167213500997>
- [†]Canto, J. M., Perles, F., & Martín, J. S. (2014). The role of right-wing authoritarianism, sexism and culture of honour in rape myths acceptance/El papel del autoritarismo de derechas, del sexismo y de la cultura del honor en la aceptación de los mitos sobre la violación. *Revista de Psicología Social*, 29(2), 296–318. <https://doi.org/10.1080/02134748.2014.918822>

- Capps, J. S. (2010). *Collateral damage in Iraq and capital punishment in the USA: How the public makes sense of extreme violence and death* [Doctoral dissertation]. University of Kansas.
- Carl, N. (2014). Verbal intelligence is correlated with socially and economically liberal beliefs. *Intelligence*, 44, 142–148. <https://doi.org/10.1016/j.intell.2014.03.005>
- †Carnahan, T., & McFarland, S. (2007). Revisiting the stanford prison experiment: Could participant self-selection have led to the cruelty? *Personality and Social Psychology Bulletin*, 33(5), 603–614. <https://doi.org/10.1177/0146167206292689>
- Coccaro, E. F., McCloskey, M. S., Fitzgerald, D. A., & Phan, K. L. (2007). Amygdala and orbitofrontal reactivity to social threat in individuals with impulsive aggression. *Biological Psychiatry*, 62(2), 168–178. <https://doi.org/10.1016/j.biopsych.2006.08.024>
- †Cohrs, J. C., Kielmann, S., Maes, J., & Moschner, B. (2005). Effects of right-wing authoritarianism and threat from terrorism on restriction of civil liberties. *Analysis of Social Issues and Public Policy*, 5, 263–276. 1 <https://doi.org/10.1111/j.1530-2415.2005.00071.x>
- Cohrs, J. C., Moschner, B., Maes, J., & Kielmann, S. (2005). The motivational bases of right-wing authoritarianism and social dominance orientation: Relations to values and attitudes in the aftermath of September 11, 2001. *Personality and Social Psychology Bulletin*, 31(10), 1425–1434. <https://doi.org/10.1177/0146167205275614>
- †Colémont, A., Van Hiel, A., & Cornelis, I. (2011). Five-Factor Model personality dimensions and right-wing attitudes: Psychological bases of punitive attitudes? *Personality and Individual Differences*, 50, 486–491. 4 <https://doi.org/10.1016/j.paid.2010.10.032>
- †Crawford, J. T., Wiley, S., & Ventresco, N. (2014). Examining Americans' attitudes toward drone strikes on the eve of the 2012 presidential election. *Analyses of Social Issues and Public Policy*, 14(1), 46–60. <https://doi.org/10.1111/asap.12030>
- †Crowson, H. M., DeBacker, T. K., & Thoma, S. J. (2005). Does authoritarianism predict post-9/11 attitudes? *Personality and Individual Differences*, 39, 1273–1283. 7 <https://doi.org/10.1016/j.paid.2005.06.005>
- †Crowson, M. H. (2009a). Right-wing authoritarianism and social dominance orientation as mediators of worldviews beliefs on attitudes related to the war on terror. *Social Psychology*, 40, 93–103. 2 <https://doi.org/10.1027/1864-9335.40.2.93>
- †Crowson, M. H. (2009b). Nationalism, Internationalism, and perceived un relevance: Mediators of relationships between authoritarianism and support for military aggression as part of the war on terror. *Journal of Applied Social Psychology*, 39, 1137–1162. 5 <https://doi.org/10.1111/j.1559-1816.2009.00475.x>
- †Crowson, M. H. (2009c). Are all conservatives alike? A study of the psychological correlates of cultural and economic conservatism. *Journal of Psychology*, 143(5), 449–463. doi: 10.3200/JRL.143.5.449-463
- †Dambrun, M., & Vatiné, E. (2010). Reopening the study of extreme social behaviors obedience to authority within an immersive video environment. *European Journal of Social Psychology*, 40(5), 760–773. <https://doi.org/10.1002/ejsp.646>
- Denson, T. F., DeWall, C. N., & Finkel, E. J. (2012). Self-control and aggression. *Current Directions in Psychological Science*, 21(1), 20–25. <https://doi.org/10.1177/0963721411429451>
- Denson, T. F., von Hippel, W., Kemp, R. I., & Teo, L. S. (2010). Glucose consumption decreases impulsive aggression in response to provocation in aggressive

- individuals. *Journal of Experimental Social Psychology*, 46(6), 1023–1028. <https://doi.org/10.1016/j.jesp.2010.05.023>
- DeWall, C. N., Anderson, C. A., & Bushman, B. J. (2011). The general aggression model: Theoretical extensions to violence. *Psychology of Violence*, 1(3), 245. <https://doi.org/10.1037/a0023842>
- Dhont, K., & Van Hiel, A. (2009). We must not be enemies: Interracial contact and the reduction of prejudice among authoritarians. *Personality and Individual Differences* 46, 172–177. 2 <https://doi.org/10.1016/j.paid.2008.09.022>
- †Djeriouat, H., & Mullet, E. (2013). Public perception of the motives that lead political leaders to launch interstate armed conflicts: A structural and cross-cultural study. *Universitas Psychologica*, 12(2), 327–346.
- Dodge, K. A., & Coie, J. D. (1987). Social information processing factors in reactive and proactive aggression in children's peer groups. *Journal of Personality and Social Psychology*, 53, 1146–1158. 6 <https://doi.org/10.1037/0022-3514.53.6.1146>
- Dodge, K. A., & Crick, N. R. (1990). Social information-processing bases of aggressive behavior in children. *Personality and Social Psychology Bulletin*, 16(1), 8–22. <https://doi.org/10.1177/0146167290161002>
- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. *Advances in Experimental Social Psychology*, 33, 41–113. doi: 10.1016/S0065-2601(01)80004-6
- †Duckitt, J., Bizumic, B., Krauss, S. W., & Heled, E. (2010). A tripartite approach to right-wing authoritarianism: The authoritarianism-conservatism-traditionalism model. *Political Psychology*, 31(5), 685–715. <https://doi.org/10.1111/j.1467-9221.2010.00781.x>
- Duriez, B., Klimstra, T. A., Luyckx, K., Beyers, W., & Soenens, B. (2012). Right-wing authoritarianism: protective factor against or risk factor for depression? *European Journal of Personality*, 26(5), 536–549. <https://doi.org/10.1002/per.853>
- Duriez, B., Vansteenkiste, M., Soenens, B., & De Witte, H. (2007). The social costs of extrinsic relative to intrinsic goal pursuits: Their relation with social dominance and racial and ethnic prejudice. *Journal of Personality*, 75(4), 757–782. <https://doi.org/10.1111/j.1467-6494.2007.00456.x>
- Duval, S., & Tweedie, R. (2000). A non-parametric “trim and fill” method of accounting for publication bias in meta-analysis. *Journal of the American Statistical Association*, 95(449), 89–98. <https://doi.org/10.1080/01621459.2000.10473905>
- †Egan, V. (1989) Links between personality, ability and attitudes in a low-IQ sample. *Personality and Individual Differences*, 10, 997–1001. 9 [https://doi.org/10.1016/0191-8869\(89\)90065-2](https://doi.org/10.1016/0191-8869(89)90065-2)
- †Ensz, S., & Jankowski, P. J. (2017). Religiousness and rape myth acceptance: Risk and protective effects. *Journal of Interpersonal Violence*, 7-8. doi: 10.1177/0886260517698281
- †Epstein, R. (1965). Authoritarianism, displaced aggression, and social status of the target. *Journal of Personality and Social Psychology*, 2, 585–589. 4 <https://doi.org/10.1037/h0022494>
- †Epstein, R. (1966). Aggression toward outgroups as a function of authoritarianism and imitation of aggressive models. *Journal of Personality and Social Psychology*, 3, 574–579. 5 <https://doi.org/10.1037/h0023290>
- Eysenck, H. J. (1954). *The psychology of politics*. Routledge & Kegan Paul.

- [†]Feather, N. T. (1996). Reactions to penalties for an offense in relation to authoritarianism, values, perceived responsibility, perceived seriousness, and deservingness. *Journal of Personality and Social Psychology*, 71, 571–587. 3 <https://doi.org/10.1037/0022-3514.71.3.571>
- [†]Feather, N. T., & Souter, J. (2002). Reactions to mandatory sentences in relation to the ethnic identity and criminal history of the offender. *Law and Human Behavior*, 26, 417–438. 4 <https://doi.org/10.1023/A:1016331221797>
- Feldman, S., & Stenner, K. (1997). Perceived threat and authoritarianism. *Political Psychology*, 18, 741–770. 4 <https://doi.org/10.1111/0162-895X.00077>
- [†]Fetchenhauer, D., & Bierhoff, H. W. (2004). Attitudes toward a military enforcement of human rights. *Social Justice Research*, 17, 75–92. 1 <https://doi.org/10.1023/B:SORE.0000018093.23790.0d>
- Funder, D. C., & Ozer, D. J. (2019). Evaluating effect size in psychological research: Sense and nonsense. *Advances in Methods and Practices in Psychological Science*, 1 (2), 259–269. <https://doi.org/10.1177/2515245919847202>
- [†]Garcia, L. T., & Griffitt, W. (1978). Authoritarianism-situation interactions in the determination of punitiveness: Engaging authoritarian ideology. *Journal of Research in Personality*, 12(4), 469–478. [https://doi.org/10.1016/0092-6566\(78\)90072-7](https://doi.org/10.1016/0092-6566(78)90072-7)
- García-Sancho, E., Salguero, J. M., & Fernández-Berrocal, P. (2014). Relationship between emotional intelligence and aggression: A systematic review. *Aggression and Violent Behavior*, 19(5), 584–591. <https://doi.org/10.1016/j.avb.2014.07.007>
- [†]Gehrke, R. C. (2016). *Get tough on juvenile criminals: An assessment of punitiveness and punitive attitudes* [Unpublished Master Thesis]. Minnesota State University.
- [†]Gerber, M. M., & Jackson, J. (2013). Retribution as revenge and retribution as just deserts. *Social Justice Research*, 26, 61–80. 1 <https://doi.org/10.1007/s11211-012-0174-7>
- [†]Gerber, M. M., & Jackson, J. (2016). Authority and punishment: On the ideological basis of punitive attitudes towards criminals. *Psychiatry, Psychology and Law*, 23 (1), 113–134. <https://doi.org/10.1080/13218719.2015.1034060>
- [†]Gerber, M. M., & Jackson, J. (2017). Justifying violence: Legitimacy, ideology and public support for police use of force. *Psychology, Crime & Law*, 23(1), 79–95. <https://doi.org/10.1080/1068316X.2016.1220556>
- Gerevich, J., Bácskai, E., & Czobor, P. (2007). The generalizability of the buss–perry aggression questionnaire. *International Journal of Methods in Psychiatric Research*, 16(3), 124–136. <https://doi.org/10.1002/mpr.221>
- Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences*, 102, 74–78. <https://doi.org/10.1016/j.paid.2016.06.069>
- [†]Golec de Zavala, A., Cichocka, A., Eidelson, R., & Jayawickreme, N. (2009). Collective narcissism as and its social consequences. *Journal of Personality and Social Psychology*, 97, 1074–1096. <https://doi.org/10.1037/a0016904>
- [†]Golec de Zavala, A., Cichocka, A., & Iskra-Golec, I. (2013). Collective narcissism moderates the effect of in-group image threat on intergroup hostility. *Journal of Personality and Social Psychology*, 104, 1019–1039. 6 <https://doi.org/10.1037/a0032215>
- Golec de Zavala, A., Cislak, A., & Wesołowska, E. (2010). Political conservatism, need for cognitive closure and intergroup hostility. *Political Psychology*, 31, 521–541. 4 <https://doi.org/10.1111/j.1467-9221.2010.00767.x>

- [†]Golecde Zavala, A., & Kossowska, M. (2011). Correspondence between images of terrorists and preferred approaches to counterterrorism: The moderating role of the ideological orientations. *European Journal of Social Psychology*, 41, 538–549. 4 <https://doi.org/10.1002/ejsp.810>
- [†]Golecde Zavala, A., Peker, M., Guerra, R., & Baran, T. (2016) Collective narcissism predicts hypersensitivity to in-group insult and direct and indirect retaliatory intergroup hostility. *European Journal of Personality*, 30, 532–551. 6 <https://doi.org/10.1002/per.2067>
- [†]Gonzalez, J. B. (2013). *The relationship between aggression and authoritarianism* [Unpublished Master Thesis]. Texas A & M University.
- [†]Goodnight, B. L., Cook, S. L., Parrott, D. J., & Peterson, J. L. (2014). Effects of masculinity, authoritarianism, and prejudice on antigay aggression: A path analysis of gender-role enforcement. *Psychology of Men & Masculinity*, 15, 437–444. 4 <https://doi.org/10.1037/a0034565>
- [†]Guimond, S., De Oliveira, P., Kamiesjki, R., & Sidanius, J. (2010). The trouble with assimilation: Social dominance and the emergence of hostility against immigrants. *International Journal of Intercultural Relations*, 34, 642–650. 6 <https://doi.org/10.1016/j.ijintrel.2010.01.002>
- [†]Gulevich, O., Sarieva, I., Nevruiev, A., & Yagiyayev, I. (2017). How do social beliefs affect political action motivation? The cases of Russia and Ukraine. *Group Processes & Intergroup Relations*, 20(3), 382–395. <https://doi.org/10.1177/1368430216683531>
- Haesevoets, T., Reinders-Folmer, C., & Van Hiel, A. (2015). Cooperation in mixed-motive games: The role of individual differences in selfish and prosocial orientation. *European Journal of Personality*, 29, 445–458. 4 <https://doi.org/10.1002/per.1992>
- [†]Hantzi, A., Lampridis, E., Tsantila, K., & Böhner, G. (2015). Validation of the greek acceptance of modern myths about sexual aggression (AMMSA) scale: Examining its relationships with sexist and conservative political beliefs. *International Journal of Conflict and Violence*, 9(1), 122–133. <https://doi.org/10.4119/ijcv-3072>
- Harré, R., & Lamb, R. (1983). *The encyclopedic dictionary of psychology*. The MIT Press.
- [†]Hart, V. (2013). *Justice and the nature of human nature: What, why, and how beliefs and values matter* [Unpublished Doctoral Thesis]. James Madison University.
- [†]Hastings, B. M., & Shaffer, B. A. (2005). Authoritarianism and sociopolitical attitudes in response to threats of terror. *Psychological Reports*, 97, 623–630. 6 <https://doi.org/10.2466/PRO.97.6.623-630>
- [†]Heaven, P. C. L., Organ, L., Supavadeeprasit, S., & Leeson, P. R. (2006). War and prejudice: A study of social values, right-wing authoritarianism, and social dominance orientation. *Personality and Individual Differences*, 40, 599–608. 3 <https://doi.org/10.1016/j.paid.2005.08.005>
- Hedges, L. V., & Vevea, J. L. (1998). Fixed- and random-effects models in meta-analysis. *Psychological Methods*, 3, 486–504. 4 <https://doi.org/10.1037/1082-989X.3.4.486>
- Hemphill, J. F. (2003). Interpreting the magnitudes of correlation coefficients. *American Psychologist*, 58(1), 78–80. <https://doi.org/10.1037/0003-066X.58.1.78>
- [†]Henry, P. J., Sidanius, J., Levin, S., & Pratto, F. (2005). Social dominance orientation, authoritarianism, and support for intergroup violence between the Middle East

- and America. *Political Psychology*, 26, 569–583. 4 <https://doi.org/10.1111/j.1467-9221.2005.00432.x>
- [†]Hetherington, M., & Suhay, E. (2011). Authoritarianism, threat, and Americans' support for the war on terror. *American Journal of Political Science*, 55(3), 546–560. <https://doi.org/10.1111/j.1540-5907.2011.00514.x>
- Hibbing, J. R., Smith, K. B., & Alford, J. R. (2014). Differences in negativity bias underlie variations in political ideology. *Behavioral and Brain Sciences*, 37(3), 297–307. <https://doi.org/10.1017/S0140525X13001192>
- Higgins, J., & Thompson, S. G. (2002). Quantifying heterogeneity in a meta-analysis. *Statistics in Medicine*, 21(11), 1539–1558. <https://doi.org/10.1002/sim.1186>
- [†]Hockett, J. M., Saucier, D. A., Hoffman, B. H., Smith, S. J., & Craig, A. W. (2009). Oppression through acceptance? Predicting rape myth acceptance and attitudes toward rape victims. *Violence Against Women*, 15(8), 877–897. <https://doi.org/10.1177/1077801209335489>
- [†]Hogben, M., Byrne, D., Hamburger, M. E., & Osland, J. (2001). Legitimized aggression and sexual coercion: Individual differences in cultural spillover. *Aggressive Behavior*, 27(1), 26–43. [https://doi.org/10.1002/1098-2337\(20010101/31\)27:1<26::AID-AB3>3.0.CO;2-V](https://doi.org/10.1002/1098-2337(20010101/31)27:1<26::AID-AB3>3.0.CO;2-V)
- Holsti, O. P. 1996. *Public opinion and american foreign policy*. University of Michigan Press.
- Hurwitz, J., & Peffley, M. (1990). Public images of the Soviet Union: The impact on foreign policy attitudes. *The Journal of Politics*, 52(1), 3–28. <https://doi.org/10.2307/2131417>
- [†]Jackson, L. E., & Gaertner, L. (2010) Mechanisms of moral disengagement and their differential use by right-wing authoritarianism and social dominance orientation in support of war. *Aggressive Behavior* 36, 238–250. 4 <https://doi.org/10.1002/ab.20344>
- Janoff-Bulman, R. (2009). To provide or protect: Motivational bases of political liberalism and conservatism. *Psychological Inquiry*, 20, 120–128. 2–3 <https://doi.org/10.1080/10478400903028581>
- [†]Johnson, D., McDermott, R., Cowden, J., & Tingley, D. (2012). Dead certain: Confidence and conservatism predict aggression in simulated international crisis decision-making. *Human Nature*, 23, 98–126. 1 <https://doi.org/10.1007/s12110-012-9134-z>
- [†]Kelly, A. J., Dubbs, S. L., & Barlow, F. K. (2015). Social dominance orientation predicts heterosexual men's adverse reactions to romantic rejection. *Archives of Sexual Behavior*, 44(4), 903–919. <https://doi.org/10.1007/s10508-014-0348-5>
- Kemme, S., Hanslmaier, M., & Pfeiffer, C. (2014). Experience of parental corporal punishment in childhood and adolescence and its effect on punitiveness. *Journal of Family Violence*, 29, 129–142. 2 <https://doi.org/10.1007/s10896-013-9564-3>
- Kepes, S., Banks, G. C., McDaniel, M., & Whetzel, D. L. (2012). Publication bias in the organizational sciences. *Organizational Research Methods*, 15(4), 624–662. <https://doi.org/10.1177/1094428112452760>
- Kepes, S., McDaniel, M. A., Brannick, M. T., & Banks, G. C. (2013). Meta-analytic reviews in the organizational sciences: Two meta-analytic schools on the way to MARS (the meta-analytic reporting standards). *Journal of Business and Psychology*, 28(2), 123–143. <https://doi.org/10.1007/s10869-013-9300-2>
- [†]Kossowska, M., Bukowski, M., & Van Hiel, A. (2008). The impact of submissive versus dominant authoritarianism and negative emotions on prejudice.

- Personality and Individual Differences*, 45(8), 744–749. <https://doi.org/10.1016/j.paid.2008.07.022>
- [†]Kteily, N., Hodson, G., & Bruneau, E. (2016). They see us as less than human: Metadehumanization predicts intergroup conflict via reciprocal dehumanization. *Journal of Personality and Social Psychology*, 110(3), 343–370. <https://doi.org/10.1037/pspa0000044>
- Lambert, A. J., Burroughs, T., & Nguyen, T. (1999). Perceptions of risk and the buffering hypothesis: The role of just world beliefs and right-wing authoritarianism. *Personality and Social Psychology Bulletin*, 25(6), 643–656. <https://doi.org/10.1177/0146167299025006001>
- Laplace, A. C., Chermack, S. T., & Taylor, S. P. (1994). Effects of alcohol and drinking experience on human physical aggression. *Personality and Social Psychology Bulletin*, 20(4), 439–444. <https://doi.org/10.1177/0146167294204011>
- [†]Larsson, M. R., Björklund, F., & Bäckström, M. (2012). Right-wing authoritarianism is a risk factor of torture-like abuse, but so is social dominance orientation. *Personality and Individual Differences*, 53, 927–929. <https://doi.org/10.1016/j.paid.2012.06.015>
- [†]LeeChai, A. Y., & Bargh, J. A. (Eds.). (2001). *The use and abuse of power: Multiple perspectives on the causes of corruption*. Psychology Press.
- Lemery, K. S., Essex, M. J., & Smider, N. A. (2002). Revealing the relation between temperament and behavior problem symptoms by eliminating measurement confounding: Expert ratings and factor analyses. *Child Development*, 73, 867–882. <https://doi.org/10.1111/1467-8624.00444>
- Lengua, L. J., West, S. G., & Sandler, I. N. (1998). Temperament as a predictor of symptomatology in children: Addressing contamination of measures. *Child Development*, 69, 164–181. <https://doi.org/10.1111/j.1467-8624.1998.tb06141.x>
- Levin, S., Roccas, S., Sidanius, J., & Pratto, F. (2015). Personal values and intergroup outcomes of concern for group honor. *Personality and Individual Differences*, 86, 374–384. <https://doi.org/10.1016/j.paid.2015.06.047>
- [†]Lindén, M., Björklund, F., & Bäckström, M. (2016). What makes authoritarian and socially dominant people more positive to using torture in the war on terrorism? *Personality and Individual Differences*, 91, 98–101. <https://doi.org/10.1016/j.paid.2015.11.058>
- [†]Lipetz, M. E., & Ossorio, P. G. (1967). Authoritarianism, aggression, and status. *Journal of Personality and Social Psychology*, 5, 468–472. <https://doi.org/10.1037/h0021214>
- [†]Lippa, R., & Arad, S. (1999). Gender, personality, and prejudice: The display of authoritarianism and social dominance in interviews with college men and women. *Journal of Research in Personality* 33, 463–493. <https://doi.org/10.1006/jrpe.1999.2266>
- Lipset, S. (1981). *Political man: The social basis of politics*. The John Hopkins University Press.
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Sage Publications, Inc.
- [†]Ljubin, T., & Grubišić-Ilić, M. (2002). Some factors related to police cadets' perceptions of deviant police behavior. In *Policing in Central and Eastern Europe: Deviance, Violence and Victimization: Conference Proceedings* (pp. 387–394), Ljubljana.

- Ludeke, S., Tagar, M. R., & De Young, C. G. (2016). Not as different as we want to be: Attitudinally consistent trait desirability leads to exaggerated associations between personality and sociopolitical attitudes. *Political Psychology*, 37, 125–135. 1 <https://doi.org/10.1111/pops.12221>
- †Lyll, H. C., & Thorsteinsson, E. B. (2007). Attitudes to the Iraq war and mandatory detention of asylum seekers: Associations with authoritarianism, social dominance, and mortality salience. *Australian Journal of Psychology*, 59(2), 70–77. <https://doi.org/10.1080/00049530601148421>
- †Malka, A., & Soto, C. J. (2011). The conflicting influences of religiosity on attitude toward torture. *Personality and Social Psychology Bulletin*, 37(8), 1091–1103. <https://doi.org/10.1177/0146167211406508>
- †Mayeux, L. (2014). Understanding popularity and relational aggression in adolescence: The role of social dominance orientation. *Social Development*, 23, 502–517. 3 <https://doi.org/10.1111/sode.12054>
- †McFarland, S. G. (1998). *Toward a typology of prejudiced persons*. Paper presented at the annual convention of the International Society for Political Psychology, Montreal, Canada, July.
- †McFarland, S. G. (1999, July). *Personality, values, and latent prejudice: A test of a causal model*. Paper presented at the annual convention of the International Society for Political Psychology, Amsterdam, the Netherlands.
- †McFarland, S. G., & Adelson, S. (1996). *An omnibus study of personality, values and prejudices*. Paper presented at the Annual Convention of the International Society for Political Psychology, Vancouver, British Columbia.
- †McFarland, S. G., Ageyev, V. S., & Djintcharadze, N. (1996). Russian authoritarianism two years after communism. *Personality and Social Psychology Bulletin*, 22, 210–217. 2 <https://doi.org/10.1177/0146167296222010>
- †McFarland, S. G. (2005). On the eve of war: Authoritarianism, social dominance, and american students' attitudes toward attacking Iraq. *Personality and Social Psychology Bulletin*, 31, 360–367. 3 <https://doi.org/10.1177/0146167204271596>
- †McKee, I. R., & Feather, N. T. (2008). Revenge, retribution, and values: Social attitudes and punitive sentencing. *Social Justice Research*, 21, 138–163. 2 <https://doi.org/10.1007/s11211-008-0066-z>
- †Mededović, J., & Petrović, B. (2016). The militant extremist mind-set as a conservative ideology mediated by ethos of conflict. *Peace and Conflict: Journal of Peace Psychology*, 22(4), 404–408. <https://doi.org/10.1037/pac0000175>
- †Melikian, L. H. (1956). Some correlates of authoritarianism in two cultural groups. *The Journal of Psychology*, 42(2), 237–248. <https://doi.org/10.1080/00223980.1956.9713037>
- †Messick, S., & Frederikson, N. (1958). Ability, acquiescence, and “authoritarianism.” *Psychological Reports*, 4, 687–697. <https://doi.org/10.2466/PRO.4.7.687-697>
- Middendorp, C. (1978). *Progressiveness and conservatism. the fundamental dimensions of ideological controversy and their relationship to social class*. Mouton.
- †Milburn, M. A., Niwa, M., & Patterson, M. D. (2014). Authoritarianism, anger, and hostile attribution bias: A test of affect displacement. *Political Psychology*, 35(2), 225–243. <https://doi.org/10.1111/pops.12061>

- [†]Mitchell, H. E., & Byrne, D. (1973). The defendant's dilemma: Effects of jurors' attitudes and authoritarianism on judicial decisions. *Journal of Personality and Social Psychology*, 25, 123–129. 1 <https://doi.org/10.1037/h0034263>
- Moran, G., & Comfort, J. C. (1986). Neither "tentative" nor "fragmentary": Verdict preference of impaneled felony jurors as a function of attitude toward capital punishment. *Journal of Applied Psychology*, 71(1), 146. <https://doi.org/10.1037/0021-9010.71.1.146>
- [†]Motyl, M., Hart, J., & Pyszczynski, T. (2010). When animals attack: The effects of mortality salience, infrahumanization of violence, and authoritarianism on support for war. *Journal of Experimental Social Psychology*, 46, 200–203. 1 <https://doi.org/10.1016/j.jesp.2009.08.012>
- Mullen, B. (1989). *Advanced BASIC meta-analysis*. Lawrence Erlbaum Associates.
- [†]Navarrete, C. D., McDonald, M. M., Molina, L. E., & Sidanius, J. (2010). Prejudice at the nexus of race and gender: An outgroup male target hypothesis. *Journal of Personality and Social Psychology*, 98, 933–945. 6 <https://doi.org/10.1037/a0017931>
- [†]Nofziger, H. A. (2013). *The psychology of genocide and the perpetration of extreme violence (PEV) model* [Unpublished doctoral dissertation]. The State University of New Jersey.
- Oesterreich, D. (2005). Flight into security: A new approach and measure of the authoritarian personality. *Political Psychology*, 26(2), 275–298. <https://doi.org/10.1111/j.1467-9221.2005.00418.x>
- Onraet, E., Van Hiel, A., De Keersmaecker, J., & Fontaine, J. R. J. (2017). The relationship of trait emotional intelligence with right-wing attitudes and subtle racial prejudice. *Personality and Individual Differences*, 110, 27–30. <https://doi.org/10.1016/j.paid.2017.01.017>
- Onraet, E., Van Hiel, A., & Dhont, K. (2013). The relationship between right-wing ideological attitudes and psychological well-being. *Personality and Social Psychology Bulletin*, 39, 509–522. 4 <https://doi.org/10.1177/0146167213478199>
- Onraet, E., Van Hiel, A., Dhont, K., Hodson, G., Schittekate, M., & De Pauw, S. (2015). The association of cognitive ability with right-wing ideological attitudes and prejudice: A meta-analytic review. *European Journal of Personality* 29, 599–621. 6 <https://doi.org/10.1002/per.2027>
- Onraet, E., Van Hiel, A., Dhont, K., & Pattyn, S. (2013). Internal and external threat in relationship with right-wing attitudes. *Journal of Personality*, 83, 233–248. 3 <https://doi.org/10.1111/jopy.12011>
- [†]Palasinski, M., & Shortland, N. (2016). Individual determinants of punitive attitudes towards sexual and domestic abuse offenders. *Safer Communities*, 15(3), 125–133. <https://doi.org/10.1108/SC-03-2016-0007>
- [†]Parkins, I. S., Fishbein, H. D., & Ritchey, P. N. (2006). The influence of personality on workplace bullying and discrimination. *Journal of Applied Social Psychology*, 36, 2554–2577. 10 <https://doi.org/10.1111/j.0021-9029.2006.00117.x>
- [†]Peterson, B. E., Doty, R. M., & Winter, D. G. (1993). Authoritarianism and attitudes toward contemporary social issues. *Personality and Social Psychology Bulletin*, 19 (2), 174–184. <https://doi.org/10.1177/0146167293192006>
- [†]Peterson, B. E., Pratt, M. W., Olsen, J. R., & Alisat, S. (2016). The authoritarian personality in emerging adulthood: Longitudinal analysis using standardized scales, observer ratings, and content coding of the life story. *Journal of Personality*, 84, 225–236. 2 <https://doi.org/10.1111/jopy.12154>

- Petrides, K. V. (2009). Psychometric properties of the trait emotional intelligence questionnaire (TEIQue). In *Assessing Emotional Intelligence*, C. Stough, D. H. Saklofske, & J. D. A. Parker (Eds.) (pp. 85–101). Springer US.
- Pettigrew, T. F. (2016). In pursuit of three theories: Authoritarianism, relative deprivation, and intergroup contact. *Annual Review of Psychology*, 67, 1–21. 1 <https://doi.org/10.1146/annurev-psych-122414-033327>
- [†]Pratto, F., Sidanius, J., Stallworth, L., & Malle, B. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741–763. 4 <https://doi.org/10.1037/0022-3514.67.4.741>
- R Core Team (2013). *R: A language and environment for statistical computing*.
- Richardson, D. R., Hammock, G. S., Smith, S. M., Gardner, W., & Signo, M. (1994). Empathy as a cognitive inhibitor of interpersonal aggression. *Aggressive Behavior*, 20(4), 275–289. [https://doi.org/10.1002/1098-2337\(1994\)20:4<275::AID-AB2480200402>3.0.CO;2-4](https://doi.org/10.1002/1098-2337(1994)20:4<275::AID-AB2480200402>3.0.CO;2-4)
- [†]Roberts, A. H., & Jessor, R. (1958). Authoritarianism, punitiveness, and perceived social status. *The Journal of Abnormal and Social Psychology*, 56, 311–314. 3 <https://doi.org/10.1037/h0040779>
- [†]Rothschild, Z. K., Abdollahi, A., & Pyszczynski, T. (2009). Does peace have a prayer? The effect of mortality salience, compassionate values, and religious fundamentalism on hostility toward out-groups. *Journal of Experimental Social Psychology*, 45(4), 816–827. <https://doi.org/10.1016/j.jesp.2009.05.016>
- Rothschild, Z. K., Landau, M. J., Sullivan, D., & Keefer, L. A. (2012). A dual-motive model of scapegoating: Displacing blame to reduce guilt or increase control. *Journal of Personality and Social Psychology*, 102(6), 1148. <https://doi.org/10.1037/a0027413>
- [†]Russell, B. L., & Trigg, K. Y. (2004). Tolerance of sexual harassment: An examination of gender differences, ambivalent sexism, social dominance, and gender roles. *Sex Roles*, 50, 565–573. 7/8 <https://doi.org/10.1023/B:SERS.0000023075.32252.fd>
- [†]Saucier, D. A., Stanford, A. J., Miller, S. S., Martens, A. L., Miller, A. K., Jones, T. L., ... Burns, M. D. (2016). Masculine honor beliefs: Measurement and correlates. *Personality and Individual Differences*, 94, 7–15. <https://doi.org/10.1016/j.paid.2015.12.049>
- [†]Schlachter, A., & Duckitt, J. (2002). Psychopathology, authoritarian attitudes, and prejudice. *South African Journal of Psychology*, 32(2), 1–8. <https://doi.org/10.1177/008124630203200201>
- [†]Schulz, W., & Weiss, H. (1993). Conservatism and the political views of young men in Austria. *European Sociological Review*, 9, 79–93. 1 <https://doi.org/10.1093/oxfordjournals.esr.a036662>
- Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, 12, 248–279. 3 <https://doi.org/10.1177/1088868308319226>
- Sibley, C. G., Wilson, M. S., & Duckitt, J. (2007). Antecedents of men's hostile and benevolent sexism: The dual roles of social dominance orientation and right-wing authoritarianism. *Personality and Social Psychology Bulletin*, 33(2), 160–172. <https://doi.org/10.1177/0146167206294745>
- [†]Sidanius, J., & Liu, J. H. (1992) The gulf war and the rodney king beating: Implications of the general conservatism and social dominance perspectives.

- Journal of Social Psychology*, 136, 685–700. 6 <https://doi.org/10.1080/00224545.1992.9712099>
- Sidanius, J., & Pratto, F. (2001). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge University Press.
- [†]Siegel, S. M. (1956). The relationship of hostility to authoritarianism. *Journal of Abnormal and Social Psychology*, 52, 368–372. 3 <https://doi.org/10.1037/h0046038>
- [†]Singer, R. D., & Feshbach, S. (1959). Some relationships between manifest anxiety, authoritarian tendencies, and modes of reaction to frustration. *Journal of Abnormal and Social Psychology*, 59, 404–408. 3 <https://doi.org/10.1037/h0044511>
- [†]Snortum, J. R., & Ashear, V. H. (1972). Prejudice, punitiveness, and personality. *Journal of Personality Assessment*, 36, 291–296. 3 <https://doi.org/10.1080/00223891.1972.10119759>
- Stellmacher, J., & Petzel, T. (2005). Authoritarianism as a group phenomenon. *Political Psychology*, 26, 245–274. 2 <https://doi.org/10.1111/j.1467-9221.2005.00417.x>
- Stenner, K. (2005). *The authoritarian dynamic*. Cambridge University Press.
- Süssenbach, P., & Böhner, G. (2011). Acceptance of sexual aggression myths in a representative sample of German residents. *Aggressive Behavior*, 37, 374–385. 4 <https://doi.org/10.1002/ab.20390>
- [†]Tam, K. P., Leung, K. Y., & Chiu, C. Y. (2008). On being a mindful authoritarian: Is need for cognition always associated with less punitiveness? *Political Psychology*, 29, 77–91. 1 <https://doi.org/10.1111/j.1467-9221.2007.00613.x>
- [†]Tang, W. Y., & Fox, J. (2016). Men's harassment behavior in online video games: Personality traits and game factors. *Aggressive Behavior*, 42(6), 513–521. <https://doi.org/10.1002/ab.21646>
- [†]Thomsen, L., Green, E. G. T., & Sidanius, J. (2008). We will hunt them down: How social dominance orientation and right-wing authoritarianism fuel ethnic persecution of immigrants in fundamentally different ways. *Journal of Experimental Social Psychology*, 44, 1455–1464. 6 <https://doi.org/10.1016/j.jesp.2008.06.011>
- [†]Torabian, S., & Abalakina, M. (2012). Attitudes toward war in the United States and Iran. *Iranian Studies*, 45(4), 463–478. <https://doi.org/10.1080/00210862.2012.673825>
- [†]Vaill, K. E., Arndt, J., Motyl, M., & Pyszczynski, T. (2012). The aftermath of destruction: Images of destroyed buildings increase support for war, dogmatism, and death thought accessibility. *Journal of Experimental Social Psychology*, 48(5), 1069–1081. <https://doi.org/10.1016/j.jesp.2012.05.004>
- van Aert, R. C., Wicherts, J. M., & van Assen, M. A. (2016). Conducting meta-analyses based on p values. *Perspectives on Psychological Science*, 11, 713–729. 5 <https://doi.org/10.1177/1745691616650874>
- van Assen, M. A. L. M., van Aert, R. C. M., & Wicherts, J. M. (2015). Meta-analysis using effect size distributions of only statistically significant studies. *Psychological Methods*, 20, 293–309. 3 <https://doi.org/10.1037/met0000025>
- Van Hiel, A., Cornelis, I., Roets, A., & De Clercq, B. (2007). A comparison of various authoritarianism scales in Belgian Flanders. *European Journal of Personality* 21, 149–168. 2 <https://doi.org/10.1002/per.617>

- Van Hiel, A., & De Clercq, B. (2009). Authoritarianism is good for you: Right-wing authoritarianism as a buffering factor for mental distress. *European Journal of Personality*, 23, 33–50. 1 <https://doi.org/10.1002/per.702>
- Van Hiel, A., De Keersmaecker, J., Onraet, E., Haesevoets, T., Roets, A., & Fontaine, J. R. J. (2019). The relationship between emotional abilities and right-wing and prejudiced attitudes. *Emotion*, 19(5), 917–922. <https://doi.org/10.1037/emo0000497>
- Van Hiel, A., Duriez, B., & Kossowska, M. (2006). The presence of left-wing authoritarianism in Western Europe and its relationship with conservative ideology. *Political Psychology* 27, 769–793. 5 <https://doi.org/10.1111/j.1467-9221.2006.00532.x>
- Van Hiel, A., & Kossowska, M. (2007). Contemporary attitudes and their ideological representation in Flanders (Belgium), Poland, and the Ukraine. *International Journal of Psychology* 42, 16–26. 1 <https://doi.org/10.1080/00207590500411443>
- Van Hiel, A., Onraet, E., Crowson, H. M., & Roets, A. (2016). The relationship between right-wing attitudes and cognitive style: A comparison of self-report and behavioral measures of rigidity and intolerance of ambiguity. *European Journal of Personality*, 30, 523–531. 6 <https://doi.org/10.1002/per.2082>
- Van Hiel, A., Onraet, E., & De Pauw, S. (2010). The relationship between social-cultural attitudes and behavioral measures of cognitive style: A meta-analytic integration of studies. *Journal of Personality*, 78, 1765–1799. 6 <https://doi.org/10.1111/j.1467-6494.2010.00669.x>
- [†]Vidmar, N. (1974). Retributive and utilitarian motives and other correlates of Canadian attitudes toward the death penalty. *Canadian Psychologist/Psychologie Canadienne*, 15, 337–356. 4 <https://doi.org/10.1037/h0081769>
- Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. *Journal of Statistical Software*, 36(3), 1–48. <https://doi.org/10.18637/jss.v036.i03>
- [†]Walker, W. D., Rowe, R. C., & Quinsey, V. L. (1993). Authoritarianism and sexual aggression. *Journal of Personality and Social Psychology*, 65, 1036–1045. 5 <https://doi.org/10.1037/0022-3514.65.5.1036>
- [†]Washburn, A. N., & Skitka, L. J. (2015). Motivated and displaced revenge: Remembering 9/11 suppresses opposition to military intervention in Syria (for some). *Analyses of Social Issues and Public Policy*, 15(1), 89–104. <https://doi.org/10.1111/asap.12062>
- [†]Webster, R. J., & Saucier, D. A. (2013). Angels and demons are among us: Assessing individual differences in belief in pure evil and belief in pure good. *Personality and Social Psychology Bulletin*, 39(11), 1455–1470. <https://doi.org/10.1177/0146167213496282>