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Internal and external threat in relationship with right-wing attitudes

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Abstract

Objective. Previous studies on the relationship between threat and right-wing attitudes have tended to focus on either internal threat, emanating from one’s private life, or external threat, originating from society. However, these studies failed to examine whether these types of threats constitute two distinctive dimensions and which of these threats is most closely related to right-wing attitudes.

Method. In order to explore the dimensions underlying threat, a factor analysis on a variety of threat scales was conducted (Study 1; \( N = 300 \)). Furthermore, in a meta-analysis (Study 2; total \( N = 22,086 \)) and a questionnaire study in a large representative sample (Study 3, \( N = 800 \)) the strength of the relationships of internal and external threat with right-wing attitudes were investigated.

Results. The present studies revealed that internal and external threat can be considered as two distinct dimensions underlying threat. Moreover, whereas external threat yielded strong relationships with right-wing attitudes, internal threat only explained a minor part of the variance in these attitudes.

Conclusion. External rather than internal threat underlies the relationship between threat and right-wing attitudes.

Keywords: internal threat, external threat, right-wing ideological attitudes, authoritarianism
From the early days of authoritarianism research, scholars have hypothesized that threat is related to right-wing attitudes (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). Studies have frequently reiterated this hypothesis over the years (e.g., Duckitt, 2001; Feldman & Stenner, 2003; Jost, Glaser, Kruglanski, & Sulloway, 2003; Sales, 1972, 1973; Stenner, 2005; Wilson, 1973), focusing on both threat-inducing situations, such as threats emanating from terrorism and economic crises (e.g., Sales, 1972, 1973; Willer, 2004; Winter, 1996), and many different threat scales, which range from general (e.g., Davids, 1955; Endler & Shedlet, 1973) to highly specific, such as death anxiety (e.g., Landau et al., 2004). The diversity of these threats seems to reflect the belief of scholars that any form of threat can be a correlate of right-wing attitudes. However, one may justifiably wonder whether these various threat types are equally correlated to right-wing attitudes and, if not, which threat types are most closely related to these attitudes. Therefore, the aim of the present paper was to investigate whether different threat types yielded differential relationships with right-wing attitudes.

To the best of our knowledge, no study has yet analyzed the structure of threat scales, whose relationship with right-wing attitudes were investigated in previous research. In the present study, we based our research on the work of Van Hiel and De Clercq (2009), who distinguished between internal sources (i.e., ‘mental distress’) and external sources (i.e., ‘ideological threats’) of threat. In line with this distinction, we suggest that threats originating from the private life of an individual and which are only experienced by the individual, might be distinguished from ‘ideological threats’ that stem from society, which pose a danger not only to oneself but also to society as a whole. A closer inspection of the literature indeed confirmed this distinction as scholars have differed substantially in their emphasis of either internal or external sources of threat as correlates of right-wing attitudes.

**Internal threat in relationship with right-wing attitudes**

Many classic works on right-wing attitudes have located the origins of such attitudes within the individual. Fromm (1941) argued that authoritarianism is an escape mechanism for freedom that “assuages an unbearable anxiety and makes life possible by avoiding panic” (p. 140). According to
Wilson (1973), conservative attitudes should be understood as a reaction to a “generalized susceptibility to experiencing threat or anxiety in the face of uncertainty” (p. 259). Consistent with the hypothesis that internal sources of threat result in right-wing attitudes, scholars have frequently asserted that threat proneness is acquired early in life, after which it becomes a part of someone’s deep rooted personality. Later in life, right-wing attitudes may stem from an internalized, intra-individual threat. The work of Adorno et al. (1950) is the clearest example of this perspective, describing authoritarianism as a syndrome originating from early-life anxiety induced by threatening events, such as inconsistent child-rearing practices and a threatening childhood environment. In such contexts, children cope with anxiety by obeying parental authority and adapting their own behaviors to that of others. Later in life, such individuals similarly obey and adapt their behavior to external norms.

Several studies supported the hypothesis that right-wing attitudes are related to internal threat by using threat measures as diverse as the Taylor’s Manifest Anxiety Scale (Taylor, 1956), the State and Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970), Cattell’s IPAT Anxiety Scale (Cattell, & Scheier, 1963), and the MMPI Anxiety Scale (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989). More specifically, internal threat was found to be related to authoritarianism (e.g., Davids, 1955; Endler & Shedletz, 1973; Melikian, 1956; O’Grady & Janda, 1978), conservatism (e.g., Mehrabian, 1996), and dogmatism (e.g., Fillenbaum & Jackman, 1961; Rokeach, 1960). Whereas these latter studies have focused on how general internal threat is related to right-wing attitudes, other studies focused on specific types of internal threat, such as death anxiety. For example, Landau et al. (2004) reported that mortality salience led to an increase in votes for the conservative presidential candidate and decreased support for the liberal candidate.

External threat in relationship with right-wing attitudes

Other scholars have proposed that external or societal sources of threat form the basis of right-wing attitudes. Two lines of research can be put forth on the effects of external threat. Whereas the first focuses on the effects of changing threat levels caused by situational changes, the other focuses on
subjective perceptions of external threat. Sales (1972, 1973) was among the first to argue that changing threat levels caused by situational changes lead to higher right-wing attitudes. In particular, using archival data, Sales (1972) revealed that authoritarian churches were very successful in attracting new members during the Great Depression, whereas in economically prosperous periods, non-authoritarian churches prevailed. Furthermore, Sales (1973) reported an increase in manifestations of authoritarianism during eras with high threat levels.

Several other researchers have also presented evidence for the effects of societal threats (including economic, terrorist, social, and political threat) on right-wing attitudes (Doty, Peterson, & Winter, 1991; McCann, 1999; Stenner, 2005; Winter, 1996). For example, following the September 11th, 2001 terrorist attacks, individuals who were close to the World Trade Center at the moment of the attacks moved toward political conservatism (Bonanno & Jost, 2006). Similar results were obtained in Spain after the Madrid attacks in March 2004 (Echebarria-Echabe, & Fernández-Guede, 2006). The meta-analysis by Jost et al. (2003) revealed a strong effect size between system instability (including economic, social, and political threat) and right-wing attitudes. Furthermore, several experimental and longitudinal studies have suggested a causal relationship between social threat and authoritarianism (e.g., Altemeyer, 1988; Doty et al., 1991; Sales, 1972, 1973; Sales & Friend, 1973).

The second line of research stressed individual differences in the subjective perception of external threat. Indeed, external threat is not only a matter of social context and time period; some people are predisposed to experience higher levels of external threat than others within the same era. For example, it is generally accepted that individuals adhering to right-wing attitudes perceive the world as especially threatening and dangerous. According to Altemeyer “High RWA’s are scared. They see the world as a dangerous place, as society teeters on the brink of self-destruction from evil and violence” (1998, p. 52). Several studies have confirmed the relationship between dangerous worldviews and right-wing attitudes (Altemeyer, 1998; Duckitt, 2001; Van Hiel, Cornelis, & Roets, 2007; Van Leeuwen & Park, 2009)). Finally, external threat may be specific as well. According to the integrated
threat theory (Stephan & Renfro, 2002), perceived threats from outgroups may occur at the individual level (intergroup anxiety) and at the group level (realistic and symbolic threat). Studies have repeatedly shown positive relationships between the perceptions of outgroup threat and right-wing attitudes (e.g. Dhont & Van Hiel, 2011; Hodson, Hogg, & MacInnis, 2009; Matthews, Levin, & Sidanius, 2009).

The present studies

As demonstrated in the previous sections, scholars seem to differ substantially in their emphasis on either internal or external sources of threat as correlates of right-wing attitudes. Hence, two threat types can be discerned. First, internal threat concerns threat originating from the private life of an individual. As a result, internal threat is exclusively experienced by the individual him or herself and has no societal relevance. External threat, on the other hand, refers to threat originating from the society and can be experienced as a threat to the society as a whole, as well as a threat to the individual itself. No previous empirical study has investigated whether these two dimensions can be empirically distinguished. Our first goal was to explore the dimensions underlying threat items that were previously investigated as correlates of right-wing attitudes. More specifically, in Study 1, we investigated the dimensional structure of a multitude of internal and external threat measures. We selected threat measures that have been previously studied in relationship to right-wing attitudes, namely neurotic anxiety, death anxiety, test anxiety, dangerous world view, symbolic threat, realistic threat, intergroup anxiety, terroristic threat, economic threat, political threat, and threat to social cohesion. This study allowed us to organize these threats in a factor-analytic structure and to test the hypothesis that internal and external threat can be empirically distinguished from one another.

The second goal was to investigate whether the threat dimensions extracted in Study 1 yield differential relationships with right-wing attitudes. Study 2 consisted of a meta-analysis investigating the magnitude of the relationship between the threat dimensions and right-wing attitudes. The analysis was based on relevant studies and classified according to the underlying threat dimensions obtained in Study 1. By the present distinction between internal and external threat and the inclusion of additional...
studies, Study 2 complemented a recent meta-analysis conducted by Jost et al. (2003) that revealed moderate to strong relationships between threat and right-wing attitudes.

A limitation to our meta-analysis was that most previous studies were based on single threat measures. Therefore, the integration of these studies in our meta-analysis has proceeded separately for each threat dimension. Study 3 addressed this limitation. Based on a questionnaire study conducted in a representative sample, we investigated the joint effects of the threat dimensions in their relationships with right-wing attitudes. Doing so allowed us to pit the effects of these threat dimensions against one another and to analyze potential interaction effects.
Study 1

Method

Participants

We gathered a nationally representative sample of 300 Dutch adults who were stratified by age, gender, educational level, and province. The sample had a mean age of 51.13 (SD = 15.44), with 44% females and 56% males. Moreover, 31% had a low level, 38% a middle level and 31% a high level of education. A survey company administered the questionnaire online.

Threat Measures

All items of these measures were rated on a 5-point Likert scale (1 = strongly disagree and 5 = strongly agree). Item selection was based on analyses of full scales administered in earlier samples. More specifically, we extracted a component from the intercorrelations among the scale’s items and withheld the three highest loading items. For scales for which no previous data was available to us, we selected three items which we believed to constitute the core of these scales.

Internal threat. We included measures of neurotic anxiety that are still used in current research. Three items of the authorized Dutch version of the NEO-PI-R Neuroticism subscale of Anxiety (Costa & McCrae, 1992; translated into Dutch by Hoekstra, Ormel, & De Fruyt, 1996) were administered (M = 2.09; SD = .95). A sample item is “I’m more anxious than most people”. Additionally, six items of the State and Trait Anxiety Inventory (translated by Van der Ploeg, Defares, & Spielberger, 1980) were administered, three of which pertained to trait anxiety (M = 1.85; SD = .97) and three to state anxiety (M = 1.93; SD = .95). Sample items are “Generally, I feel nervous and restless” and “At this moment, I am worried”. Furthermore, two specific internal anxieties were measured. First, death anxiety was measured using three items based on the Death Attitude Profile questionnaire (DAP; Wong, Reker, & Gesser, 1994; translated by Van Hiel and Vansteenkiste, 2009; M = 2.06; SD = 1.14). A sample item is “I have an intense fear of death”. Participants also completed a measure of test anxiety (Sarason, 1980), which included three items based on the Test Anxiety Scale (M = 1.90; SD = 1.00). A sample item is “If I were
to take an intelligence test, I would worry a great deal before taking it”. Cronbach’s alphas (Table 1 on the left side of the diagonal) indicated high reliability for all of the scales.

**External threat.** Three items of the dangerous worldview scale (Altemeyer, 1988; translated by Van Hiel et al., 2007), which measured the extent to which the world is perceived as generally dangerous and chaotic by the respondents, were administered ($M = 3.43; SD = .98$). A sample item is “Every day as society becomes more lawless and bestial, a person’s chances of being robbed, assaulted, and even murdered go up and up”. To measure perceived threat stemming from outgroups, we administered three symbolic threat, three realistic threat, and three intergroup anxiety items (based on Stephan & Stephan, 1985). **Symbolic threats** are perceived threats to an ingroup’s values and beliefs ($M = 3.93; SD = 0.83$). A sample item is “In general, immigrants have different values and norms”. **Realistic threats** are perceived threats to the political and economic power of an ingroup (translated by Dhont & Van Hiel, 2011; $M = 2.59; SD = 1.02$). A sample item is “The presence of immigrants in our country has a negative influence on the Dutch economy”. **Intergroup anxiety** refers to negative feelings experienced during intergroup interactions (translated by Dhont, Roets, & Van Hiel, 2011; $M = 2.63; SD = 1.57$). A sample item is “When thinking of a situation where you have had contact with immigrants, to what extent did you feel anxious?”. Furthermore, three items measured perceived **terroristic threat** (Cohrs, Kielmann, Maes, & Mosher, 2005; $M = 1.95; SD = .89$). A sample item is “I feel that my everyday life is affected by possible terroristic action”. In addition, three items measured **economic threat**, which was based on Feldman and Stenner (1997; $M = 3.18; SD = 1.09$). A sample item is “I am worried that I will lose my job in the near future.” We also measured **political threat**, which examined the perceived threat stemming from the government. Because we found no other suitable measures of political threat in the literature, we constructed three items pertaining to political threat ($M = 3.63; SD = 1.00$). A sample item is “I am afraid that the decisions of politicians today will bear important negative consequences in the future”. Finally, we measured **threat to social cohesion**, which explores the perceived deterioration of national values and norms (based on Feldman (2003); $M = 3.83; SD = .88$). A
sample item is “It seems as if people in this country have less in common than they used to”.

Cronbach’s alphas (see Table 1) indicated high reliability for all scales.

Results

Table 1 displays the relationships among the threat scales. To explore the dimensions underlying threat, a confirmatory factor analysis was conducted using structural equation modeling with latent variables (LISREL, version 8.71). The original items served as indicators for the various latent threat variables. Model fit was assessed using comparative fit index (CFI), root-mean-square error of approximation (RMSEA), and standardized root-mean-square residual (SRMR). Initial estimation of the adequacy of the measurement model indicated a good fit (Hu & Bentler, 1998), $\chi^2(624) = 907.99, p < .001; \text{CFI} = .99; \text{RMSEA} = .039; \text{SRMR} = .041$. Next, we tested the hypothesized model (Figure 1), where the latent factors NEO-anxiety, trait anxiety, state anxiety, death anxiety, and test anxiety loaded on a higher-order factor representing ‘internal threat,’ and the latent factors dangerous worldviews, realistic threat, symbolic threat, intergroup anxiety, terroristic threat, economic threat, political threat, and threat to social cohesion loaded on a higher-order factor representing ‘external threat’. The fit indices indicated a good model fit, $\chi^2(688) = 1156.11, p < .001; \text{CFI} = .98; \text{RMSEA} = .048; \text{SRMR} = .079$. This two-factor model fit the data better ($\Delta \chi^2(1) = 966.81, p < .001$) than a constrained model with the correlation between the two factors fixed to 1, $\chi^2(689) = 2122.92, p < .001; \text{CFI} = .96; \text{RMSEA} = .083; \text{SRMR} = .134$. In sum, internal and external threat can be considered two separate dimensions.

Discussion

Confirmatory factor analyses indicated a good model fit for the measurement model of the primary threat factors and an adequate fit for a model with two higher-order factors. A model assuming a single latent higher-order factor performed considerably worse. These two higher-order factors can be labeled internal and external threat. Internal threat originates from the private life of the individual and is thus only experienced at the individual level. The specific scales loading on this dimension were neurotic anxiety, death anxiety, and test anxiety. External threat emanates from society and may affect other
individuals in society as well. The specific scales loading on this dimension are dangerous world view, symbolic threat, realistic threat, intergroup anxiety, terroristic threat, economic threat, political threat, and threat to social cohesion. Having firmly substantiated these two threat dimensions, we can confidently use this distinction in the following studies.
Study 2

Study 2 consisted of a meta-analytic integration of empirical research on the relationship between threat and right-wing attitudes. This study replicates and extends the work of Jost et al. (2003) in two ways. First, we distinguished between internal and external threat, a distinction not made by Jost and colleagues. Second, we included a number of additional, recent studies, both published and non-published, and we checked for classic studies that might have gone unnoticed by Jost et al. (2003). The inclusion of omitted and new studies might lead to further refinements.

We computed an overall effect size across all studies and investigated whether internal and external threat yield relationships of different magnitudes with right-wing attitudes. Moreover, we investigated the impact of possible moderator variables, such as the type of scale measuring right-wing attitudes, study characteristics, and publication characteristics. Publication bias was investigated as well. Following the main meta-analysis, we conducted two follow-up meta-analyses for internal and external threat separately. In these analyses, we computed the combined effect size and tested for moderation effects of the specific threat scales. Moreover, in the meta-analysis of external threat, we also investigated the difference in effect size between studies analyzing subjective perceptions of threat and those investigating objective situational threat.

Method

Search strategies and inclusion criteria for studies

First, we identified the relevant studies included in Jost et al.‘s (2003) meta-analysis. Second, we searched ISI Web of Science by using a variety of keywords entered in various combinations. Third, we inspected the references cited in each article for additional relevant studies. Fourth, we contacted researchers in the field to uncover relevant unpublished data.

To be included in the meta-analyses, studies had to meet several criteria. First, at least one measure of right-wing attitudes and one of threat had to be administered. Furthermore, samples had to be statistically independent (i.e., no sample overlap). We developed a number of rules to obtain a single
data point for each study when multiple outcome values were available. For the studies including measures of both social dominance orientation (SDO) and authoritarianism, we randomly chose SDO for half of these studies and authoritarianism for the other half. When a measure of conservatism was also administered together with SDO or authoritarianism, we selected the data point with conservatism because this measure was less frequently examined than the other two. When multiple indicators of a single measure of right-wing attitudes were administered, the mean correlation between these indicators and the threat measure variable was calculated. Similarly, for studies administering multiple indicators of a single threat type, the mean correlation between these indicators and the right-wing attitudes measure was calculated and used in the analyses.

**Coding the studies**

Each study was coded for design, sample, and publication features. The design characteristics included the division of threat into internal and external threat, the different subtypes of threat (for internal threat: neurotic anxiety (including the State-Trait Anxiety Index, Cattell’s IPAT Anxiety scale, Taylor manifest anxiety scale, and anxiety scales from personality questionnaires, such as the MMPI and the NEO-questionnaire), death anxiety, and test anxiety; for external threat: dangerous world view, societal threat, outgroup threat, terroristic threat, threat to social cohesion, and economic threat), and type of ideological measure (social dominance orientation, ethnocentrism, authoritarianism, dogmatism, and conservatism). The sample population (students, adults, mixed samples, and other), sex composition (mixed-sex, males-only, and females-only), and geographic location of the study (US, Europe, Australia and New Zealand, and other) were coded as sample characteristics. For publication characteristics, we also coded whether the data were retrieved from a published or unpublished paper.

**Summary of study characteristics**

We located 76 studies that met the criteria for inclusion in the meta-analysis (34 studies included a measure of internal threat, 40 studies a measure of external threat, and 2 studies a measure of both internal and external threat). These studies reported data from 109 independent samples (53
with internal threat, 53 with external threat, and 3 with both internal and external threat) with a total of 22,086 participants.

Meta-analytical decisions

We used Pearson product-moment correlation coefficients ($r$’s) as effect size estimates. For studies reporting mean differences in scores on ideological measures across high and low threatened groups, effect sizes were based on reported test statistics (F-, t- or p-values) or, if available, reported means and standard deviations for each group (Borenstein, Hedges, Higgins, & Rothstein, 2005). When only the significance of the association was reported, we derived the lower limit effect size estimates from the reported significance level. When an association was reported to be non-significant, an effect size of zero was assigned. These are commonly used but rather conservative strategies that generally underestimate the true magnitude of effect sizes (Durlak & Lipsey, 1991).

Statistical analyses

The analyses were performed using Comprehensive Meta-analysis (CMA) version 2.2 software (Borenstein et al., 2005). First, Pearson correlations were converted into Fisher’s Z-coefficients to permit an unbiased comparison and combination of effect sizes. Second, CMA calculated the mean weighted effect sizes and 95% confidence intervals (CI) around the point estimate of the combined estimates. These effect size estimates were transformed back to correlations to facilitate interpretation. Next, homogeneity ($Q$) analyses were conducted to test the assumption that the sets of effect sizes were homogeneous at the population level and to test the influence of potential moderator variables. We used a random-effects model (Hedges & Vevea, 1998) to compute the overall effect in each analysis because we assumed that effect sizes would not be functionally equivalent across the studies.

To account for variability within effect size distributions, we conducted moderation analyses using categorical testing procedures (Lipsey & Wilson, 2001). Categorical testing yields two homogeneity estimates, a within-groups ($Q_w$) and a between-groups ($Q_b$) estimate. A significant $Q_w$ indicates that the effect sizes within each moderator category are heterogeneous. A significant $Q_b$ indicates that the
subgroups of the effect sizes are significantly different. CMA also allows for the quantification of the amount of heterogeneity by calculating $I^2$ indices (Higgins & Thompson, 2002). This index quantifies the percentage of variability stemming from between-study variation rather than sampling error. An $I^2$ of 0 indicates that all variability stems from sampling error within studies and that no variability is caused by heterogeneity. $I^2$-values on the order of 25, 50, and 75 represent low, moderate and high heterogeneity.

Publication bias analyses

Researchers are more likely to submit studies for publication if the results are significant, which may cause an overestimation of the meta-analytic effect size. The fail-safe number is the minimum number of hypothetical studies with non-significant results necessary to eliminate a significant overall effect (Rosenthal, 1995). If the fail-safe number exceeds the critical value of $5k + 10$ ($k =$number of studies), the meta-analytic finding is considered robust. Conversely, if the fail-safe number falls below this critical value, a publication bias problem may exist. We also used Duval and Tweedie's (2000) trim-and-fill method to estimate the adjusted effect sizes and CI's. This method constructs a funnel plot containing each study's effect size against its precision (inverse of its standard error). The plot should be shaped as a funnel if publication bias is absent. If non-significant results are underrepresented, the values for these missing studies are imputed, and an adjusted effect size is calculated.

Results

First, we conducted a meta-analysis on all the located studies (109 samples) investigating the relationship between threat (both internal and external) and right-wing attitudes. For the three samples including measures of both internal and external threat we randomly chose one of the two threat types for each sample. To evaluate the magnitude of the combined effect sizes, we used the conventions established by Cohen (1988): correlation effect sizes of $r \leq .10$ and $r \geq .40$ are considered as indices of small and large effects, respectively, while values falling in between are considered moderate effects.

The results of the meta-analysis (Table 2) revealed that the overall relationship was moderate in magnitude ($r = .29$, $p < .001$), which indicates that high threat levels are associated with the stronger
endorsement of right-wing attitudes. The effect size was heterogeneous, indicating that differences in
effect size among the samples might be explained by the moderator variables. Because we investigated
6 possible moderator variables, we corrected for multiple comparisons using a significance level of .01
(\(\alpha/6\)). Two moderator variables reached this significance level. First, we obtained a significant
difference between the effect sizes for internal and external threat, with external threat yielding stronger
relationships with right-wing attitudes. Second, mixed samples yielded a stronger effect size than
samples with only males or females. Although publication status did not yield a significant moderator
effect, we also conducted publication bias analyses (only on published studies, \(k = 91\)). The analysis
revealed that the fail-safe number was 30,828, largely exceeding the critical value of \(5k + 10 = 465\). The
absence of publication bias was also confirmed by the non-significant difference between published and
unpublished studies in the moderator analyses (\(Q = 0.43, I^2 = .00, ns\)). Furthermore, the trim-and-fill
procedure yielded an adjusted effect that was still significant: \(r = .25, CI = .23\) to .26.

Next, we conducted a meta-analysis based on samples including a measure of internal threat
(Table 3). We discerned three subtypes of internal threat: neurotic anxiety, death anxiety, and test
anxiety. This subdivision of internal threat was included in the analysis as a moderator variable, as well
as the type of right-wing measure. This analysis revealed a relationship of moderate strength, \(r = .21,\)
between internal threat and right-wing attitudes\(^2\). Further analyses revealed that, whereas internal threat
only yielded small effects with authoritarianism and SDO, internal threat had moderate to strong
relationships with conservatism and dogmatism. Publication bias analyses (conducted on the published
studies, \(k = 42\)) revealed that the fail-safe number was 3,165, exceeding the critical value of 220 and
indicates that publication bias is very unlikely. Duval and Tweedies’ trim-and-fill procedure indicated that
the value of the effect should not be adjusted.

Finally, we conducted a meta-analysis based on samples including a measure of external threat
(Table 4). Three moderator variables were tested. First, we made a distinction between studies

\(^2\) Note that this effect size is slightly different from the effect size for internal threat in the overall
meta-analysis. In the latter analysis, we did not include two randomly chosen samples that also
included external threat because we wished to avoid sample overlap.
investigating the effects of situational changes on threat and those investigating the subjective perception of threat. Second, we discerned six different subtypes of external threats: dangerous worldviews, social threat, political threat, economic threat, out-group threat, terroristic threat, and threat to social cohesion. Finally, we investigated the moderator effect for measures of right-wing attitudes. A moderate effect size, \( r = .35 \), was obtained for this relationship, which indicates that external threat is associated with higher levels of right-wing attitudes\(^3\). Further analyses revealed that authoritarianism yielded a strong effect size, whereas only moderate effect sizes were found for conservatism and SDO.

The effect sizes between studies investigating objective situational threat and studies investigating subjective perceptions of threat did not significantly differ. Moreover, the different types of external threat did not yield effects of different magnitudes. Publication bias analyses (only on published studies, \( k = 47 \)) yielded a fail-safe number of 4,003, largely exceeding the critical value of 245, indicating that publication bias is very unlikely. Duval and Tweedies' trim-and-fill procedure yielded an adjusted effect of \( r = .28, CI = .27 \) to \( .30 \).

**Discussion**

We obtained convincing evidence for a moderate relationship between overall threat and right-wing attitudes (\( r = .29 \)), with a significantly stronger relationship for external threat (\( r = .35 \)) than for internal threat (\( r = .22 \)). The effect sizes did not vary between different types of internal threat and external threat. In other words, different scales probing into one of the threat types yielded homogenous effects, which further substantiated the validity of the distinction between internal and external threat.

We also examined the consistency of these relationships across several measures of right-wing attitudes. A noteworthy finding is that conservatism yields relationships of comparable strength with both internal and external threat, whereas authoritarianism and SDO have weaker relationships with internal threat than with external threat.

\(^3\) Note again that this effect size is slightly different from the effect size for external threat described in the overall meta-analysis because one overlapping sample was excluded.

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A straightforward comparison of our results and Jost et al.’s (2003) meta-analysis is not easy for several reasons. First, Jost et al. (2003) only included 8 samples with a measure of internal threat, whereas our meta-analysis included 56 such samples. Moreover, Jost et al. (2003) had 13 samples with a measure of external threat (4 with dangerous worldview and 9 with societal threat), whereas we included 56 such samples. Notwithstanding this limited overlap, our results corroborate Jost et al.’s (2003) main conclusion that threat is related to right-wing attitudes. However, our results demonstrated that this general relationship needs to be further specified. In particular, the relationship between threat and right-wing attitudes is stronger for external threat than for internal threat and the magnitude of these relationships depends upon the measure of right-wing attitudes. Specifically, a strong effect size exists for the relationship between external threat and authoritarianism.
Study 3

Despite the meta-analytic evidence showing that right-wing attitudes are more strongly related to external threat than to internal threat, the meta-analysis could not simultaneously test the effects of both threat types. It is also possible that both internal and external threat show a mutually reinforcing moderation effect. The burden of external threats in addition to high levels of internal threat may be associated with disproportionally high levels of right-wing attitudes. Another possibility is that threats accumulate and thereby lead to additional increases in right-wing attitudes. To directly compare the effects of both threat types and to test for possible moderation effects, we conducted a survey study with RWA, SDO, and Conservatism administered as measures of right-wing attitudes.

Method

Participants

A survey company gathered online a nationally representative sample of 800 Dutch adults who were stratified by age, gender, educational level, and province. The sample had a mean age of 49.46 (SD = 15.42), with 46% females and 54% males. Moreover, 34% had a low level, 36% a middle level and 30% a high level of education.

Measures

For internal and external threat, we used the same measures as in Study 1. For the measures of right-wing attitudes, item selection was based on analyses of full scales administered in earlier samples. More specifically, we extracted a component from the intercorrelations among the scale’s items and withheld the three highest loading items.

Threat measures. Internal threat was measured by the Anxiety subscale of NEO-PI-R Neuroticism (M = 2.14; SD = .93), trait anxiety (M = 1.87; SD = .94), state anxiety (M = 1.91; SD = .95), death anxiety (M = 2.07; SD = 1.06), and test anxiety (M = 1.96; SD = .93). External threat was measured by dangerous worldviews (M = 3.46; SD = .89), symbolic threat (M = 3.85; SD = .84), realistic threat (M = 2.72; SD = 1.10), intergroup anxiety (M = 2.72; SD = 1.61), terroristic threat (M = 1.99; SD = .89), economic threat

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(M = 3.18; SD = 1.08), political threat (M = 3.65; SD = 1.00), and threat to social cohesion (M = 3.81; SD = .91). Cronbach’s alphas (Table 1) indicated high levels of reliability for all scales.

Right-wing attitudes. Participants completed six items of Altemeyer’s (1981; translated by Meloen, 1991) RWA scale (α = .73; M = 3.29; SD = .70) and six items of Pratto, Sidanius, Stallworth, and Malle’s (1994; translated by Van Hiel & Duriez, 2002) SDO scale (α = .77; M = 2.34; SD = .70). Furthermore, they completed four items measuring socio-cultural conservatism (De Witte, 1990; α = .75; M = 3.72; SD = .78). A sample item is “People who don’t work are no good.”

Results

Separating Internal from External threat

Table 1 reports the correlations among the internal threat and external threat scales. Analogous to Study 1, a CFA was conducted using SEM, with the scale items serving as indicators for the latent variables. The measurement model indicated an adequate fit: χ²(624) = 1607.45, p < .001; CFI = .99; RMSEA = .044; SRMR = .036. Moreover, the hypothesized model (Model 1, presented in Figure 1) also showed an adequate model fit: χ²(688) = 2289.24, p < .001; CFI = .98; RMSEA = .054; SRMR = .074. As can be seen in Figure 1, we obtained a moderate positive correlation between the higher-order factors of internal threat and external threat.

Differential relationships of internal and external threat with RWA, SDO, and Conservatism

To analyze the relationships between threat and right-wing attitudes, we first tested a measurement model including the higher-order factors internal and external threat, as well as the factors of RWA, SDO, and Conservatism. To reduce the number of indicators, three parcels of items were created in a random fashion to serve as indicators of the latent factors. This measurement model indicated a good fit: χ²(1104) = 3432.88, p < .001; CFI = .98; RMSEA = .051; SRMR = .072. This measurement model revealed moderate to strong correlations between internal and external threat (r = .36, p < .001) and between the right-wing ideological attitudes (RWA and SDO, r = .36, p < .001; RWA and Conservatism, r = .76, p < .001; SDO and Conservatism, r = .25, p < .01). Moreover, external threat
yielded strong correlations with all the right-wing attitudes ($r = .66$, $r = .42$, $r = .49$, all $p < .001$, for RWA, SDO and Conservatism, respectively. However, internal threat was only weakly related to RWA, SDO, and Conservatism ($r = .09$, $p < .05$; $r = .11$, $p < .01$; $r = .09$, $p < .05$, respectively).

Next, we examined the relationships between external threat and right-wing attitudes while controlling for the effect of internal threat, and vice versa (model Figure 2). This model ($\chi^2(1107) = 3610.40$, $p < .001$; CFI = .97; RMSEA = .053; SRMR = .075) showed significant associations between external threat and RWA, SDO, and Conservatism, whereas internal threat was significantly negatively to RWA and Conservatism and non-significantly related to SDO. Finally, to test potential moderator relationships between internal and external threat, we conducted regression analyses (Aiken & West, 1991) with internal threat, external threat and their interaction term as the independent variables and RWA, SDO, and Conservatism scores as the dependent variables. These interaction effects were not significant ($\beta$’s = .04, .03, and .02, ns, for RWA, SDO, and Conservatism, respectively).

**Discussion**

Study 3 revealed that external threat was strongly related to RWA and moderately related to SDO and Conservatism, whereas internal threat yielded much weaker relationships. Furthermore, the relationships between internal threat and right-wing attitudes were curbed when external threat was controlled for. Conversely, the relationship between external threat and right-wing attitudes remained strongly significant and positive when controlling for internal threat. No significant moderation effect between internal and external threat on right-wing attitudes emerged.

**General Discussion**

The present research addressed three major goals. First, we wanted to test the hypothesis that internal and external threat can be discerned as two separate dimensions. For this purpose, we established the underlying structure of threat measures that were previously related to right-wing attitudes. Our second goal was to compare the magnitudes of the relationships among these different
threat dimensions and right-wing attitudes. Finally, we wanted to examine the relative contributions of and the interplay between the various threat dimensions in relationship with right-wing attitudes.

With respect to our first goal, Studies 1 and 3 revealed that threat measures load on two distinct higher-order threats: internal and external threat. Internal threat originates from the private life of the individual and thus only affects the individual (e.g., neurotic anxiety and death anxiety), whereas external threat emanates from the society and can also affects other citizens (e.g., economic threat and outgroup threat). Concerning our second goal, Study 2 provided meta-analytic evidence for the positive relationship between threat and right-wing attitudes and thus corroborated Jost et al.’s (2003) meta-analytic results. However, and herein lies the main contribution of the present work, the general relationship between threat and right-wing attitudes can be further specified. In particular, internal threat was a weaker correlate of right-wing attitudes than external threat. Regarding the third research goal, we found that statistically controlling for external threat undermined the relationship between internal threat and right-wing attitudes to non-significance for SDO, while a reversed, significant weak relationship emerged for RWA and Conservatism. Conversely, the strong relationship between external threat and right-wing attitudes is hardly weakened when controlling for internal threat. Finally, there was no moderation effect between internal and external threat on right-wing attitudes, indicating that both threat types do not reinforce each other yielding tremendously high correlations with right-wing attitudes.

Two additional noteworthy findings emerged. First, the scale used to measure right-wing attitudes had a significant impact on the strength of the relationship between threat and right-wing attitudes. More specifically, we obtained an especially strong relationship between external threat and authoritarianism, whereas the relationship between external threat and SDO was somewhat curbed. These results are consistent with the Dual Process Model of social attitudes (DPM; Duckitt, 2001) in which RWA is considered a reaction to threatening social situations and is rooted in the perception of the world as a dangerous place (see also, Altemeyer, 1998). According to this model, SDO is related less to threat and is more rooted in the perception of the world as a competitive jungle.
Another interesting finding is the curbed, even negative relationship between internal threat and right-wing attitudes when controlling for external threat. This finding reminds us of Van Hiel and De Clercq (2009) who reported that authoritarianism serves as a buffer for the relationship between facilitators of mental distress and resulting mental distress. Also Napier and Jost (2008) reported greater happiness among conservatives. All these results suggest that right-wing attitudes may be ‘good for the self’. However, the negative relationship between internal threat and right-wing attitudes should be interpreted with caution as this effect might reflect a suppression effect (Cohen & Cohen, 1983; Tzelgov & Henik, 1991). Indeed, the raw correlation between internal threat and right-wing attitudes is positive, and the negative relationship in the full model has been caused by the substantial correlation between internal and external threat (.36 in Study 3). In other words, controlling for external threat eliminates the part of internal threat that positively relates to right-wing attitudes.

In the remainder of the general discussion, we first discuss the weak relationship of internal threat and right-wing attitudes. Second, we elaborate on the finding that external threat plays a central role in the relationship between threat and right-wing attitudes. Finally, we elaborate upon the processes that might be involved in responding to internal and external threat.

The case of internal threat as a basis of right-wing attitudes

Throughout their monumental work, Adorno et al. (1950) repeatedly described the authoritarian’s emotional life in terms of the negative emotions that typically accompany threat proneness, such as anxiety, fear, aggression, and hostility. The classic vision on authoritarianism holds that perception of internal threat is typical among right-wing adherents. Our results seem to oppose this classic assumption. Moreover, because internalized threat proneness is acquired early in life, this classic vision also implies that social attitudes should show substantial stability later on. Indeed, unless threat proneness changes, the basis of these attitudes should remain stable, and the resulting attitudes should stay unchanged. However, this view of social attitudes as deeply ingrained and unchangeable
opposes recent literature on right-wing attitudes, which asserts that (right-wing) ideology is sustained by broad social attitudes that show substantial stability but are amenable to change as well (Duckitt, 2001).

Our results also indirectly touch upon recent work on the impact of personality on right-wing attitudes. More specifically, although Neuroticism is a broad personality factor that incorporates anxiety and threat proneness, it is only poorly or not significantly related to right-wing attitudes (Schlachter & Duckitt, 2002; Sibley & Duckitt, 2008; Van Hiel et al., 2007).

However, the present study does not rule out the possibility that internal threats might have indirect effects on right-wing attitudes. For example, it may well be that individuals adhering to right-wing attitudes are more prone to externalize their anxieties (both internal and external) by blaming societal circumstances, rather than looking inwards and finding the source of anxiety within themselves. Such a process reminds us of Adorno et al. (1950) who asserted that authoritarian people do not tend to pay much attention to their own feelings (as captured by anti-introspection). Another possibility is that individuals who experience strong internal threat might be more prone to perceive external threat, which in turn would lead to higher levels of right-wing attitudes. Such a chain of processes has also been proposed in the context of the developmental antecedents of authoritarianism. For instance, Duckitt (2001) asserted that mental distress in childhood (stemming from punitive and strict socialization) leads to social conformity and authoritarianism at a later point in time.

External threat and right-wing attitudes

Many studies reported strong relationships between right-wing attitudes and threat posed by economic hardship (e.g., Sales, 1972; Doty et al., 1991), terrorism (e.g., Willer, 2004), and the presence of outgroups (e.g., Renfro et al., 2006). The effects of such threats have been considered to confirm the classic vision of right-wing adherents as emotionally disturbed people, even though the reasons for these disturbances reside in contextual variations. Our findings suggest that these external threats originating from society are qualitatively different in their effects on right-wing attitudes and operate without interacting with internal threat. Hence, right-wing attitudes seem to represent a collective.

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response to societal threats, orienting individuals to the group and its authority. Kessler and Cohrs (2008) argued that authoritarianism fosters coordination of activities and cooperation in large-scale groups. Group coordination and cooperation, in turn, may lead to benefits in coping with external threats like economic hardship, disasters, famines, threat posed by outgroups.

Several theories and models explain the relationship between external threat and right-wing attitudes, without incorporating internal threats. The group cohesion model (Duckitt, 1989) considers RWA to express the degree to which people feel that the cohesion and integrity of their group is threatened. According to the DPM (Duckitt, 2001), social threat and dangerous worldview are considered central inducers of RWA. Furthermore, Kreindler (2005) argued that RWA, which is considered necessary to maintain group norms, is caused by the perception of threat to these norms. Similarly, Stenner (2005) has asserted that normative threat, i.e., threat to the oneness and the sameness of the group, is the critical factor in activating authoritarianism. As argued by Jost et al. (2003), economic, societal, and political threats induce an ideological motivation to defend and justify the existing social system and thereby increase right-wing attitudes.

Internal and external threat: recruiting on two distinct processes?

We have firmly established that external threat, rather than internal threat, is the key factor to understand the relationship between threat and right-wing attitudes. These findings suggest that internal and external threats solicit different processes. Unfortunately, although previous studies have demonstrated how threat impacts people, for instance, by affecting appraisal processes (Scherer, Shorr, & Johnstone, 2001) and altering subsequent information processing (Bar-Haim, Lamy, Pergamin, Bakermans-Kranenburg, & van Ijzendoorn, 2007; Mathews, Mackintosh, & Fulcher, 1997), these studies did not distinguish between internal and external threats. Future studies should increase our understanding of the mediating processes of both threat types and probe into their consequences. It seems likely that external threat may be processed more cognitively and less emotionally than internal threat and that these cognitive aspects might be especially relevant for understanding relationships with
right-wing attitudes (see, Onraet, Van Hiel, Roets, & Cornelis, 2012). Moreover, these studies should not only consider personal but also societal consequences. For instance, Poulin, Silver, Gil-Rivas, Holman, and McIntosh (2009) reported that almost 60% of the respondents of a national sample perceived social benefits, such as increased pro-social behavior and political commitment, two months after the 9/11 attacks. According to these authors, “… for collective traumas, individuals’ responses may be marked less by a direct focus on the event’s implications for the self than on the implications for others or for the broader society” (p. 88).

Limitations and Strengths

A definite strength is that we established empirical support for our framework of threat dimensions, which was obtained through factor-analytic techniques performed on several threat scales previously used in research on right-wing attitudes. Moreover, we replicated the structure of internal and external threat in an independent sample and showed that the various threats comprising the two dimensions yielded distinct effects on right-wing attitudes, further substantiating the validity of distinguishing between internal and external threat. Furthermore, in addition to conducting a meta-analysis that enabled us to compare the direct relationships of internal and external threat, we also tested the interplay between these threats.

However, there is a noteworthy limitation of the present studies. The strong relationship between external threat and right-wing obtained in Study 3 does not allow drawing causal inferences. Nevertheless, situational external threat yielded a strong effect size (Study 2), suggesting a causal relationship between external threat and right-wing attitudes. However, an untested possibility is that social attitudes affect the perception of external threat (e.g., Cohrs & Ibler, 2009; Duckitt, 2001; Stephan & Renfro, 2002). To test the possible bidirectional relationships between (perceived) threat and right-wing attitudes, longitudinal or experimental studies are needed.

Conclusions
The present studies revealed that threat on the level of society, rather than anxiety originating from one's private life, is the key factor in explaining the relationship between threat and right-wing attitudes. Our findings do not seem to corroborate the classic views on right-wing attitudes, which situate these attitudes in deeply ingrained anxieties. Rather, our findings corroborate the view that external sources of threat emanating from society are most relevant for right-wing attitudes.
References

1 = included in meta-analysis for internal threat
2 = included in meta-analysis for external threat


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Roccato, M. Unpublished data.


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1Sibley, C.G., (2003), Unpublished data, University of Auckland.


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Table 1. Correlations between the variables of Study 1 and Study 3

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Note. 1 = NEO Anxiety; 2 = Trait Anxiety; 3 = State Anxiety; 4 = Death Anxiety; 5 = Dangerous World View; 7 = Symbolic Threat; 8 = Realistic Threat; 9 = Intergroup Anxiety; 10 = Terroristic Threat; 11 = Economic Threat; 12 = Political Threat; 13 = Threat to Social Cohesion; 14 = Right-Wing Authoritarianism; 15 = Social Dominance Orientation; 16 = Conservatism. Correlations above the diagonal: correlations from the Study 1; Correlations below the diagonal: correlations from Study 3. On the diagonal, Cronbach’s alphas of the corresponding scales are reported (first α: Study 1; second α: Study 3). p < .05; * p < .01; ** p < .001
Table 2. Moderators of effect sizes for studies on threat and right-wing attitudes

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</tbody>
</table>

Note. 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).

¹ For the moderator analyses sex composition and tested group, 8 samples were excluded because they did not investigate individual subjects (McCann, 2008; McCann, & Stewin, 1984; McCann, & Stewin, 1990; Padgett, & Jorgenson, 1982; Sales, 1973).

*p < .05; **p < .01; ***p < .001
Table 3. Moderators of effect sizes for studies on internal threat and right-wing attitudes

<table>
<thead>
<tr>
<th>Moderator</th>
<th>n</th>
<th>K</th>
<th>r</th>
<th>95%CI</th>
<th>Q₀</th>
<th>Qₘ</th>
<th>I²</th>
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<td>.14 to .28</td>
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<td>.21***</td>
<td>.13 to .28</td>
<td>324.71***</td>
<td>87.37</td>
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<td>.24*</td>
<td>.03 to .43</td>
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<td>.12 to .32</td>
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<td>.00</td>
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<td>Ideological Measure</td>
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<td>11.28*</td>
<td>65.55</td>
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<td>.09 to .45</td>
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<td>SDO</td>
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<td>.01 to .18</td>
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<td>53.56</td>
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<td>-.01 to .26</td>
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<td>Dogmatism</td>
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<td>.38***</td>
<td>.21 to .52</td>
<td>135.04***</td>
<td>91.85</td>
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</tr>
</tbody>
</table>

Note.

k = number of studies; CI = confidence interval; Q₀ = homogeneity statistic between classes; Qₘ = homogeneity statistic within classes. I² = homogeneity statistic (percentage of heterogeneity).

*p < .05; **p < .01; ***p < .001
<table>
<thead>
<tr>
<th>Moderator</th>
<th>n</th>
<th>K</th>
<th>r</th>
<th>95% CI</th>
<th>Qb</th>
<th>Qw</th>
<th>I²</th>
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</thead>
<tbody>
<tr>
<td>Total Set</td>
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<td>.30 to .40</td>
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<td>.28 to .39</td>
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<td>.20 to .37</td>
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<tr>
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<td>.36 to .50</td>
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</table>

Note.

k = number of studies; CI = confidence interval; Qb = homogeneity statistic between classes; Qw = homogeneity statistic within classes. I² = homogeneity statistic (percentage of heterogeneity)

*p < .05; **p < .01; ***p < .001
Figure 1. Model with two higher order factors representing internal threat and external threat. Factor loadings are reported (first loadings: Study 1; second loadings: Study 3). All paths are significant, $p < .001$. 
Figure 2. Standardized path coefficients

*** p < .001, ** p < .01, * p < .05

```
- External Threat
  - RWA
    - SDO
    - Conservatism

- Internal Threat
  - RWA
    - SDO
    - Conservatism

Path Coefficients:
0.76***
0.45***
0.58***
0.19***
-0.12**
-0.05
```

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