

Authoritarianism: Conceptualization, research, and new developments

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Summary

The conceptualization and measurement of authoritarianism has involved important difficulties. One was the failure to originally differentiate two distinct dimensions of authoritarianism, today best (though not necessarily adequately) captured by Altemeyer's Right Wing Authoritarianism (RWA) and Pratto et al's Social Dominance Orientation (SDO) scales. A second has been the conflation of authoritarianism with conservatism highlighted by new research on political extremism and Left wing Authoritarianism (LWA). This has underlined the need to conceptually clarify the construct to adequately subsume authoritarianisms of both right and left and differentiate them from both conventional conservatism and liberalism. It is therefore proposed that authoritarianism would be best conceptualized as a morally absolutist and intolerant desire for the coercive imposition of particular beliefs, values, way of life, and form of social organization on individuals irrespective of their wishes and of any human costs involved.

Research on the assumed causes and consequences of authoritarianism has focused almost entirely on authoritarianism of the right. Although evidence of causality is often tentative, this research does suggest a reasonably clear pattern of likely dispositional and social environmental causal antecedents. There are strong genetic influences, more so for RWA than SDO, though environmental influences can modulate the degree to which genetic factors may be expressed in ideological attitudes. Dispositional factors, which may mediate genetic as well as environmental influences, show clearly differential effects with particular traits, values, motives, and threat related social worldview perceptions associated with RWA (low Openness, high Conscientiousness, Conservation values, Binding moral foundations, Dangerous world beliefs) and others with SDO (low Agreeableness and individualizing moral foundations, Self-enhancement values, Competitive world beliefs). The effects for cognitive rigidity on ideological attitudes seem weaker than previously assumed and specific to only social conservatism and RWA.

Social influences have effects as strong as genes, again with important differential effects for RWA (aging, parenting, low diversity experiences) and SDO (higher status group membership and social positioning). New research has shown that both ideological right and left are associated with threat, but of different kinds with the left more sensitive to threats perceived as necessitating social change, and the right to threats resulting from disruptive social changes. On the right disruptive social changes that threaten personal and collective security seem to drive RWA, and competitive threats of change to the social hierarchy SDO. Threat also affects RWA and SDO through changing peoples' worldview perceptions towards seeing the social world as dangerous and threatening (RWA) or as ruthlessly competitive (SDO). These worldview beliefs then also determine how people interpret social experiences (as threatening or competitive) and so moderate the effects of these experiences on ideological attitudes either by shifting conservatives' attitudes toward more authoritarian ones, or liberals' attitudes in a more conservative direction.

Research on the assumed consequences of authoritarianism indicates that while RWA and SDO do generally predict the core outcomes proposed by early theorists new research suggests some important qualifications and frequently indicates differential effects for RWA and SDO. Thus, RWA and SDO are associated with lower support for civil liberties and individual rights but not with greater political intolerance or lower support for electoral or majoritarian democracy. RWA and SDO are also not associated with prejudice generally but only against target groups viewed as potentially threatening the traditional social order, with RWA predicting prejudice against groups threatening safety and security and SDO against groups threatening the social hierarchy. In the case of leadership SDO tends to be associated with dominance in leaders and RWA with strong authoritarian leadership. Findings do also support the original expectation that RWA and SDO would predict support for extreme right wing and populist parties and candidates, nationalist attitudes, support for the military, military action, war, intergroup conflict, and the use of torture in

conflict situations. However, the effects across domains again appear to be differentially motivated for RWA and SDO.

The general pattern for these findings is consistent with authoritarianism on the right being motivated by a need for strong governmental authority to control potentially disruptive threats to social order with differential effects for RWA (focused on disruptive changes to the traditional social order and consequent threats to safety and security) and SDO (focused on competitive threats to the social hierarchy of status, achievement, and power). Existing research, however, has focused almost entirely on authoritarianism of the right. New findings have now emerged suggesting LWA may be as predictive of authoritarian phenomena on the left as RWA and SDO are for the right, with the former motivated by radical change to the traditional social order, and the latter by its defense.

Authoritarianism

The first systematic research on authoritarianism as a set of social attitudes and beliefs held by individuals was published in 1950 by Adorno, Frenkel-Brunswick, Levinson, and Sanford. They conceptualized authoritarianism as a broad personality dimension disposing individuals to right wing conservatism, anti-Semitism, generalized prejudice, and notably fascism, and so named their measure of this syndrome, the F scale. They proposed that this authoritarian personality arose out of inner conflicts originating from harsh, punitive childhood socialization. This concept stimulated a great deal of research but the findings did not support their theory of the origins of authoritarianism or the psychometric adequacy of their F scale. As a result, alternative measures, which broadly followed their conceptualization, were developed and used.

Conceptualizing and Measuring Authoritarianism

Altemeyer's Right Wing Authoritarianism

In 1981 Altemeyer developed the first psychometrically reliable and seemingly unidimensional scale to measure individual differences in authoritarianism. This Right-Wing Authoritarianism (RWA) scale was directly derived from the F scale but empirically refined it by reducing its original nine content facets to only three; that is, authoritarian aggression, authoritarian submission, and conventionalism. Research by Altemeyer (1981, 1996) and others (see, e.g., Duckitt, 2009) confirmed that RWA was stable in individuals over periods as long as twenty years, and was powerfully associated with right wing political orientation, religious fundamentalism, social conservatism, traditionalism, and prejudice against minorities and outgroups. The RWA scale soon became the measure of choice for research on authoritarianism

Some researchers have argued that the strong correlations between RWA and measures of social or cultural conservatism suggested that they were measuring the same dimension (Feldman, 2003). However, Altemeyer (1996) argued, that right wing authoritarianism (as “toughminded conservatism”) was conceptually and empirically distinct from social conservatism, although they

would be strongly related due to their inevitably shared right wing ideological content. This was expressed in the harsh, intolerant, coercive, moralistically self-righteous and therefore blatantly authoritarian content of many of the RWA scale's items, particularly the protrait items, that make them very different to the more neutral items found in measures of social conservatism, which express a preference for particular values, lifestyles and social arrangements. As a result the RWA scale has been a markedly better predictor of indices of punitiveness, support for anti-democratic actions, political intolerance, prejudice, extreme right wing party preference, and ethnocentrism than conventional measures of social conservatism (Altemeyer, 1981, 1996) and has remained a significant predictor even with liberal-conservative political orientation controlled (e.g., Conway & McFarland, 2019). Consequently, the RWA scale has remained the measure of choice for most authoritarianism research.

Social Dominance Orientation

A further development came with the concept and measure of Social Dominance Orientation (SDO) (Pratto, Sidanius, Stallworth, & Malle, 1994). In contrast to the items of the RWA scale, which express beliefs in coercive social control, obedience and respect for authorities, and conforming to traditional moral and religious norms, SDO items expressed support for inequality and the right of powerful groups to dominate weaker ones. Not surprisingly therefore scores on the SDO and RWA scales were often uncorrelated or weakly correlated, indicating that the two scales were measuring different and relatively independent dimensions (Altemeyer, 1998; Pratto et al., 1994).

Despite this, SDO proved as powerful a predictor as RWA of support for authoritarian social phenomena such as nationalism, militarism, support for tough, undemocratic, authoritarian government, and of generalized prejudice. Altemeyer (1998) suggested that the RWA and SDO scales measured two different authoritarianism dimensions, the submissive and the dominant

respectively. This view of SDO as a second distinctively different dimension of authoritarianism has been broadly accepted by most researchers.

Social Conformity versus Autonomy

Feldman and Stenner (1997) have suggested that authoritarian attitudes or reactions are activated by the impact of social situational threats to social cohesion on individuals who hold values of social conformity (versus autonomy), which they viewed as predisposing to authoritarianism. Feldman (2003) developed a 17-item scale to measure social conformity versus autonomy (SCA) values, with items that clearly express socially conservative rather than the openly authoritarian sentiments of the RWA scale. Although the SCA scale did correlate powerfully with the RWA scale this correlation would have been inflated by shared items and was still well below the scale reliabilities suggesting that they did measure somewhat different constructs.

In much of their research, Feldman and Stenner (1997; Stenner, 2005) preferred to use a much shorter four item scale contrasting socially conservative and traditional child rearing values with socially liberal ones, which they viewed as an equivalent measure of their concept of an authoritarian predisposition. The shortness of this child rearing values (CRV) scale, and its inclusion in large scale social surveys, has made it a popular choice for many researchers, who have typically described it as measuring authoritarianism itself. This, however, is a misconception. The items of the SCA and CRV scales, unlike those of the RWA and SDO scales, do not express clearly authoritarian sentiments, but simply contrast socially conservative with liberal child rearing values. It is also inconsistent with Feldman and Stenner's (1997; Feldman, 2003; Stenner, 2005) conceptualization of these scales as measuring not authoritarianism per se but a predisposition to authoritarianism. As such these scales seem better conceptualized as measures of social conservatism rather than authoritarianism.

Political Conservatism

In contrast to Adorno et al. (1950) and Altemeyer (1996) who had viewed authoritarianism and conservatism as conceptually and empirically distinct, Jost, Glazer, Kruglanski, and Sulloway's (2003) motivated cognition theory suggested that both were subsumed in a single broad Political Conservatism dimension that was driven by needs to reduce and manage threat and uncertainty. In their research Jost and colleagues therefore treated measures of authoritarianism (such as the F, RWA, and SDO scales) and conservatism as essentially equivalent indicators of Political Conservatism.

There have been important criticisms of this approach, with the assumption that political attitudes can be organized along a single dimension particularly controversial. Research, for example, has shown that social and economic conservatism, and RWA and SDO, are factorially distinct dimensions and that the correlations between them vary across social contexts from strong positive through weak and nonsignificant to significantly negative (e.g., Malka, Letes, & Soto, 2019; Roccato & Ricolfi, 2005) and that they have quite different origins and correlates (e.g., Duckitt & Sibley, 2017; Federico & Malka, 2018; Kandler, Bell, & Riemann, 2016). A second criticism has been their assumption that authoritarianism and conservatism are essentially isomorphic and that authoritarianism is therefore largely or almost entirely to be found on the political right. This has been brought into question by new research on political extremism and left-wing authoritarianism which are discussed below.

Overall, therefore, there may be social contexts (particularly where social and economic conservatism and RWA and SDO are highly correlated) in which a broad Political Conservatism construct may be meaningful for particular research objectives. However, its conflation of critical conceptual and empirical distinctions suggests that it may be less useful for research on authoritarianism specifically.

Non-ideological Concepts of Authoritarianism

An early criticism of Adorno et al.'s (1950) authoritarianism was that it focussed only on explaining authoritarianism of the political right and ignored authoritarianism of the left (e.g., Shills, 1954). One response to this was the attempt to develop constructs and measures that would be ideologically neutral and equally applicable to authoritarianism of the right and left.

Rokeach (1954) suggested that dogmatism, or rigidity in beliefs, might predispose individuals to authoritarianism in general, rather than just authoritarianism of the right. His Dogmatism (D) scale, however, proved problematic. The items were broad, vague statements of opinion often with ideological implications and sometimes similar to items of the F Scale. As a result, the D Scale correlated highly with both the F and RWA scales (Altemeyer, 1981) indicating that it was clearly not ideologically neutral. Altemeyer (1996) later developed a new Dogmatism (DOG) scale with a more precise conceptualization of dogmatism as “relatively unchangeable, unjustified certainty” (p. 201), which had better psychometric properties than the D scale. However, his DOG scale also correlated powerfully with the RWA scale and even more strongly with religious fundamentalism, suggesting that the scale might largely assess religious dogmatism (Duckitt, 2009).

Despite the failure of non-ideological measures of authoritarianism, new research on political extremism has indicated that there might well be a shared basis to authoritarianism of left and right. This research, reviewed by van Prooijen and Krouvel (2019), has shown that political extremism of both left and right was motivated by quests for meaning in an uncertain world, and resulted in cognitively simplistic views of social reality, moral absolutism, overconfidence in own beliefs, and intolerance to those with different views. Moreover, both liberal and conservative extremists were more self-righteous and used more negative and angry language than moderates and were both motivated by perceived threat from political rivals. Extremists were also more cognitively inflexible, deferential to their own authorities, and had a simplistic understanding of politics and of how their favoured policies would work.

Overall, therefore, content-based attempts at ideologically neutral concepts of authoritarianism, such as dogmatism, failed. This was partly because they inevitably invoked values leaning in a particular ideological direction, and possibly also because authoritarianism was rooted not in cognition, but in motives which differed on the left and the right. As a result, authoritarianism researchers have continued to use ideologically based measures, such as the RWA or SDO scales. The new research on extremism, however, by indicating that authoritarian reactions could indeed be found on the political left as well as the right gave fresh impetus to the neglected issue of trying to measure left wing authoritarianism.

Left Wing Authoritarianism

Until recently there had been only two noteworthy attempts to develop left-wing authoritarianism (LWA) scales but neither involved a sustained research effort. The first by Altemeyer (1996) viewed LWA as an ideological mirror image of his tripartite concept of RWA, and thus characterized by authoritarian submission (to left-wing authorities), authoritarian aggression (against established authorities) and conventionalism (conformity to norms of left-wing authorities). The items of his LWA scale therefore directly expressed these sentiments. The scale, however, seemed unsuccessful as there were few high scorers and it unexpectedly correlated positively though weakly with his RWA scale. A possible flaw may have been his assumption that authoritarians of the left and right would share fundamentally the same values, just directed at different targets.

A second attempt by Van Hiel, Duriez, and Kossowska (2006) proposed that LWA would comprise only authoritarian submission (obedience to party discipline) and authoritarian aggression (support for political violence). Their scale did not appear valid in a general population sample but performed better in a sample of left-wing activists. This may have been because their items expressed support for communism and violent revolution, which after the collapse of communism

in Europe and the USSR would no longer have been endorsed by any other than committed left-wing activists. Neither of these two LWA scales has been much used subsequently.

Recently, however, there have been two more promising attempts to measure LWA. First, Conway, Houck, Gornick, and Repke (2018) adapted Altemeyer's RWA items to refer to causes and groups that leftists (rather than right wingers) would support, but retained the intolerant, coercive, authoritarian content of the items. Initial findings have indicated that this LWA scale predicted liberalism-conservatism and presidential candidate support equivalently and oppositely to the RWA scale, as well as prejudice (against conservative targets) and dogmatism (in liberal favouring domains). A criticism of this LWA scale, however, is that its items like those of the RWA scale are complex and cumbersome often expressing two or even three distinct ideas simultaneously, which is not psychometrically ideal.

Second, Costello, Bowes, Stevens, Waldman, and Lilienfeld (2020) used an exhaustive test construction process to develop a content valid LWA scale which showed impressive evidence of validity when tested against over 50 criterion variables. These findings showed that authoritarians of left and right shared many characteristics as well as both endorsing coercive, intolerant, prejudiced, morally absolutist, and aggressive actions and attitudes towards others seen as threatening their values.

Overall, therefore, there has been remarkably little research on LWA in comparison to the enormous volume on RWA. Nevertheless, recent developments are promising although they need independent replication and extension.

Conceptualizing and Measuring Authoritarianism: Conclusions

The conceptualization and measurement of authoritarianism has involved important difficulties. The most critical, stemming largely from Adorno et al.'s (1950) original conceptualization and the failure to develop ideology free measures of authoritarianism, has been the almost universal conflation of authoritarianism with right wing ideology and conservatism. New

research on political extremism and LWA, however, indicates the need for a conceptual approach able to subsume authoritarianism of both right and left. Crystallizing the core elements proposed for authoritarianism and incorporated in its measurement therefore suggests a broader conception of authoritarianism as a morally absolutist and intolerant desire for the coercive imposition of particular beliefs, values, way of life, and form of social organization on people irrespective of their wishes and of any human costs involved.

Assumed Antecedents of Authoritarianism

Researchers have investigated many possible causes of authoritarianism. These can be broadly divided into dispositional (i.e., genetics, personality, motives, values, and cognitive factors), social or situational influences (i.e., family and parental influences, personal and social experiences, and broader societal and cultural factors), and threat, which is largely situational but also reflects dispositional differences in threat perception.

Dispositional Factors

Genetic influences.

Hatemi and McDermot (2012) have reviewed the findings of numerous studies investigating the heritability of ideological attitudes. The findings have shown stronger correlations between the ideological attitudes of monozygotic versus dizygotic twins enabling estimates of the variance due to genetic, common environmental (i.e., shared among siblings), and unique (to the individual) environmental influences. These have shown a substantial genetic influence (40-60% of variance) for measures of conservatism, RWA, and traditionalism. In adult samples there were relatively weak effects for shared environmental influences and substantial effects for unique environmental factors, which were broadly equivalent to those for genetic influences. Findings for genetic influences on SDO, however, have suggested weaker effects than for RWA with Kandler, Bell, and Riemann (2016) finding minimal genetic effect on SDO and Kleppestø et al. (2019) only moderate effects (24-37% of variance).

Research has also shown that genetic and environmental influences can interact to influence behaviour. Studies using longitudinal panel designs have shown that during adolescence genetic influences tend to be weak and shared environmental influences strong. However, when children leave home the effects of shared environment largely disappear and genetic factors exert a more powerful effect which lasts for the rest of life (Hatemi & McDermont, 2012; Hufer, Kornadt, Kandler, & Riemann, 2020). This suggests that environmental influences can modulate the degree to which genetic factors may be expressed in ideological attitudes, either permitting maximal genetic impact or reducing it substantially.

Personality.

Although early theorists, such as Adorno et al. (1950) did view authoritarianism as a personality dimension, later evidence, and notably genetic analyses (Funk et al., 2013), have indicated that personality and ideological attitudes, are clearly distinct factors. As a result subsequent research has focused on the relationship of RWA and SDO with well validated personality constructs, such as the broadband personality dimensions of the Big Five and Hexaco models.

For the Big Five, meta-analytic findings have shown that the primary predictors were Openness on lower RWA (-.36), and Agreeableness on lower SDO (-.29) (Sibley & Duckitt, 2008). Conscientiousness was also a significant but much weaker predictor of RWA as was Openness of SDO. For the Hexaco dimensions, Zettler, Thielmann, Hilbig, and Moshagen's (2020) meta-analysis found that Openness was the primary predictor of RWA ($r = -.39$), while Lee, Ashton, Ogunfowora, Bourdage, and Shin (2010) found that Honesty-Humility was the most important predictor of SDO. Since Hexaco Honesty-Humility and Big Five Agreeableness (Gaughan, Miller, & Lynam, 2012) are highly correlated these findings are clearly consistent with each other.

Meta-analytic findings for more specific personality traits have indicated that SDO but not RWA was associated with lower empathy or altruism (Onraet Van Hiel, De Keersmaecker, &

Fontaine, 2017) and positively with the dark triad traits (i.e., Narcissism, Psychopathy, and Machiavellianism) (Vize, Lynam, Miller, & Collison, 2018). Upper body strength or drive for muscularity was also positively correlated with SDO but not RWA among men (Peterson & Laustsen, 2019). Meta-analytic findings, however, have shown little if any association of positive affectivity, negative affectivity, and self-esteem with Conservatism, RWA, or SDO (Onraet, Van Hiel, & Dhont, 2013).

The relatively few longitudinal findings available have supported the view that personality does causally affect ideological attitudes. Three longitudinal studies over approximately one year periods found significant cross-lagged effects for Big Five personality dimensions of Openness and Agreeableness on RWA and SDO respectively (Perry & Sibley, 2012; Sibley & Duckitt, 2010; Sibley & Duckitt, 2013) with little evidence of reciprocal effects from personality from ideological attitudes.

A second issue is that of whether effects of personality on ideology might be direct or mediated. Research on the DPM model has shown that the effects of the Big Five or Hexaco personality dimensions on RWA and SDO were fully or partially mediated via Dangerous and Competitive Worldview Beliefs respectively (Duckitt & Sibley, 2017). In addition, Caprara, Vecchione, and Schwartz (2009) have shown that the effects of Big Five personality on Conservatism were fully mediated by basic values, with effects of Openness and Conscientiousness mediated via Security values and Agreeableness via Universalism values.

In conclusion, therefore, research findings show that the major personality dimensions do clearly predict ideological attitudes, but differentially so, with RWA predicted primarily by low Openness (for both Big Five and Hexaco models) and SDO by low Big Five Agreeableness (and Hexaco Honesty-Humility). Moreover, effects of personality on ideological attitudes would appear to be not to be direct but mediated, again differentially so, via Dangerous World beliefs and Security values on RWA, and via Competitive World beliefs and Universalism values on SDO.

Motives, values, and morality.

Early theorists had viewed authoritarianism as a single motivationally based dimension (Adorno et al., 1950; Wilson, 1973). This approach was comprehensively articulated by Jost and his colleagues who proposed that authoritarianism (both RWA and SDO) and conservatism comprise a single Political Conservatism dimension motivated by needs to manage, and control threat and uncertainty (Jost et al., 2003). Research, reviewed in the next two sections, however, has not supported this perspective. Rigid cognitive styles and threat and fearfulness, which were assumed to underlie these needs, have been shown to relate differently to social and economic aspects of conservatism, and SDO and RWA (e.g., Costello, Bowes, Malka, Baldwin, & Lilienfeld, 2020; Federico & Malka, 2018).

The DPM model in contrast proposes that authoritarianism comprises two different motivationally based dimensions. RWA expresses the motivational goal or value of maintaining collective or societal safety and security and is driven by a view of the social world as dangerous, threatening, and unstable. SDO on the other hand expresses the motivational goal or value of power, dominance, and superiority over others driven by a view of the social world as a ruthlessly competitive jungle in which the strong win and the weak lose. Research comprehensively reviewed by Duckitt and Sibley (2017) has supported the DPM model by showing that RWA and SDO are factorially distinct, have different personality, genetic, and worldview origins, and are differentially reactive to different kinds of perceived threats with SDO more reactive to competitive threats to status and power differentials and RWA to threats to social order, stability, cohesion, and personal security.

Finally, research on motivationally based values, such as Schwartz's well validated values typology, has found powerfully differential effects on RWA and SDO, with the former primarily related to Conservation values and the latter to Self-Enhancement values (e.g., Altemeyer, 1998; Boer & Fischer, 2013; Duriez, Van Hiel, & Kossowska, 2005). Similar differential effects have

been found for moral values with RWA associated with binding moral foundations (loyalty, authority, and sanctity), and SDO primarily (and negatively) related to individualizing foundations (care and fairness) (e.g., Federico, Weber, Ergun, & Hunt, 2013; Hadarics & Kende, 2018).

To conclude, therefore, research has supported the original view that authoritarianism would be motivationally based, but also shown that it comprises two distinct authoritarian dimensions with each expressing different basic motives.

Cognitive style and ability.

Early theorists had suggested that authoritarianism and conservatism would be associated with cognitive styles characterized by rigidity, intolerance of ambiguity, and preferences for structure and order (Adorno et al., 1950; Rokeach, 1954; Wilson, 1970). This was supported by Jost et al.'s (2003) meta-analysis which found positive correlations between Political Conservatism (which included RWA, SDO as well as conservatism) and indices of more rigid cognitive styles ($r = .23-.34$). A second more comprehensive meta-analysis by Jost and colleagues (Jost, Sterling & Stern, 2017) obtained similar effects.

Critics, however, expressed concern about an over reliance on self-report cognitive style measures that were also often poorly defined, unreliable, unvalidated, and included ideologically relevant item content, as well as the conflation of different ideological dimensions (e.g., Costello, Bowes, Malka et al, 2020; Van Hiel, Onraet, & De Pauw, 2010, Van Hiel, Onraet, Crowson, & Roets, 2016; Zmigrod, 2020). For example, two meta-analyses by Van Hiel and colleagues (Van Hiel et al, 2010; Van Hiel et al., 2016) found very weak correlations for behavioral rigidity related cognitive measures with right wing ideological attitudes compared to much stronger effects for self-report measures.

Most recently a new and more extensive meta-analysis by Costello, Bowes, Malka et al. (2020) used the same rigidity related cognitive style measures as Jost et al. (2017) but redressed a number of the concerns with their meta-analyses, by for example excluding self report measures

with overlapping item content (between ideology and cognitive style). Its findings showed a considerably smaller overall relationship between rigidity related indices and conservatism ($r = .13$) than previously reported, with a significant though weak overall effect for social conservatism ($r = .20$) but a negligible effect for economic conservatism. In addition, the effects for behavioral indices were much weaker and the overall effects were non-significant in representative samples.

These meta-analyses, however, all focused on conservatism broadly. Relatively few studies have included both RWA and SDO and these have found that whereas the correlations between RWA and indices of greater cognitive rigidity were consistently significant, those for SDO were much weaker and often nonsignificant (Berggren, Akrami, Bergh, & Ekehammar, 2019; [Burger, Pfattheicher, & Jauch, 2020](#); Van Hiel, Pandelaere, & Duriez, 2004). This parallels the findings from Costello, Bowes, Malka et al.'s (2020) meta-analysis for social and economic conservatism with cognitive rigidity.

Research on the relationship of intelligence or cognitive ability with ideological attitudes has suggested a similarly complex picture. A meta-analysis of findings by Onraet et al. (2015) found an overall effect of intelligence on conservative ideology (i.e., RWA and social conservatism) of $r = -.20$ but did not include effects for SDO and economic conservatism. Research on cognitive ability and SDO has found either nonsignificant (Heaven, Ciarrochi, & Leeson, 2011; Ludeke, Tagar, & DeYoung, 2016; Van Hiel et al., 2019) or significant but very weak negative effects (Choma & Hanoch, 2017; Choma, Sumantry, & Hanoch, 2019). For economic conservatism on the other hand a few studies have found nonsignificant effects (e.g., Choma et al., 2019), but most, and particularly those using large representative samples, have found economically conservative attitudes associated with higher cognitive ability (Carl, 2014; Lewis & Bates, 2018; Ludeke & Rasmussen, 2018).

Overall, therefore, more rigid cognitive styles and lower cognitive ability are consistently associated with greater social conservatism and RWA but the effects are not strong (around $r = .20$). On the other hand, the effects for SDO are inconsistent, with very weak or nonsignificant

correlations, and those for economic conservatism are either negligible or, in the case of cognitive ability, positive.

Situational Factors

Parental and family influences.

Altemeyer's (1996) findings did not support Adorno et al.'s (1950) theory that authoritarianism originated from strict and punitive parenting. He did, however, find moderate to strong correlations (around .40) between parent-offspring RWA. Subsequent research has replicated this for RWA and conservatism, as well as finding significant though much weaker correlations for parent-offspring SDO (e.g., Dhont, Roets, & Van Hiel, 2013; Kandler, Bleidorn, & Riemann, 2012).

Altemeyer (1996) suggested that parental and family influences were largely transmitted through social learning during childhood and adolescence. However, findings from twin behavioral genetic research, already noted, have shown that shared environmental effects such as family and parental influences on ideological attitudes largely disappear when offspring leave the parental home (Hatemi & McDermont, 2012; Hufer et al., 2020). This suggests that the parent-offspring ideological attitude correlations in adulthood primarily reflect shared genetic influences, which would also be consistent with the stronger effects found for genetic influences on RWA than SDO.

Social influences and personal experiences.

Altemeyer (1996) had argued that authoritarian attitudes could be modified throughout life by social influences and personal experiences and research supports this. Thus, exposure to ethnic and cultural diversity and intergroup contact experiences are associated with lower RWA (Van Assche, Asbrock, Dhont, & Roets, 2018), and two experimental studies have shown that interethnic contact lowered students' SDO levels (Dhont, Van Hiel, & Hewstone, 2014; Shook, Hopkins, & Koech, 2016).

Research has shown that education, and particularly higher education, reduced social conservatism, RWA, and SDO (Altemeyer, 1996; Napier & Jost, 2008; Van Hiel et al., 2010) but not economic conservatism (Houtman, 2003; Lewis, 2018; Napier & Jost, 2008). However, the effects vary, being greater for “liberal” educational approaches and hierarchy attenuating college courses (e.g., psychology) than for more conservative educational approaches and hierarchy enhancing college courses (e.g., law) (Guimond, Dambrun, Michinov, & Duarte, 2003; Hurley & Hurley, 2015). Aging and becoming a parent have been found to be associated with higher RWA and social conservatism, but not with SDO (Altemeyer, 1996; Pratto et al., 1994; Ruffman et al., 2016), with the effects on RWA and social conservatism mediated by increased threat perception and vigilance (Cheon & Esposito, 2020; Kerry & Murray, 2018).

Consistent with Social Dominance Theory, research has shown that ethnic groups of higher status are higher in SDO, that males are consistently higher in SDO than females, and that larger differences in social group status are associated with larger differences in the mean group levels of SDO (Sidanius, Levin, Liu, & Pratto, 2000). Two studies have also shown that assigning individuals to positions of personal power (i.e., manager versus receptionist) can increase their SDO level (Guimond et al., 2003) though only if the normative context was hierarchy enhancing (as opposed to hierarchy attenuating) (De Oliveira, Guimond, & Dambrun, 2012). Higher income and SES have been associated with higher economic conservatism but, inconsistent with Social Dominance Theory, with lower SDO, as well as lower social conservatism, and RWA (Houtman, 2003; Lewis, 2018; Napier & Jost, 2008).

Overall, therefore, social and personal experiences throughout life seem likely to influence either both RWA and SDO (education, diversity, intergroup contact) or RWA (aging, parenting) and SDO (group or personal power) differentially.

Societal and cultural influences.

A number of studies from diverse disciplines have investigated effects of societal and cultural level factors on individuals' ideological attitudes. One pattern identified was that normative cultural values of hierarchy (or power distance) and collectivism (or embeddedness) were associated with individuals being higher in SDO and RWA respectively (Fischer, Hanke, & Sibley, 2012).

A second pattern has been between low socio-economic development and more conservative ideological attitudes. Onraet, Van Hiel, and Cornelis (2013) found powerful correlations for 91 countries between adverse socio-economic indicators (higher inflation, unemployment, homicide rate, and lower gross national product and life expectancy) with higher socio-cultural and economic-hierarchical conservatism ($r = .71$ and $.79$ respectively). Fischer et al. (2012) found a similarly strong correlation between lower gross national income and higher SDO ($r = -.59$) over 27 different countries, and similar effects have been reported in other studies (e.g., Welzel, 2013). Researchers have assumed that this effect is broadly driven by the experience of social and personal insecurity, instability, and threat (e.g., Onraet et al., 2013; Welzel, 2013).

Threat, Conservatism, and Authoritarianism

Most early theorists had seen threat as a major cause of conservatism and authoritarianism (e.g., Adorno et al., 1950; Wilson, 1973). Jost et al.'s (2003) influential meta-analysis found that Political Conservatism was consistently and often strongly correlated with heightened perceptions or experiences of social, political, economic and personal threats. A later review by Hibbing, Smith, and Alford (2014) argued that conservatives were higher on psychological and physiological reactivity to threatening stimuli of all kinds and were therefore characterized by a generalized negativity bias.

Critics, however, have noted that conservatives were no different from liberals in negative affectivity, anxiety, neuroticism, self-esteem, and fear of death, and were higher in well being and optimism (e.g., Feldman & Huddy, 2014). In addition, new and more comprehensive research failed

to replicate earlier findings that conservatives were higher in physiological reactivity to threat (Bakker, Schumacher, Gothreau., & Arceneaux, 2020; Osmundsen, Hendry, Laustsen, Smith, & Petersen, in press).

A second more extensive meta-analysis by Jost and colleagues (Jost, Stern, Rule, & Sterling, 2017) reported much weaker, and sometimes nonsignificant, effects than found in the earlier meta-analysis. In discussing their weaker effects, they noted new findings indicating that that liberals and conservatives differed in reactivity to different kinds of threats (Fig. 5, pp. 344-5). Two subsequent studies that used more comprehensive taxonomies of perceived threats over many samples found no overall differences between liberals and conservatives in threat perception, but differences in the kinds of threats they perceived (Clifton, 2020; Kahn, Björklund, & Hirschberger, 2020). Liberals emphasized threats of omission (failure to make needed social changes) while conservatives emphasized threats of commission (harms from disruptive social changes).

There is also evidence that threats are differentially related to different ideological dimensions. Thus, correlational, longitudinal, and experimental studies have shown that threats to social and personal safety and security predict social conservatism or RWA but not economic conservatism or SDO (e.g., Choma & Hodson, 2017; Duckitt & Fisher, 2003; Jugert & Duckitt, 2009; Nagoshi, Terrell, Nagoshi, 2007). SDO on the other hand, as proposed by the DPM model, would be predicted by competitive threats over relative dominance and superiority arising from disruptive social changes to the social hierarchy of status and power (Duckitt & Sibley, 2017). Thus, correlational and longitudinal research has shown that a perception of the social world as dangerous predicted RWA but not SDO, while a perception of the social world as a ruthlessly competitive jungle predicted SDO but not RWA (Perry, Sibley, & Duckitt, 2013; Sibley & Duckitt, 2013).

According to the DPM model, threats affect RWA and SDO through changing peoples' worldview perceptions, and this has been demonstrated experimentally (Duckitt & Fisher, 2003;

Jugert & Duckitt, 2009). However, these social worldview beliefs (belief in a dangerous or competitive world) once established form relatively stable and partly dispositional interpretive lenses that determine how people interpret social experiences (as threatening or competitive, or not) and so can moderate the effect of social and personal experiences on ideological attitudes. For example, some threats (e.g., minor, symbolic) may have no effect on liberals (for whom the social world is safe and stable) but shift conservatives (who are more ready to see threat) towards more authoritarian reactions (cf. Feldman & Stenner's, 1997, "authoritarian reaction"). Other threats (e.g., more serious, realistic threats) may have a greater "conservative shift" on liberals (by dramatically violating their view of the world as safe and secure) than on conservatives (who already see the world as dangerous and threatening) (cf. Hetherington & Suhay, 2011).

Overall, therefore, both ideological right and left seem associated with threat, but of different kinds, with the left more sensitive to threats perceived as necessitating social change, and the right to threats resulting from disruptive social changes. Moreover, on the right disruptive social changes that threaten personal and collective security are associated with RWA, and competitive threats of change to the social hierarchy with SDO. These effects seem mediated via social worldview perceptions which can also moderate their effects. And finally, it has also been shown that the presence of threat can also weaken or even eliminate the effects of personality, cognitive factors, and values on ideological attitudes (Bakker, 2017; Boer & Fischer, 2013).

Conclusions: Assumed Antecedents of Authoritarianism

Overall, although evidence of causality is often tentative, research does suggest a reasonably clear pattern. There are strong genetic influences, though more so for RWA than SDO. Dispositional factors, which may mediate genetic as well as environmental influences, show clearly differential effects with particular traits, values, motives, and threat related social worldview perceptions associated with RWA and others with SDO. New findings indicate that the effects for cognitive factors seem weaker than previously assumed and associated with RWA (and social

conservatism) rather than SDO (and economic conservatism). Social and societal influences have effects as strong as genes with important differential effects for RWA (aging, parenting, diversity experiences) and SDO (individuals' social positioning). And finally, threats of disruptive social changes seem a potentially major driver of authoritarianism, but again differentially so, with threats to safety and security related to RWA and competitive threats to the social hierarchy to SDO.

Assumed Consequences of Authoritarianism

Many assumed effects of authoritarianism have been investigated, and particularly the core issues identified by early theorists. These are anti-democratic attitudes, political intolerance, prejudice, ethnocentrism, political extremism, nationalism, militarism, and support for autocratic leadership.

Anti-democratic Attitudes and Political Intolerance

Altemeyer's (1996) found that his RWA scale correlated powerfully with how justified illegal, repressive actions by government officials were seen (illegal wiretaps and searches, denial of right to protest, and use of agent provocateurs), particularly when these targeted unconventional and therefore even right-wing groups. Many studies have replicated these findings by showing that RWA and SDO correlated with lower support for human rights, civil liberties, and democratic values (e.g., Cohrs, Kielmann, Maes, & Moschner, 2005; Crowson, 2009). There is also evidence, consistent with the DPM model, that the effects of RWA and SDO on civil liberties restrictions seem differentially motivated, with those for RWA associated with perceiving the social world as dangerous and threatening and the effects of SDO associated with perceiving the social world as a ruthlessly competitive jungle (e.g., Crowson, 2009; see also, Cohrs et al., 2005).

There is, however, evidence that the lower support on the political right for civil liberties and individual rights may not also hold for political intolerance and electoral democracy. Research reviewed by Brandt, Reyna, Chambers, Crawford, and Wetherell (2014) shows that conservative and liberals show equivalent levels of intolerance for threatening or opposing groups (see also, Stern

& Crawford, 2020). New research also indicates an important distinction between electoral or majoritarian democracy (decisions based on the will of the majority) and minoritarian or liberal democracy (civil liberties and minority rights) with RWA associated with support for majoritarian but not minoritarian democracy (Claasen, 2020; Šerek & Lomičova, 2020).

Overall, therefore, findings RWA, SDO, and political conservatism are associated with lower support for democratic values, and particularly civil liberties and individual rights, with the effects for RWA and SDO differentially motivated, but not with greater political intolerance or lower support for electoral or majoritarian democracy. These seemingly anomalous effects seem consistent with right (RWA, SDO, and conservatism) and left-wing ideologies being motivated to defend or change the social status quo respectively.

Authoritarian Leadership

Given its theoretical centrality, there has been relatively little research on authoritarianism and support for autocratic, dictatorial leadership. One indirectly relevant finding is that threatening social conditions (i.e., uncertainty, hardship, conflict, physical danger, low economic development) that predict greater authoritarianism also predict preferences for leaders who are more dominant, male, masculine, charismatic, strong, conservative, and physically intimidating in appearance (e.g., Lausten & Petersen, 2017; Russo, Roccato, & Mosso, 2019).

One set of studies has found that conservatism, RWA, and SDO were positively correlated with preference for dominant as opposed to nondominant leaders (using facial appearance, voice tone, or adjective ratings of dominance) but only the effect for SDO remained significant when all three predicted simultaneously (Laustsen, & Petersen, 2016, 2017). Another set of studies using a single item originally from the World Values Study (WVS) found that preference for “a strong leader who does not have to bother with parliament and elections” was positively correlated with conservatism but the effects for SDO and particularly RWA were stronger (Miller, 2017; Russo et

al., 2019) with only RWA significant when both RWA and conservatism were used as predictors (Russo et al., 2019).

Overall, therefore, right wing ideologies and threatening circumstances are both associated with preferences for more dominant, autocratic, and strong authoritarian leadership. However, the effects seem to be driven by RWA or SDO rather than conservatism, with SDO, rather than RWA, associated with preference for dominance in leaders, and RWA associated with strong leader authoritarianism.

Prejudice and Ethnocentrism

Research has shown that RWA and SDO powerfully and independently predict a broad ethnocentric pattern involving a generalized dislike of minorities, outgroups, and deviants as well as ingroup favoritism (Altemeyer, 1998; Pratto et al., 1994; Sibley & Duckitt, 2008). Research on the DPM model has shown that RWA and SDO have differential effects on prejudice reflecting their different motivational bases (see e.g., Duckitt & Sibley, 2017, pp. 202-211, for a recent review). RWA primarily predicts prejudice against groups seen as threatening personal and collective safety and security, while SDO primarily predicts prejudice against groups seen as challenging or threatening the social hierarchy of status and power. These effects are therefore differentially mediated with effects of RWA mediated by perceived outgroup threats to safety and security and those for SDO by perceived intergroup competitiveness over relative status and dominance. They are also differentially moderated with RWA being more predictive of prejudiced attitudes when threats to collective security are salient and SDO more predictive when competitive concerns over relative group dominance and superiority are salient.

Another implication of the DPM model is that authoritarianism of the right (RWA and SDO) does not predict prejudice against all outgroups, as the generalized prejudice thesis had suggested, but only against groups seen as potentially threatening the legitimacy of the traditional social order. Consistent with this, research recently reviewed by Brandt and Crawford (2019; see

also, Stern & Crawford, 2020) has shown that those on the political right were prejudiced against groups perceived as left-wing, and those on the political left equivalently prejudiced against groups perceived as right-wing with these effects mediated by perceived threat. This suggests, as Brandt and Crawford (2019) have proposed, that right wing prejudices arise from motives to preserve the status quo (i.e., with RWA pro-tradition and SDO pro-hierarchy) and left wing prejudices from motives to promote social change.

To conclude, right wing authoritarian attitudes seem to predict generalized prejudices not to all outgroups but to those perceived as threatening the legitimacy of the social order, with RWA predicting prejudice against groups threatening personal and collective safety and security and SDO groups threatening the social hierarchy of status and power.

Political Extremism, Nationalism, and Militarism

Research, meta-analyzed by Van Assche, Dhont, and Pettigrew, (2019) has shown that RWA and SDO were consistently strong predictors of support for far right and populist parties or candidates (with correlations around .40). Several studies have also reported effects consistent with the different motivational bases of RWA and SDO, with effects of RWA, and not SDO, on far right support mediated by perceived immigrant threat (Aichholzer, & Zandonella, 2016), and RWA being associated with support for traditionalist parties and SDO for libertarian parties (Van Assche, Van Hiel, Dhont, & Roets, 2019).

RWA and SDO have also both consistently predicted nationalism (belief in national superiority and dominance) (Altemeyer, 1996; Osborne, Milojev, & Sibley, 2017; Pratto et al., 1994), whereas effects for patriotism (affective attachment to ones' nation) have varied. RWA has consistently correlated positively with patriotism, whereas the correlations for SDO have only been positive for members of powerful, dominant social groups and nations (Osborne et al., 2017; Pratto et al., 1994; Sidanius, Feshbach, Levin, & Pratto, 1997).

Research has also shown that RWA and SDO predict support for the military, military action, war in general, and prisoner abuse in conflict situations (Crowson, 2009; Jackson & Gaertner, 2010; Pratto et al, 1994; Van Hiel et al., 2020). Moreover, these effects seem differentially motivated with the effect for RWA associated with perceived threat and that for SDO with competitiveness and a lack of concern for victims (Crowson (2009; Jackson and Gaertner, 2010).

Overall, therefore, findings show that RWA and SDO predict support for extreme right wing and populist parties and candidates, nationalist attitudes, support for the military, military action, war, intergroup conflict, and the use of torture in conflict situations with the effects across domains differentially motivated for RWA and SDO.

Conclusions: Assumed Consequences of Authoritarianism

Research indicates that RWA and SDO consistently predict the core outcomes proposed by early theorists such as anti-democratic attitudes, political intolerance, prejudice, ethnocentrism, nationalism, militarism, and support for extremist right wing political parties and candidates. The findings, however, also show that RWA and SDO predict these outcomes for different motives. And finally whereas existing research has focused almost entirely on authoritarianism of the right, new findings suggest that LWA may be as predictive of authoritarian phenomena on the left as RWA and SDO are for the right (Costello et al., 2020)

Authoritarianism: Conclusions and New Directions

Research on individual differences in authoritarianism has a long history, but there have been important new developments. These have underlined the need to conceptually clarify the construct to adequately differentiate authoritarianism on the right from conventional conservatism, as well as LWA from conventional liberalism. It is argued that authoritarianism can be viewed as a morally absolutist and intolerant desire for the coercive imposition of particular beliefs, values, way of life, and form

of social organization (radical traditionalism on the right and radical egalitarianism on the left) on people irrespective of their wishes and of any human costs involved.

There have also been important developments in research on the likely causes and consequences of authoritarianism. This suggests that authoritarianism is fundamentally rooted in motivation (rather than cognition) with the right motivated by support of traditional values and social organization and the left by changing them. The research, which has focused almost entirely on authoritarianism of the right, also indicates that two distinct dimensions, best captured by RWA and SDO, have different genetic, dispositional and situational origins. In addition, despite having broadly similar likely effects, they are differently motivated, in the case of RWA by concerns over personal and collective safety and security, and in the case of SDO by concerns over competitive threats to the social hierarchy of status and power. New research on LWA while still in its infancy also suggests that authoritarianism of right and left may be rooted in broadly similar personal characteristics and have similar effects on social behaviour and attitudes. Nevertheless there may also be important differences and such possibilities signal important new directions for research and theory.

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