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The Allure of Tyrannical Leaders: Moral Foundations, Belief in a Dangerous World, and Follower Gender

Agata Mirowska¹ · Raymond B. Chiu^{2,3} · Rick D. Hackett⁴

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Abstract

What explains followers' attraction to tyrannical leaders? They systematically coerce, belittle, and manipulate, often at the expense of subordinates' mental and physical well-being and their organization's long-term interests. To help address the question, we examine the tendencies of people who view the tyrannical leader prototype (characterized by domineering, pushy, manipulative, loud, conceited, and selfish traits) as a component of effective leadership (Epitropaki and Martin in J Appl Psychol 89:293–310, 2004; Foti et al. in Leadersh Q 23:702–717, 2012). Specifically, we apply moral and evolutionary psychology to propose and empirically test a mediation model in which belief in a dangerous world (Altemeyer in Enemies of freedom: understanding right-wing authoritarianism. Jossey-Bass, San Francisco, 1988) links positively with endorsement of the tyrannical leader traits, as mediated through the binding components (loyalty, authority, and sanctity) of moral foundations theory (Graham et al. J Pers Soc Psychol 101:366–385, 2011). Regarding gender, our model proposes that the link between the binding foundations and tyrannical leadership endorsement is stronger among males than females. Our overall model was supported across two independent samples of working adults; we also anticipated and found a direct *negative* association between the individualizing moral foundations (care and harm) and endorsement of the tyrannical prototype. These findings provide insights into the circumstances under which tyrannical traits are viewed as part of effective leadership.

Keywords Moral foundations theory \cdot Implicit leadership theory \cdot Tyrannical leader prototype \cdot Belief in a dangerous world \cdot Follower gender \cdot Destructive leadership

Introduction

What explains followers' attraction to a tyrannical leader? Tyrannical leaders systematically coerce, belittle, and manipulate their subordinates, often at the expense of their

Agata Mirowska Agata.mirowska@neoma-bs.fr

> Raymond B. Chiu rchiu@redeemer.ca

Rick D. Hackett hackett@mcmaster.ca

- ¹ NEOMA Business School, 1 rue de Maréchal Juin, Rouen, France
- ² Brock University, 1812 Sir Isaac Brock Way, St. Catharines, ON, Canada
- ³ Present Address: Redeemer University, 777 Garner Rd E., Ancaster, ON, Canada
- ⁴ McMaster University, 1280 Main St. W., Hamilton, ON, Canada

followers' mental and physical well-being and their organization's long-term interests (Thoroughgood et al., 2018). Foti et al. (2012) found that 33% of those in their study endorsed leader profiles higher in tyranny than the prototypical socially desirable leader profile consisting of sensitive, intelligent, and dedicated attributes. To advance the literatures concerning followership and leadership, a better understanding is required concerning how and why some people endorse the tyrannical leader prototype (Epitropaki & Martin, 2004). Research of this kind has been called for (Ashforth, 1994), but has not been pursued; nonetheless, the issue is a crucial one given repeated historical experiences with organizations and societies that have welcomed tyrants with open arms despite their obvious dysfunctions (Sullivan, 2016).

One of the ways the attraction to tyranny has been addressed in the literature is through implicit leadership theory (ILT; Lord & Maher, 1991; Lord et al., 2020). Specifically, ILT-tyranny (defined by domineering, pushy, manipulative, loud, conceited, and selfish traits) is one of six collections of attributes people use to characterize business leaders (Epitropaki & Martin, 2004). According to ILT, these collections of traits (i.e., leader prototypes) are sets of simplified expectations people have for their leaders, somewhat irrespective of the extent to which they contribute to effectiveness. Notably, there has been much theorizing, but little empirical work, concerning individual-level characteristics associated with the endorsement of various leader prototypes, including tyranny (Epitropaki et al., 2013; Walker et al., 2020). Hence, our follower-centered investigation addresses this gap by examining the extent to which moral and evolutionary mechanisms, along with gender, are associated with the tendency to view ILT-tyranny as a component of effective leadership. Specifically, as detailed below in Fig. 1, we propose and evaluate a model in which (1) belief in a dangerous world (BDW; Altemeyer, 1988), (2) the binding foundations of moral foundations theory (MFT; Graham et al., 2011; Haidt, 2012), and (3) follower gender are each implicated in the tendency to view ILT-tyranny as part of effective leadership.

Our model draws from social and moral perspectives related to evolutionary psychology (Haidt, 2008), along with contemporary leadership research, to propose that BDW (Altemeyer, 1988) is indirectly and positively linked with ILT-tyranny, and this relationship is mediated by the binding foundations of MFT (i.e., loyalty, authority, and sanctity; Graham et al., 2011; Haidt, 2012). That is, we position BDW as an underlying motivator of groupfocused (binding) moral intuitions, wherein respect for authority, loyalty to an in-group, and vigilance against degradation lead to the belief that an authoritative leader, with their presumed willingness to dominate, intimidate, and manipulate, will be instrumental to protecting oneself and the group against perceived dangers such as tribal competition, disorder, or contamination (Graham et al., 2013a). In contrast, BDW is not viewed as a source of motivation for the moral intuitions reflected by the individualizing foundations (comprised of fairness and care) as these are grounded in the development of reactions to harmful interpersonal experiences (Graham et al., 2009,

Fig. 1 Hypothesized moderated mediation model. Dashed line represents a non-hypothesized relationship. Covariance relationship between anteced-ents BDW and individualizing foundations was allowed but not shown

2013a). Also, as "core values" (Napier & Luguri, 2013), the individualizing foundations function as a default, whereas the perception of danger has the potential to *increase* the relevance of the binding foundations as group protection grows in importance. We expect the tyrannical traits to be less attractive to those high on the individualizing foundations given that such people would be sensitive to leaders who override their individual well-being and needs, in an aggressive and self-interested way, to achieve dominance over others (Süssenbach et al., 2018; Van Vugt et al., 2008).

Finally, gender is anticipated to moderate the positive association between the binding foundations and endorsement of the tyrannical leader prototype in that the relationship should be stronger for males. Also in terms of gender, we expect the negative association between the individualizing foundations of MFT (care and fairness; Graham et al., 2011; Haidt, 2012) and endorsement of the tyrannical prototype to be stronger among females. As we will detail, this is premised on the tendency of females to hold leader prototypes characterized as communal, sensitive, and caring (Baumeister & Sommer, 1997; Hackett et al., 2018) in comparison to more masculine, agentic, and dominant leader prototypes that typically appeal to males. Essentially, we believe that women who strongly endorse the individualizing foundations will be less willing than men to compromise those intuitions by endorsing tyrannical leadership traits.

Our bridging of the ILT, MFT, and BDW literatures has the potential to explain why some people view tyrannical leadership as effective even though these traits are associated with the harsh treatment of subordinates and can adversely impact organizations (Epitropaki & Martin, 2005; Foti et al., 1982; Lord et al., 1984; Porr & Fields, 2006). This is an important issue, as followers inclined toward ILT-tyranny may eventually enable tyranny in their organizations and, more broadly, in their societies (Thoroughgood et al., 2018). Support for our model would provide an evidence-based foundation for recommendations that could prevent or counteract these effects.



Theoretical Background

Tyrannical Leadership

Early research concerning tyrannical leadership was conducted by Ashforth (1994, 1997) using the construct of "petty tyranny," characterized by behaviors such as selfaggrandizement, belittling subordinates, lack of consideration, forcing conflict resolution, discouraging initiative, and non-contingent punishment, and described as arbitrary, abusive, and destructive. He defined a tyrannical leader as "someone who uses their power and authority oppressively, capriciously, and perhaps vindictively" (Ashforth, 1997, p. 126). Einarsen et al. (2007) characterized tyrannical leadership as one of three types of destructive leadership defined broadly as "the systematic and repeated behavior by a leader, supervisor, or manager that violates the legitimate interest of the organization by undermining and/or sabotaging the organization's goals, tasks, resources, and effectiveness and/or the motivation, well-being, or job satisfaction of his/her subordinates." While their model situates tyrannical behaviors as potentially helpful in driving employees to achieve short-term organizational goals (i.e., anti-subordinate, but pro-organizational), Itzkovich et al. (2020) argue that organizations are eventually harmed when employees' well-being suffers and they become demoralized or retaliatory as a result of ongoing harsh treatment.

In all, there is widespread agreement that tyrannical leadership be included among the destructive forms of leadership (e.g., Hauge et al., 2007; Itzkovich et al., 2020; Krasikova et al., 2013; Mackey et al., 2020; Schyns & Schilling, 2013; Thoroughgood et al., 2018) given its overall negative impact on personal and organizational outcomes (e.g., Aasland et al., 2009; Bies & Tripp, 1998; Hauge et al., 2007; Mackey et al., 2020; Mitchell & Ambrose, 2007; Schyns & Schilling, 2013; Tepper, 2007; Wu et al., 2018). Considering the various forms of destructive leadership, our focus is on ILT-tyrannical. As we noted at the outset, it is one of the six well-established ILT prototypes people associate with business leaders (Epitropaki & Martin, 2004).

Implicit Leadership Theories

Leadership is a process whereby intentional influence is exerted by one person over others to guide, structure, and facilitate activities and relationships in a group and organization (Yukl, 2006). Without followership there is no leadership; that is, the perception by the follower that another person is a leader is a prerequisite to leadership. Follower perceptions are governed by social-cognitive processes that enable people to make sense of their environment, simplify how work environments are perceived, and reduce the demands on cognitive processing (e.g., Lord et al., 2020). One such simplifying mechanism involves using leader prototypes (e.g., Epitropaki & Martin, 2004), that is, cognitive structures that followers use to guide the processing of leader attributes and to make inferences about the likely associated behaviors and outcomes (Lord et al., 2020). These prototypes reflect implicit ideas followers hold about the nature of (in)effective leadership. Thus, according to ILT, the emergence of leadership is a subjective process involving prototype matching between a prospective leader's attributes and those perceived by a prospective follower as exemplary of leadership (Lord et al., 1986). Leader prototypes facilitate intuitive, quickly formed impressions of leaders. Once a prototype-based determination is made, it limits the type of leader behavior that is subsequently attended to and recalled. In all, the ILT perspective is a follower-centered view in that the definition of leadership is held in the follower's mind (Junker & van Dick, 2014).

ILT-related empirical research supports the view that followers' implicit characterizations of leadership can be captured by six prototypes (Epitropaki & Martin, 2004). As noted earlier, one of these is ILT-tyranny, defined by domineering, pushy, manipulative, loud, conceited, and selfish traits. There has been little research concerning the antecedents of ILT-related prototypes (Epitropaki et al., 2013; Lord et al., 2020; Shen, 2019), but they are thought to be tied to one's early socialization and life experiences (Lord et al., 2020) in which perceptions of the attributes that various leaders share give rise to categories that are ultimately used to distinguish among leaders and non-leaders. Thus, for example, the development and preference for ILT-tyranny may be fostered when followers become familiar with this leadership approach through culturally reinforced norms and displays of authority by parents and teachers (Lord & Maher, 1991). Consistent with this view, Keller (1999) found that college students who described their parents as manipulative, domineering, and power hungry were more likely to consider tyrannical characteristics as reflective of ideal leadership. Longitudinal research has also shown that adolescents who reported high levels of family conflict were more likely to endorse the tyrannical prototype in their thirties (Walker et al., 2020). The impact of early socialization on the formation of ILTs has largely been accounted for using social learning theory (Bandura & Walters, 1977), as parents can be strong role models of leadership given their authority over their children (Popper & Mayseless, 2003).

Table 1 Moral foundations theory

Moral foundation	Description	Basis of morality	Evolutionary challenge addressed
Individualizing fou	undations		
Care	Sensitivity to suffering and need; desire to protect and care for vulnerable	Autonomy	Need to care for vulnerable children to propagate species
Fairness	Preference for reciprocal altruism, values of equal- ity and individual rights; desire to punish cheaters	Autonomy	How to obtain benefits of cooperation without exploitation
Binding foundation	ns		
Loyalty	Value sacrifice for and loyalty to the group, punish disloyalty or betrayal	Community	How to create and maintain coalition
Authority	Respect for hierarchy, acceptance of benefits for those higher in hierarchy, but also expectation of help/protection for those lower	Community	How to create and maintain stability through social roles
Sanctity	Includes behavioral immune system; aversion or even disgust to things considered unnatural or "wrong," even if no clear victim exists	Divinity	How to avoid biological pathogens and parasites

Adapted from Haidt (2012)

Moral Foundations Theory

MFT (e.g., Graham et al., 2011; Haidt, 2012) posits that humans, at birth, are equipped with five moral intuitions care, fairness, loyalty, authority, and sanctity (see Table 1 for descriptions). Each type of intuition is tied to evolutionary challenges faced by humans over history, and together they serve as canvases on which groups form values and priorities that in turn help form the basis for moral judgments. Although MFT holds that we are all predisposed to the same five moral dimensions, there are individual differences in the weight put on each one. From an evolutionary perspective, the weight assigned to each foundation varies as a function of social virtues that are transmitted intergenerationally as shaped by social and cultural experiences in response to challenges faced by the community (Haidt, 2012; Haidt & Graham, 2007).

Using McAdams' three-level model of personality (McAdams & Pals, 2006), Graham et al. (2013a) explain that the moral foundations function at the middle level of "characteristic adaptations": moral strivings in reaction to the challenges experienced as one grows up in a particular cultural context. Hence the moral foundations are sandwiched between lower-level decontextualized "dispositional traits" and higher-level "integrative life stories" that may involve political ideologies and cultural stereotypes. Graham et al. (2013a) also comment that moral foundations, being based on a "first draft of the moral mind" (p. 79), can only be accessed *indirectly* (i.e., by measuring explicit moral beliefs), which is why they are consistently described as *intuitive and innate* and not equivalent to explicit beliefs, values, or ideologies (Haidt & Joseph, 2004).

Research concerning the dimensionality of the moral foundations has revealed two higher-order moral constructs,

each with a distinct grounding (Graham et al., 2009, 2011). One consists of the binding foundations of loyalty, authority, and sanctity. The commonality among them is the importance assigned to the ethics of community and divinity (Shweder et al., 1997), which strengthen the ties individuals have to groups and institutions (Graham et al., 2011). Their importance is especially evident outside of western, educated, industrialized, rich, and democratic (WEIRD) societies (Clark et al., 2017; Haidt, 2012). Strong endorsement of the binding foundations reflects an emphasis on the group as the moral focus, putting the protection and survival of the collective above that of any individual. The second higherorder construct consists of the individualizing foundations, care and fairness. Their commonality is grounded in the importance of the ethic of autonomy (Shweder et al., 1997), which is more evident in WEIRD, relative to non-WEIRD, societies (Clark et al., 2017; Haidt, 2012). Endorsement of the individualizing foundations reflects an emphasis on the importance of preventing suffering and betrayal where compassion and reciprocity in interpersonal relationships are the moral focus (Haidt, 2012; Haidt & Graham, 2007).

Belief in a Dangerous World

Thus far, the theory underlying moral foundations and implicit leadership presumes that the mechanisms involved are intuitive and implicit (i.e., automatic, heuristic) in nature (Graham et al., 2013a; Lord & Maher, 1991). In particular, the binding foundations and the tyrannical leader prototype exist in response to perceived external or societal dangers. On the one hand, the binding foundations delineate the moral basis for the integrity of various institutions and hierarchies within a community, and such structures in turn provide protection from aggression and contamination from outside groups, especially in times of conflict (Haidt & Graham, 2007; Shweder et al., 1997). On the other hand, dominant forms of leadership address very real problems with coordination and conflict due to threats from scarce resources, rival groups, and adaptation challenges (Van Vugt, 2006). Relatedly, the accumulation of excess resources, such as those found in agriculturally based societies over recent human history, makes way for greater stakes in the rise of shrewd, forceful, and selfish leaders (Betzig, 1993; Diamond, 1999; Johnson & Earle, 2006), where aggressive warrior-class leaders are favored because they are seen as most capable of protecting communities in times of intergroup conflict (Van Vugt et al., 2008).

Of particular interest to our study is the extent to which BDW can account for the endorsement of tyrannical leader traits via evolutionary mechanisms comparable to MFT. Altemeyer's (1988) BDW construct captures individual differences in peoples' beliefs that the world is dangerous, unpredictable, and threatening. It was originally designed as an attitudinal measure to explore how rightwing authoritarians develop their hostility toward other people, arising from Altemeyer's observations of the ways that parents socialize children regarding threats and danger from people considered delinquent, violent, and distasteful. Comparable to MFT, perceptions of the world as a dangerous place are rooted in early-lived experiences and intergenerational socialization, such that BDW becomes a generally stable variable on which individuals can be differentiated. More specifically, an individual's baseline BDW is not incidental or idiosyncratic, but rather a stable source of individual differences (Cook et al., 2018). Moving on from its original focus, use of the BDW scale has since been expanded to investigate prejudice toward various groups (Cook et al., 2018; Duckitt, 2001; Duckitt et al., 2002), conservative political views (Jost et al., 2003, 2004), and opinions about specific issues such as military aggression (Crowson, 2009). As noted by others, BDW offers a coherent explanation for the formation of binding moral foundations (Van Leeuwen & Park, 2009; Wright & Baril, 2013), thereby providing the basis for proposing that the binding foundations mediate the BDW to ILTtyranny relationship (Tate, 2015). Relatedly, Wright and Baril (2011) argue that moral and ideological orientations (as could be reflected by MFT and ILT) are a form of "motivated social cognition" (Jost et al., 2003) in which humans are driven by their conditions (as may be indicated by BDW) to take up certain beliefs in order to achieve the outcomes that will satisfy their psychological and social needs (such as stability, self-esteem, or security). Hence, moral foundations are the outworking of ongoing concerns that people perceive about their social environment.

Model Development

Belief in a Dangerous World and Binding Foundations

We contend that there is a direct positive association between BDW and endorsement of the binding foundations. From the perspective of evolutionary psychology, the need for protection from external threats is satisfied in part by building group loyalty, respecting those in authority, and maintaining bodily and spiritual purity (which generalizes to shielding one's group from others who are perceived as different, including those differentiated by ethnicity, skin color, religion, or political ideology; Haidt, 2012). For example, Wright and Baril (2013) found that students higher in BDW were more likely to assign importance to the binding functions, and that conservatives scored higher in BDW than liberals. In finding BDW positively related to endorsing the binding foundations, van Leeuwen and Park (2009) concluded that an increased tendency to perceive dangers (or sensitivity to threat more generally) fosters a heightened emphasis on the loyalty, authority, and sanctity (i.e., the binding) foundations because of the protective function that these foundations support. This relationship is shown in Fig. 1:

Hypothesis 1 (H1) Belief in a dangerous world will associate positively with endorsing the binding moral foundations.

Binding Foundations and Tyrannical Leadership

As a source of *moral* intuition (Süssenbach et al., 2018), the binding foundations provide a basis for judgments concerning what is "right" or "wrong" concerning leadership qualities, in a manner similar to their influence on political attitudes (e.g., Van Leeuwen & Park, 2009). Specifically, we expect those who especially value the binding foundations to be more likely to see the tyrannical traits as part of effective leadership that is useful for strengthening group bonds. That is, such traits are likely to be seen as functional in preserving social order, coordinating scarce resources, and suppressing within-group subversion (Haidt, 2012; Mooijman et al., 2017). For example, a leader who is domineering and pushy may be seen as someone who will not easily back down or be intimidated in negotiation situations; similarly, a leader known for manipulative traits may be seen as someone who is unafraid to engage in questionable tactics to achieve groupprotective ends. In essence, the tyrannical traits exhibited by the leader are signals that are congruent with the ends to be achieved. Simultaneously, the emphasis placed on *group* outcomes mitigates the potential unpleasantness of one-on-one interactions with those who exhibit tyrannical traits.

Those who exhibit higher binding intuitions should also be more inclined to expect and accept submissive, unquestioning follower roles and to remain loyal, even in the face of personal neglect, exploitation, and abuse. van Leeuwen and Park (2009) reasoned that, as MFT characterizes the basic moral psychology of humans, moral intuitions are causally prior to political attitudes (i.e., about social structures considered right or wrong). Similarly, and as shown in Fig. 1, we position the binding moral foundations prior to ILT-tyranny in our model, such that moral intuitions precede the judgment of tyrannical traits as effective ("right" vs. "wrong") leadership.

Hypothesis 2 (H2) The endorsement of binding foundations will associate positively with endorsement of ILT-tyranny as effective leadership.

Belief in a Dangerous World, Tyrannical Leadership, and the Binding Foundations

As noted previously, affinity for domineering leader characteristics has evolutionary roots, linked to an adaptive psychological system purposed to provide protection and coordination, and triggered by the perception of pervasive or widespread dangers (Bastardoz & Van Vugt, 2019). We argue that BDW is rooted in socialization processes and experiences in society that underlie the development of binding moral foundations (authority, loyalty, and sanctity). In response to dangers, followers develop moral intuitions that strengthen and enforce the priorities that serve to protect the group from outside threats. Such moral foundations are passed down intergenerationally, such that dominant types of leaders become preferred because followers perceive them to best preserve and embody the collectively focused binding foundations. Subsequently, such followers are willing to subjugate their individual autonomy to the leader as an expression of loyalty to the well-being of the group and respect for the group's hierarchical authority (Walker et al., 2020), comparable to the mechanisms reflected in the mediation of the path from BDW to conservative beliefs by the binding moral foundations in van Leeuwen and Park (2009). Our thinking is grounded in evolutionary psychology linking perceived dangers and threats in society to moral intuitions, and such intuitions to the appeal of a certain type of leader who is perceived as offering protection of the in-group. That is, for people high in BDW, the binding foundations will be especially prominent, making it more likely that they will endorse the tyrannical leader prototype:

Hypothesis 3 (H3) The binding foundations will mediate the positive association between BDW and endorsement of ILT-tyranny as effective leadership.

Individualizing Foundations and Tyrannical Leadership

The individualizing moral foundations, consisting of care and fairness, are fundamental components of the "moral mind" (Haidt & Graham, 2007; Haidt, 2012); as with the three binding foundations they reflect evolutionary adaptations to human challenges (Graham et al., 2013a). Based on the extensive theory behind the common origins of the moral foundations (Graham et al., 2013a), all five are often investigated in studies of first-order relationships with outcomes (e.g., Egorov et al., 2019; Napier & Luguri, 2013; Niemi & Young, 2013; Tilburt et al., 2013). The two higher-order foundations are also expected to uniquely predict outcomes (Wang et al., 2018). Even so, the binding and individualizing foundations also have overlapping variance, such that it is the excess of the binding over individualizing foundation ratings that predicts group-focused concerns (Van Leeuwen & Park, 2009). Therefore, it is important to include both higher-order foundations in our model to properly reflect the (non-directional) covariance associated with the common and opposing effects of each variable with respect to the endorsement of ILT-tyrannical.

The individualizing foundations are based in the universal human concern for well-functioning close relationships (Graham et al., 2013a, p. 201). The associated intuitions arose in direct response to the vulnerabilities and inequalities imposed on loved ones by the hierarchy and dominance that occurs in social groups (Haidt & Joseph, 2004). Notably, the individualizing foundations run counter to the prototypical tyrannical leader who achieves group and personal interests by subjugating, manipulating, and controlling followers (Van Vugt et al., 2008) at the cost of the followers' physical and mental well-being. As such, these foundations are more likely to be associated with the desire for a leader who is sympathetic to the suffering and unfairness experienced by followers, as opposed to the overbearing, self-interested tyrannical traits that lack concern for individual harms. Accordingly, as shown in Fig. 1,

Hypothesis 4 (H4) The individualizing foundations will associate negatively with the endorsement of ILT-tyranny as effective leadership.

The Moderating Role of Gender

We anticipate that gender will moderate associations between the moral foundations and endorsement of the tyrannical leader prototype, such that the endorsement will be stronger for men than for women. From an evolutionary psychology perspective, men have had more to gain by competing physically for high-status leadership roles, including greater access to resources and sexual mates (Betzig, 2012). These competitions arose in contexts that prized aggressive and dominant approaches to leadership, particularly ones that posed dangers because of intergroup conflict, exploration, or food insecurity (Bastardoz & Van Vugt, 2019). Relatedly, leadership has been linked strongly to success with hunting and coordinating raids with other men as followers (von Rueden et al., 2018), for which dominant forms of leadership requiring loyalty to leader and "tribe," and sacrifice of autonomy to interests of the collective, are advantageous. The binding foundations would especially come into play for males as the loyal adherence to authority and the sanctity of group rituals could contribute to the success of these activities and, by extension, the perceived effectiveness of the leader. Hence, it is not surprising that hierarchy tends to play a greater role in relationships involving men, whereas for women, leader-follower interactions tend to be more egalitarian and consensus-based (Benenson & Markovits, 2014).

Evidence of gender-based differences in the preference for various leader prototypes is also found in contemporary leadership research as driven by socialization experiences and culture (Ayman, 1993; Schein, 2007). For example, across samples of mid-level managers from 27 countries, women, relative to men, preferred participative, team-oriented, and charismatic leader prototype dimensions; women also considered self-protective leader behaviors (e.g., status conscious, self-centered, competitive) as stronger inhibitors to outstanding leadership (Paris et al., 2009). These findings were magnified in gender-egalitarian societies (such as the North American-based samples we used). Tyrannical characteristics and behaviors are also viewed as masculine rather than feminine (Jonason & Davis, 2018; Powell & Butterfield, 2017). Additionally, Walker et al. (2020) found men were more likely than women to endorse the tyrannical traits, noting that stereotypical masculinity emphasizes agentic traits (e.g., aggression), whereas stereotypical femininity emphasizes communal traits (e.g., "tender"; see also Johnson et al., 2008 p. 39). Thus, we anticipate (see Fig. 1) that the association between the binding foundations and ILT-tyranny (i.e., Hypothesis 2) will be moderated by gender:

Hypothesis 5 (H5) The positive association between the binding foundations and the endorsement of ILT-tyranny will be stronger for men than for women.

Gender should also moderate the negative ties between the individualizing foundations and endorsement of the tyrannical traits, with a stronger effect among women than men. Based on evolutionary psychology, women historically have played more communal (e.g., caregiving) roles than men (Rosette & Tost, 2010), and are more likely to view their role as caregiver (Hagedoorn et al., 2002). Accordingly, women, relative to men, are more likely to see a compassionate leader as enabling them to fulfill these roles. As noted earlier, there is a preference among women for less hierarchical, more egalitarian, consensus-based leader-follower interactions (Benenson & Markovits, 2014). Women seek social belongingness by building and maintaining close dyadic social relationships (Baumeister & Sommer, 1997; Hackett et al., 2018; Melnyk et al., 2009) that require caring and fairness. Finally, the tyrannical traits may be especially undesirable for women because, relative to men, they tend to experience a greater fear of coming to the attention of authority figures in general (May et al., 2010). To the extent that the authority figure is tyrannical and prone to conformist values, women's fear of the probability of being minimalized or even criminalized increases (Harms et al., 2018). Thus, women should be especially sensitive to the potential violations of the individualizing foundations by tyrannical leaders. As shown in Fig. 1,

Hypothesis 6 (H6) The negative association between individualizing foundations and the endorsement of ILT-tyranny will be stronger for women than for men

Method

Procedure and Participants

Two studies of adult populations were undertaken to investigate our model.

Study 1

Our first sample was comprised of adults residing in the U.S. with an undergraduate degree (or higher), who were at least 32 years of age. They were recruited using the Prolific crowdsourcing platform, a portal created by academics and dedicated solely to academic research. It requires ethical rewards above a minimum 5 British pound sterling per hour (Gleibs, 2017). Relative to other online participant recruitment platforms, Prolific respondents tend to be more diverse and honest, and the overall quality of the data is higher (Peer et al., 2017). The survey was completed online using the Qualtrics survey platform; participants were compensated \pounds 1.15 (about USD \$1.52). Given a mean completion time of just under 13 min, the average hourly reward was \pounds 5.31 (USD \$7.02).

The quality of the responses collected was assessed both by examining their consistency when reverse-coded items were involved and by examining the attention-check items embedded in the moral foundations questionnaire (MFQ; Graham et al., 2013b). To elaborate, we identified seven dyads of items from two scales in the survey (BDW and the Core Self Evaluation Scale, Judge et al., 2003, for which data were collected but not used in this analysis), where each dyad consisted of one reverse-coded item and both items measured a very similar attitude or idea. For each dyad, we flagged any respondents where the responses to the two items exceeded two scale points, assigning one point per problematic dyad. Also flagged with one point each were highly illogical responses on two MFQ attention-check items (Wright & Baril, 2011). Finally, any participant that took either fewer than five minutes (the minimum time needed to read all items) or more than 90 min (indicating the survey was left unattended) to complete the questionnaire was given a final point. The points were then summed to form a concern index; those with eight or more points were removed from the data set. This concern index value was determined based on an earlier data set (not reported here) in which eight reflected a natural breakpoint in the data. To maintain consistency and objectivity among our analyses, we decided to adopt the same cut-off point in any subsequent examinations of these same variables.

Of the 410 respondents, eight were removed based on the concern index, resulting in a final sample of 402; 51% were women, the average age was 42.9 years (SD=9.2), and 7% reported a non-WEIRD country as their place of birth; 65.2% were full-time employed, 14.7% were working part-time, while the remainder were either unemployed or not engaged in paid work (e.g., homemaker, retired, or disabled). As for education level, 64.4% reported their highest educational attainment as an undergraduate degree, 29.4% a master's degree, and the remainder a doctoral degree.

Study 2

In our follow-up investigation, the replicability of the relationships from the first study was assessed and a control variable was added; also, a larger sample with greater variance in education was obtained. Participants consisted of 751 full-time working adults living in North America. As in Study 1, they were recruited using Prolific and the survey was completed online using Qualtrics. Compensation was £1.70 (approximately USD \$2.10); as the average completion time was 15.6 min, the average hourly rate amounted to £6.54 (approximately USD \$8.08). Six respondents were removed based on the rules associated with the concern index as described in Study 1, for a final sample of 745; 50% were women, the average age was 40.2 years (SD = 9.0); and 7.5% reported a non-WEIRD country as their birthplace. In terms of the highest level of education completed, 8.6% reported a high school diploma, 12.2% completed a technical/community college degree, while 40.3%, 29.3%, and 8.6% of respondents held undergraduate, master's, and doctoral degrees, respectively.

Measures and Analyses

ILT-tyranny

Endorsement of the tyrannical leader prototype was measured using the implicit leadership questionnaire (ILQ; Epitropaki & Martin, 2004); this prototype is defined by six adjectives (i.e., domineering, pushy, manipulative, loud, conceited, and selfish). Although the popular meaning of some adjectives may have changed over time, the essence of the tyrannical prototype is stable (Offermann & Coats, 2018). Whereas the ILQ asks followers to indicate the extent to which each adjective is characteristic of business leaders, our participants were asked to rate the extent to which they believe that each adjective is characteristic of an *effective* business leader (1 = not at all characteristic, 9 = extremely characteristic; Study 1, α =0.93; Study 2, α =0.89). As such, respondents indicated the degree to which they view the tyrannical traits as desirable leadership qualities.

Moral Foundations

We assessed the five moral foundations using Graham et al.'s (2013b) 32-item moral foundations questionnaire (MFQ); it consists of two parts, each containing 16 questions, three per moral foundation and one attention-check item. The first part asks respondents to rate the relevance of a variety of statements when making judgments of right or wrong concerning a particular behavior (e.g., for care, "Whether or not someone suffered emotionally"; 0 = not at all relevant, 5 = extremely relevant). The second part asks followers to report their agreement with various statements (e.g., for loyalty, "It's more important to be a team player than to express oneself"; 0=strongly disagree, 5=strongly agree). Scores were averaged across the relevant items for each of the five moral foundations. Following other empirical work (Clark et al., 2017; Malka et al., 2016; Van Leeuwen & Park, 2009; Wright & Baril, 2011), these measures were then aggregated to form the higher-order individualizing (care, fairness; Study 1, $\alpha = 0.78$; Study 2, $\alpha = 0.79$) and binding (authority, loyalty, sanctity; Study 1, $\alpha = 0.91$; Study 2, $\alpha = 0.91$) foundation scores.

Belief in a Dangerous World

Altemeyer's (1988) 12-item scale was used to measure belief in a dangerous world (1 = strongly disagree to 5 = strongly agree); for example, "Our country is *not* falling apart or rotting from within"; reverse scored (emphasis in the original; Study 1, α = 0.90; Study 2, α = 0.91). Participants reported their country of birth, age (in years), and gender $(0 = \text{man}, 1 = \text{woman}, \text{with an option to state that they did not identify with either gender; no one chose this option), as provided by the Prolific platform.$

Control Variables

Given that research concerning the hypothesized relationships is lacking, the use of control variables was treated with caution, as using them when their role is unknown may inadvertently remove the effects of interest (Spector & Brannick, 2011; Spector et al., 2000). As such, we conducted our primary analysis without controls so that the targeted relationships were tested in the manner hypothesized (Spector & Brannick, 2011).

Analyses

IBM SPSS Statistics and Amos 26 were used to compute descriptive statistics, run PROCESS, and conduct confirmatory factor analyses (CFA; Arbuckle, 2019). The Hayes (2018) PROCESS macro (Models 6 and 88) was used to test the hypotheses; it allows direct and indirect paths to be analyzed simultaneously using a bootstrapping methodology. This has advantages over the stepwise Sobel test that assumes a normal distribution for the indirect effect, which is typically not an appropriate assumption for smaller samples (Hayes, 2018).

Results

Construct Validity

Prior research concerning the leadership implications of MFT has focused on the degree of correspondence between leader and follower moral profiles (Egorov et al., 2019; Fehr et al., 2015). In contrast, our investigation focuses on the

Table 2Descriptive statisticsand correlations for Study 1

influence of evolutionary mechanisms as represented by
the focal constructs, and, given their connected origins, it
is worthwhile to examine their distinctiveness. CFA was
used to compare a four-factor model in which each focal
construct is distinct (i.e., BDW, ILT-tyranny, and the two
MFQ dimensions) to nested models with one, two, and
three factors. When the initial analysis failed to converge,
the factor loadings involving the higher-order individual-
izing foundations and its first-order factors (care, fairness)
were constrained to 1.0 as recommended by the software
(Arbuckle, 2019). Across both samples, the significant
chi-square results ($p < 0.001$) after comparing the models
(Cole, 1987; Gatignon, 2010; Kline, 2011) revealed that the
intended four-factor representation had the best fit. None-
theless, the fit indices ranged from acceptable (i.e., relative
chi-square values between 2 and 5, along with the RMSEAs
from 0.05 to 0.08) to less than desired in the case of the GFIs
and CFIs (e.g., Byrne, 2016; Meyers et al., 2013) (Study
1: $\chi^2 = 2866.27$, $p < 0.001$, $df = 1070$, RMSEA = 0.065
GFI=0.74, CFI=0.81; Study 2: χ^2 =4476.51, p<0.001,
df = 1070, RMSEA = 0.065, GFI = 0.75, CFI = 0.80). These
results, albeit including BDW and ILT-tyranny, were com-
parable to earlier CFA research involving the MFQ (e.g.,
Andersen et al., 2015; Doğruyol et al., 2019; Graham et al.,
2011) that showed reasonable RMSEA statistics.

Descriptive Statistics

Descriptive statistics and Cronbach's alpha scale reliabilities are shown in Tables 2 and 3 for the two samples, respectively.

Main Effects

The results of the analysis of main and moderation effects are presented in Table 4 and Fig. 2. To test the main effects of BDW, the individualizing foundations, and the binding moral foundations on ILT-tyranny, the Hayes (2018) PRO-CESS macro Model 6 was used. Model 6 is mathematically equivalent to our model, which has one mediator and the

	Variable	Mean	SD	1	2	3	4	5	6
1	Age	42.88	9.15	_					
2	Gender	0.51	0.50	0.08	-				
3	Belief in a dangerous world	2.67	0.82	0.06	0.10*	(0.90)			
4	Individualizing foundations	4.61	0.66	0.12*	0.16**	0.04	(0.78)		
5	Binding foundations	3.29	0.96	0.09	- 0.13**	0.44**	0.04	(0.91)	
6	ILT-Tyranny	3.79	1.93	-0.07	- 0.09	0.03	-0.12*	0.11*	(0.93)

N=402. Internal consistency reliability coefficients (Cronbach's alphas) appear in parentheses along the main diagonal. Gender is coded as 0= male, 1= female

p*<0.05; *p*<0.01

Table 3Descriptive statisticsand correlations for Study 2

	Variable	Mean	SD	1	2	3	4	5	6
1	Age	40.20	8.95	_					
2	Gender	0.50	0.50	0.07*	-				
3	Belief in a dangerous world	2.95	0.85	- 0.02	0.04	(0.91)			
4	Individualizing foundations	4.65	0.69	0.03	0.15**	-0.08*	(0.79)		
5	Binding foundations	3.56	1.00	- 0.02	-0.14^{**}	0.43**	0.09*	(0.91)	
6	ILT-Tyranny	3.67	1.84	- 0.12**	-0.15^{**}	0.07	- 0.13**	0.13**	(0.89)

N=745. Internal consistency reliability coefficients (Cronbach's alphas) appear in parentheses along the main diagonal. Gender is coded as 0= male, 1= female

p*<0.05; *p*<0.01

Table 4Hypothesis testing—main effects

Fig. 2 Results of hypothesized

relationships. Hypothesis was

reached significance) at a mini-

mum of p < 0.05, p < 0.01, or p < 0.001 in both Study

represents a non-hypothesized

1 and Study 2. Dashed line

relationship

supported (or relationship

	Study	1		Study	2			Combined				
	Binding foundations		Tyrannical leadership endorsement		Binding foundations		Tyrannical leadership endorsement		Binding foundations		Tyrannical leadership endorsement	
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
BDW	0.52^{+}	0.05	- 0.06	0.13	0.50^{+}	0.04	- 0.02	0.09	0.51 [†]	0.03	- 0.03	0.07
IND	0.03	0.07	- 0.37*	0.15	0.18^{\dagger}	0.05	-0.39^{\dagger}	0.10	0.13^{\dagger}	0.04	-0.39^{\dagger}	0.08
BIN			0.25*	0.11			0.29^{\dagger}	0.08			0.27^{\dagger}	0.06
R^2			0.028*	*			0.039^{\dagger}				0.036^{\dagger}	

Study 1: N=454; Study 2: N=402; Study 3: N=745

BDW belief in a dangerous world, *BIN* binding foundations, *IND* individualizing foundations p < 0.05; p < 0.01; p < 0.001



two antecedent variables that are allowed to covary. In line with Hypothesis 1, BDW positively associated with the binding foundations across the samples (Study 1: b=0.52, p<0.001; Study 2: b=0.50, p<0.001). Hypothesis 2, positing a positive association between the binding foundations and ILT-tyranny endorsement, was also supported in the two samples (Study 1: b=0.25, p<0.05; Study 2: b=0.29, p<0.001). Hypothesis 3, proposing an *indirect* path from BDW to ILT-tyranny through the binding foundations as a mediator, was also supported across samples, reflected by CIs (based on 10,000 bootstrap estimates at the p<0.05 level) in which the indirect effect was both positive and

excluded zero (Study 1: b=0.13, SE=0.07, 95% CI [0.005, 0.266]; Study 2: b=0.14, SE=0.04, 95% CI [0.064, 0.233]). In support of Hypothesis 4, the individualizing foundations were negatively associated with the endorsement of ILT-tyranny in both studies (Study 1: b=-0.37, p<0.05; Study 2: b=-0.39, p<0.001). Finally, the *non-directional* path from individualizing to binding foundations was significant in Study 2 only (Study 1: b=0.03, NS; Study 2: b=0.18, p<0.001). Even though the two higher-order foundations were positively correlated, they showed opposite relationships with ILT-tyranny, a finding we address in the discussion section. Also, note regarding the placement of the

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Table 5 Hypothesis testing-

moderation effects

	Study 1				Study 2				Combined				
	Binding founda- tions		Tyrannical leadership endorsement		Binding founda- tions		Tyrannical leadership endorsement		Binding founda- tions		Tyrannical leadership endorsement		
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE	
Main variables													
BDW	0.52^{\dagger}	0.05	0.00	0.13	0.50^{\dagger}	0.04	0.02	0.09	0.51^{\dagger}	0.03	0.01	0.07	
IND	0.03	0.07	- 0.45*	0.20	0.18^{\dagger}	0.05	- 0.45 **	* 0.14	0.13^{\dagger}	0.04	-0.45^{\dagger}	0.12	
BIN			0.49**	0.16			0.42^{\dagger}	0.10			0.45^{\dagger}	0.09	
Gender			0.76	1.50			0.02	0.99			0.30	0.82	
Moderators													
IND×gender			0.15	0.30			0.18	0.20			0.17	0.16	
BIN×gender			- 0.50*	0.20			- 0.35*	0.14			-0.41^{\dagger}	0.11	
R^2			0.046**				0.059^{\dagger}				0.055^{\dagger}	ŕ	
ΔR^2 due to significant interaction			0.015*				0.008*				0.011*		

Study 1: N=402; Study 1: N=745; Combined: N=1,147. Gender is coded as 0= male, 1= female *BDW* belief in a dangerous world, *BIN* binding foundations, *IND* individualizing foundations *p < 0.05; **p < 0.01; [†]p < 0.001



Fig.3 Interaction of follower gender and binding foundations in Study 1

higher-order MFT components in Fig. 2, the positioning of the binding foundations between the individualizing foundations and ILT-tyranny is *not* meant to imply mediation.

Gender as a Moderator

Hypotheses 5 and 6 were tested using the Hayes (2018) PROCESS macro Model 88, which consists of Model 6 used above plus a single moderator added to two paths. As shown in Table 5 and Fig. 2, Hypothesis 5 positing a stronger positive association between binding foundations and ILT-tyranny among males, relative to females, was supported in both samples (Study 1: b = -0.50, p < 0.05; Study



Fig.4 Interaction of follower gender and binding foundations in Study 2

2: b = -0.35, p < 0.05). Graphs of the interactions in Figs. 3 and 4 using the 16th, 50th, and 84th percentiles (as provided by PROCESS) show that the association between binding foundations and ILT-tyranny endorsement is significant for males but not females (Study 1: p < 0.01, b = 0.49, SE=0.16, t(395) = 3.15, 95% CI [0.184, 0.794]; Study 2: p < 0.001, b = 0.42, SE=0.10, t(738) = 4.07, 95% CI [0.219, 0.626]). That is, at higher values of binding foundations, males more strongly endorse the tyrannical traits than females. Hypothesis 6, predicting a stronger negative association between the individualizing foundations and ILT-tyranny among females was not supported in either study. Even though follower gender moderated the effect of the binding foundations on ILT-tyranny, we also investigated the effect of the moderator on the overall mediated relationship by using PROCESS to calculate an index and confidence intervals as recommended by (Hayes, 2018). Specifically, the index shows the extent to which follower gender affects the *indirect effect* of BDW on ILT-tyranny, mediated by the binding foundations. For both samples, the confidence interval for each index does not include zero, which indicates that follower gender influenced the overall indirect effect (Study 1: index = -0.260, SE = 0.117, 95% CI [-0.492, -0.032]; Study 2: index = -0.177, SE = 0.074, 95% CI [-0.327, -0.038]).

Combined Sample

Given that the focal measures were the same across the two studies, we combined the samples with the inclusion of a dummy variable to account for random effects (see Tables 4 and 5). All the Study 1 hypotheses as replicated in Study 2 were confirmed in the combined sample, including both Hypothesis 4 positing a negative association between the individualizing foundations and ILT-tyranny and Hypothesis 5 concerning the stronger positive association between the binding foundations and ILT-tyranny for men relative to women (b=0.41, p<0.001). The index for the effect of follower gender on the relationship mediated by the binding foundations-the indirect effect of BDW on ILT-tyrannywas also significantly different from zero (index = -0.211, SE = 0.064, 95% CI [-0.337, -0.084]). The only relationship to emerge with the dummy variable involved the binding foundations (b = 0.12, p < 0.05), which likely reflects differences in age and education level across the two studies.

Supplemental Analyses

Control Variables

As explained earlier, our initial approach was to test the relationships in as close as possible to their hypothesized form, meaning without any control variables included (Spector & Brannick, 2011). Nonetheless, we identified two psychological variables of interest that are conceptually unrelated to evolutionary or moral mechanisms. Sex role (Bem, 1974) was assessed in both studies; vertical collectivism (Triandis & Gelfand, 1998) was included in Study 2 only.

First, the short forms of Bem's (1974) sex-role inventories (Choi et al., 2009) were included to examine the possibility that participants' leadership preference (or lack thereof) was influenced by homophily (e.g., Keller, 1999), that is, a function of whether the tyrannical traits are associated (or not) with gender traits that respondents consciously or *explicitly* attributed to themselves, attributions that would be captured by the sex-role measures. This contrasts with the more innate or *implicit* belief concerning the stereotypical characteristics attributed to leaders and idealized (or not) in themselves, based on their self-identified gender (Taylor & Brown, 1988). Thus, participants were asked to indicate the extent to which 20 Bem (1974) inventory items were characteristic of themselves (e.g., masculine: aggressive, dominant, forceful, Study 1, α =0.88; Study 2, α =0.84; feminine: compassionate, loves children, sensitive to the needs of others, Study 1, α =0.91; Study 2, α =0.92).

Second, to refine our understanding of individualism/ collectivism and implicit leadership, vertical collectivism (VC; Triandis & Gelfand, 1998) was added to assess the role of cultural differences not associated with evolutionary processes. Controlling for collectivism eliminates the possibility that support for tyrannical leadership reflects nonmoral group-related motivations, including, for example, the preference for working in groups rather than alone (Gerstner & Day, 1994), the presumption that leaders are necessary in collective groups (Stock & Özbek-Potthoff, 2014), or the willingness to accept group priorities due to recent high exposure to such groups (Yilmaz et al., 2016). The Triandis and Gelfand (1998) VC measure consists of four items (e.g., "It is important to me that I respect the decisions made by my groups"; Study 2, $\alpha = 0.77$), to address group well-being and the differentiation of individuals based on hierarchical position.

The controls were analyzed in Samples 1 and 2 separately. All the hypotheses supported in the analysis were confirmed in both samples except for Hypothesis 4, the negative association between individualizing foundations and ILT-tyranny. The examination of each control variable one at a time revealed that Hypotheses 4 was left unsupported in both samples because the feminine sex-role inventory was negatively associated with ILT-tyranny. Hypothesis 5, predicting, in the case of men, a stronger association between the binding foundations and ILT-tyranny relative to women, retained support (Study 1: b = -0.44, p < 0.05; Study 2: b = -0.33, p < 0.05).

Alternate Models

Mediation models, by their nature, imply a temporal ordering (Tate, 2015; Wiedermann & von Eye, 2015). However, as BDW and the binding foundations reflect intergenerational evolutionary processes, it is possible that the ordering we hypothesized is incorrect. Accordingly, the positioning of these variables was examined further using two additional analytical approaches. First, the positions of the binding foundations and BDW were reversed, such that the association between the binding foundations and ILT-tyranny was mediated through BDW. Relative to our original model, in both samples (using PROCESS Models 6 and 88 as before) the indirect relationship was no longer significant as BDW was unrelated to ILT-tyranny, and the fit either deteriorated or was no better in terms of the main (Study 1: $R^2 = 0.028$; Study 2: $R^2 = 0.038$) or moderation (Study 1: $R^2 = 0.039$; Study 2: $R^2 = 0.055$) effects.

Second, we conducted a direction of dependence analysis (DDA; Wiedermann & von Eye, 2015) comparing the skewness of the residuals from the originally hypothesized model to one in which the ordering of the binding foundations and BDW was reversed. This approach takes advantage of the asymmetric properties of higher-order moments (in this case the third higher moment, skewness), and the fact that, due to a normally distributed error term, the skewness of a dependent variable (Y) will generally be lower than that of the explanatory variable (X; Wiedermann et al., 2015). By extending this reasoning to the residuals of a regression, Wiedermann and von Eye (2015) show that the skewness of the results for the misspecified model, where the X and Y variables are reversed, will be greater than that for the correctly specified model. In line with Wiedermann and colleagues (Wiedermann & von Eye, 2015; Wiedermann et al., 2015), we calculated D'Agostino z-scores (D'Agostino & Belanger, 1990; D'Agostino, 1971) to examine the significance of the difference of skewness between our hypothesized and the reversed model. Evidence of a preferred order did not emerge in the *separate samples* as the skewness of the residuals from competing models did not differ (Study 1: $z_d = -0.91$, p > 0.05; Study 2: $z_d = -1.61$, p = 0.05). However, in the combined sample, the null hypothesis of equality of skewness of residuals was rejected ($z_d = -2.82, p < 0.01$); importantly, the residuals from the theorized model were less skewed than those from the reversed model, providing support for our theory-informed ordering.

Discussion

Data from two independently collected samples of working adults largely supported our proposed model. Accordingly, we addressed a longstanding need to understand the mechanisms implicated in seeing tyrannical traits as conducive to effective leadership (Ashforth, 1994; Epitropaki et al., 2013; Walker et al., 2020). We also added to the nascent literature linking moral foundations, rooted in evolutionary psychology, to leadership preferences (Egorov et al., 2017, 2019; Fehr et al., 2015), and in so doing inform both scholarship and practice.

Theoretical Implications

As noted from the outset, there is no leadership without followership, such that leaders are enabled through the support of their followers. Moreover, there is considerable evidence that subordinates exposed to destructive leaders, as captured in good part through the traits of a tyrannical leader, suffer in terms of their well-being and that there are long-term negative impacts for the organizations involved (e.g., Bies & Tripp, 1998; Mackey et al., 2020; Mitchell & Ambrose, 2007; Schyns & Schilling, 2013; Tepper, 2007; Wu et al., 2018). In our efforts to understand why the tyrannical traits are viewed as effective by some, we developed and found support for a model of mediation and moderation that integrates the literatures concerning BDW, MFT, and ILT. Specifically, BDW is positively associated with ILT-tyranny endorsement, mediated through the MFT binding foundations. In terms of gender, the relationship between the binding foundations and ILT-tyranny is stronger for males relative to females.

From an evolutionary perspective, our findings are consistent with the idea that individuals have evolved cognitive mechanisms guiding who they categorize as good or ideal leaders (Bastardoz & Van Vugt, 2019, p. 92), and that this categorization links to both perceptions of danger and the binding foundations of MFT. In line with Lord et al. (2020) who suggested that the application of ILT could enhance understanding of the mechanisms that underlie the appeal of destructive forms of leadership, we show how individuals perceiving dangers in their world may seek security via dominant leaders who present themselves as capable of enacting and protecting group loyalty, hierarchical structures, and conformity to traditions. Importantly, our findings link aspects of several literatures including leadership, evolutionary and moral psychology, implicit leadership theory, and theories grounded in human responses to longstanding existential uncertainties (van den Bos, 2009). In doing so, we build on earlier studies that assess the role of MFT and similar social attitudes in regard to individuals' reactions to a variety of threats, including mortality salience (Wright & Baril, 2013) and perceived vulnerability to disease (Murray & Schaller, 2012; Park & Isherwood, 2011; Van Leeuwen et al., 2012), while contributing to the limited empirical research linking threat reactions to leadership preferences (Nevicka et al., 2013).

As described earlier, a covariance relationship between individualizing and binding foundations was included in our model without specifying a causal direction. Notably, these foundations were positively linked in both the second and in the combined samples, while still being predictive of ILT-tyranny in *opposite* directions. These findings build on our current understanding of the higher-order foundations as related but distinct (Egorov et al., 2017; Napier & Luguri, 2013). Individuals show the least variance on the individualizing foundations (Graham et al., 2009; Napier & Luguri, 2013); however, their socialization and upbringing is associated with differentiation on the binding foundations. This suggests that both preferences for, and the aversion to, a tyrannical leader prototype may originate from the *same* basic desire for "good." That is, heightened endorsement of the binding foundations is simply another way to pursue the broader collective objectives of the moral foundations (group survival and well-being), depending on the nature of the evolutionary challenges experienced by one's predecessors. Importantly, our research moves beyond studies that predominantly focus on exposure to authoritative leaders (Keller, 1999; Lord & Maher, 1991; Walker et al., 2020) to highlight the importance of understanding the moral and psychological roots of attraction to leaders who treat their subordinates harshly.

The mediated path linking the binding foundations to the endorsement of ILT-tyranny was stronger among males than females. This is consistent with tyrannical characteristics and behaviors being (1) more abundant among males than females (Jonason & Davis, 2018; Powell & Butterfield, 2017), (2) positively associated with hierarchy and agency, which are known to play a greater role in relationships involving men (Benenson & Markovits, 2014), (3) more likely to be endorsed by men than women (Walker et al., 2020), and (4) more strongly tied to evolutionary benefits for men, given the access they may have provided to high-status positions (Bastardoz & Van Vugt, 2019).

Our expectation that the association between individualizing foundations and the lesser preference for tyrannical leadership would be stronger among women was not supported. Despite the intuitively strong congruence between communal (i.e., feminine) gender roles and the individualizing foundations, and their incompatibility with tyrannical leadership, women may not play the empathetic counterbalance in society against the endorsement of tyrannical leaders that may be expected of them (Jaffee & Hyde, 2000). For example, perhaps women see leadership issues abstractly and impersonally compared with issues that are personal to them (Fumagalli et al., 2010). Additionally, given that the inclusion of the feminine sex-role inventory nullified the significant negative relationship between the individualizing foundations and tyrannical leader prototype endorsement, it is possible that the dislike of tyrannical leadership may depend on the extent to which one sees oneself as conforming to the traditional feminine stereotype (Jonason & Davis, 2018).

In all, our findings suggest that support for tyrannical traits in a leader can arise from individual-level characteristics that do not imply a deficit, but rather reflect well-intentioned efforts, based on deeply held beliefs about what is right or just, to achieve the best outcome in the context of a world that they perceive as dangerous (Haidt, 2012). This perspective is a valuable addition to a management literature that has emphasized followers' deficiencies to account for their attraction to leaders who treat them harshly (e.g., unmet basic needs, self-enhancement motives, Machiavellianism, a

"bottom-line" mentality, and low core self-evaluations; Castille et al., 2018; De Clercq et al., 2019; Padilla et al., 2007; Thoroughgood et al., 2012).

Practical Implications

Our findings are potentially relevant to followers who are viscerally drawn to tyrannical leadership because they perceive dangers to one's community, especially for individuals higher in the binding moral foundations. Just as autocratic and authoritarian leaders in the political realm can champion their cause based on fear (e.g., of immigration, fake news, visible minorities), tyrannical business leaders can identify themselves as aggressors against threats and dangers (e.g., business competition, turbulent economy) to justify and win support among employees. The most vulnerable followers to such influence efforts would be those highest in the binding foundations and socialized in ways that are known to contribute to ILT-tyranny.

While we did not directly study tyrannical leaders and their followers, the effort to understand the psychology of tyranny sets fertile conditions for specifically addressing their enablement. Accordingly, given the established ill effects of tyrannical forms of leadership, it may be beneficial to "inoculate" followers from the influence tactics of tyrannical leaders, especially in times of uncertainty. For example, effective followership can be fostered in organizational cultures that place value on empowerment, transparency, accountability, and reduced power distance (Padilla et al., 2007). Awareness of the impact of the moral foundations on both the expectations of leader behavior and the follower perceptions of leader effectiveness (Egorov & Pircher Verdorfer, 2017; Egorov et al., 2019) also can be strengthened. People can learn to avoid the "soundbites" from corporate spectacles and popular media that fuel perceptions of "tough guy" leaders. Finally, efforts should be made to weaken gender-related leadership biases and dispel the notion that tyrannical behaviors somehow actualize masculinity in a positive sense (Paustian-Underdahl et al., 2014). Business schools and employers alike have a role to play in providing a balanced portrayal of effective leadership that includes examples of leaders of strong moral character (Byrne et al., 2018; Rego et al., 2017; Sosik, 2015) in comparison with ineffective leaders who behave tyrannically.

Limitations and Future Research

As with all studies, there are limitations to our design and execution. With cross-sectional research the directionality of the variables in our model, including mediation, cannot be conclusively established. Although the testing of alternate representations provided some support for our correct placement of the variables involved, it remains plausible that the binding foundations could precede BDW in time. The relationship between these variables could also be reciprocal in nature, wherein, over time, changes in one result in changes to the other. Unfortunately, given the intergenerational nature of our theory, it is difficult to properly capture and measure this reciprocity. Also, given that our model explained only about 5.5% of the variance in ILT-tyranny, further refinements and additional study is called for.

Although the sources and measures were appropriate to our research questions (Conway & Lance, 2010), our data were obtained from a single administration of self-reported survey items. Therefore, common-method variance could have inappropriately inflated the magnitude of the relationships obtained. Nonetheless, given the private nature of our variables, self-report measures were deemed the most appropriate (Conway & Lance, 2010). Moreover, well-established measures of the focal variables were used and the intermediary data collection platform guaranteed participant anonymity (Andersen et al., 2015; Podsakoff et al., 2003). Moreover, the scales used to measure our focal variables (moral foundations, BDW and ILT) do not share common scale formats or anchors, and we counterbalanced both the presentation of the separate scales and the individual questions within each scale (Podsakoff et al., 2003). Our CFA findings further support the independence of our measures and their construct validity which also counters the common-method variance threat (Conway & Lance, 2010). Finally, interaction effects can be severely deflated where common-method variance is problematic, making them difficult to detect (Siemsen et al., 2010); even so, we found an interaction between the binding foundations and gender.

Alternative methodologies to supplement our approach are encouraged. One approach would be to operationalize the tyrannical leader characteristics as discrete behaviors, perhaps using scenario-based experiments, to better separate the boundary conditions of which tyrannical traits are unacceptable to whom and within what contexts. Also, a range of potential antecedents of leader categorization remain to be explored, including leader and follower personality traits, self-construal, and leader and follower attachment styles (Lord et al., 2020). Finally, employing additional outcome measures, such as leader competence, warmth (Fiske et al., 2002), or general likeability (Cronshaw & Lord, 1987) may reveal nuances in the relationships under study, especially as they relate to interactions between leader and follower gender.

Some of the variables involved in the theoretical development of our model were assumed but not directly measured, especially those related to identification with and perceptions of threats to one's in-group, and the extent to which respondents believed a leader with tyrannical traits would be harmful to them or their organization over the short or long term. Also, consistent with ILT, participants rated the effectiveness of tyrannical leader traits in the abstract, rather than with respect to an actual leader or related outcomes. Given the limited number of organizational studies concerning ILT, we echo Lord et al. (2020) in encouraging research that examines these prototypes outside of the laboratory.

Looking at the full ILT-tyranny scale, two of the six traits of ILT-tyranny (conceited and selfish) do not align conceptually with the binding foundations as well as the other traits, or with the idea that tyrannical leaders will provide protection to the group. These traits are notably the weakest contributors to the construct as reflected by the factor loadings and they also have the lowest mean ratings (Epitropaki & Martin, 2004). However, they may play a signaling role: leaders who are unabashedly self-seeking and self-aggrandizing, with a record of success, may signal an ability and willingness to do whatever it takes to guard against future strife and that this behavior has been accepted by others in the past. Nonetheless, we conducted all our analyses with these two items excluded from the ILT-tyranny measure and the overall pattern of our findings did not change. Future research should examine how these facets of ILT-tyranny come under approval or disapproval, perhaps based on specific moral foundations (e.g., loyalty vs. authority) or contextual conditions.

Although our study drew from two independent samples differing on educational level and employment status, the results should be replicated on samples dominated by non-WEIRD participants, and those that may reflect variations in leader–follower race and ethnicity (Ospina & Foldy, 2009; Yilmaz et al., 2016). For example, as some visible minorities are less likely to rely on institutional authority for protection (Cao, 2011; Wu et al., 2009), they may be less inclined to see a dominant leader as a positive, especially if the leader represents the traditional white, male oppressor. Relatedly, the binding foundations have been found to operate differently in African American populations (Davis et al., 2016), highlighting the need for studies considering visible minorities within WEIRD countries.

The theory underlying our model is based on distal mechanisms, where the size of the effects is diminished due to additional links in the causal chain, including competing causes and random factors (Shrout & Bolger, 2002). Thus, given the evolutionary, intergenerational effects of perceived dangers, we did not hypothesize a direct or proximal relationship between BDW and ILT-tyranny, since the association may be affected by other, unmeasured mediators (Hayes, 2009; MacKinnon et al., 2000; Shrout & Bolger, 2002). For those who study human psychology with long time horizons (e.g., developmental or evolutionary psychology), the requirement of a direct link can be relaxed because the long-term processes being studied are not represented accurately by a direct relationship in the model (Shrout & Bolger, 2002). Possible mediators mentioned by Lord et al.

(2020) and others include individual or societal differences stemming from the study of the behavioral immune system (psychological mechanisms evolved to protect against infectious pathogens; Schaller & Park, 2011) which are known to have the same evolutionary basis as sensitivity to dangers and the moral foundations (Duncan et al., 2009; Murray & Schaller, 2012; Park & Isherwood, 2011).

Beyond follower-based effects, further research concerning the gender of the leader is required. For example, Thoroughgood et al. (2011) found that reactions to aversive leadership were dependent on interactions between organizational performance, climate, and leader gender, wherein female leaders who acted in intimidating ways and strongly reprimanded their subordinates were viewed more negatively, especially in intolerant climates when organizational performance was poor. Thus, given the high value of hierarchy and tradition tied to the binding foundations (Haidt, 2012), it is possible that the desire for dominant leadership is limited to male leaders. Relatedly, although there is reason to liken tyrannical and dominant leadership to masculinity, these constructs are not synonymous (Johnson et al., 2008). In all, there is a need to examine how leader and follower gender interact to impact the social perceptions and attributed effectiveness of tyrannical leadership traits.

Conclusion

The current study examines the possibility that moral foundations, belief in a dangerous world, and follower gender are implicated in one's tendency to view tyrannical traits as positively linked to effective leadership. Leaders not only solve problems relevant to individual and collective wellbeing, they are also the hub of a socially constructed web of innate impressions regarding what is good and necessary. Understanding support for leaders who treat their followers aggressively requires a broad understanding of people's moral thoughts and the dangers in the world around them.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

Ethical Approval The authors affirm that the use of all data in this study have been approved by all appropriate institutional research ethics boards and any identifying information has been anonymized prior to analysis.

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