

Why would anyone elect a narcissistic untrustworthy leader?

A behavioural ecology approach

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Abstract

Leader choice is a cornerstone of modern democracies and a central topic in cognitive sciences. In the present paper, we discuss an unresolved question in leader choice research: How can the cognitive mechanisms underpinning leader choice be both exquisitely responsive to contextual cues and blatantly suboptimal? Specifically, leaders displaying features that clearly threaten group coordination or that risk harming individuals' interests are sometimes preferred. Our review of the literature suggests that this pattern can be explained by the fact that leader choice recycles social heuristics that evolved

25 to evaluate individual's achievements and track their competence.
26 Achievement evaluations are a useful guide to select who to take information
27 from and who to grant influence to in group decisions. When used in 'leader
28 choice' contexts however, this heuristic leads people to select high achievers
29 whether or not they have adequate leadership skills (i.e. skills to successfully
30 lead and coordinate the group).

Main text

Understanding political behaviour has been a key topic in social and cognitive sciences: How do citizens choose their leaders? What are the factors that predict fluctuations in political preferences? What are the cues people use to guide their political decisions? In the past decades, studies in social sciences have highlighted that leader choice is sensitive to cultural and familial influences as well as contextual factors, such as economic crises and terrorist attacks [1–3]. Cognitive scientists have extended these findings in experiments showing that leader preferences respond to external cues in a rather systematic way. In particular, participants reliably prefer more masculine and taller leaders in threatening scenarios [4–8]. These mechanisms also appear to be quite specific. For instance, dominant leaders, who can coerce others and thereby ensure effective group coordination, are preferred in violent contexts [4–6], but the same attributes are avoided for other social choices, such as cooperative partner choice (including when they are produced in similarly violent contexts) [4]. People’s leader preferences thus appear to be exquisitely fine-tuned to the particular task leaders have to complete and calibrated to the unique challenges raised by the environment.

Concomitantly however, electoral decisions are also influenced by puzzling parameters, such as the candidate’s perceived attractiveness, that bear no relevance to leadership skills [9–11]. More strikingly still, people sometimes prefer leaders who impede group success [6,12,13]. We review evidence of these two puzzles in the next sections.

i) leader choice is influenced by leadership-irrelevant traits

While some of the traits predicting leader preferences appear to be directly linked with the ability to successfully coordinate or successfully lead a group, e.g., trustworthiness and dominance, others bear no straightforward relationship with coordination skills. For instance, perceived health is an important predictor of leader choice [9,11,14] despite the fact that it is not associated with effective leadership. Data collected on more than 100 supervisors from six different industrial sectors indeed reveals that leader health is not correlated with leadership effectiveness [15]. Strikingly however, the impact of perceived health on leader choice is much greater than that of traits that are directly linked with leaders' ability to coordinate the group. Using videos of body motion for instance, Kramer et al. [9] demonstrated that perceived health was a better predictor of voting preferences than perceived leadership ability itself. The impact of perceived health was also greater than that of trustworthiness, dominance or caring, despite the fact that these traits have a direct and robust effect on group coordination [16,17]. Importantly, adding any of these other traits did not improve the predictive power of the health-only model to explain leader choice.

ii) People sometimes prefer leaders who impede group success

Even more surprisingly, people sometimes choose leaders who clearly display traits, such as untrustworthiness, that are likely to *impair* group coordination [12,13]. Leaders are in a position where they can exert considerable power to favour their own interests over those of the majority so one would expect

trustworthiness to be universally valued among leaders. Yet, both experimental and anthropological data demonstrate that untrustworthy leaders can be preferred in a range of contexts.

For instance, in an experiment where participants were asked to choose a leader for a company facing a crisis, Nevicka et al. [12] showed that 90% of them preferred a highly narcissistic leader to a lowly narcissistic one. Strikingly, participants displayed this preference while rating the highly narcissistic leader as selfish and manipulative. Are these negative features counter-balanced by large benefits for groups led by selfish or narcissistic leaders? The current empirical literature points to the contrary. A large body of studies in organisational sciences indeed demonstrate the negative impact of leaders' narcissism on multiple outcomes, ranging from the company's probability of being sued to counterproductive behaviour among employees [e.g., 18–20]. Well-controlled experimental studies also indicate that leaders' narcissism is associated with decreased group performance in joint decisions experiments and that the effect is mediated by a decrease in information exchange that hinders coordination possibilities [21].

Beyond narcissism, untrustworthiness and selfishness also appear to be valued in specific circumstances. For instance, Cheng et al. found that individuals scoring high on a dominance scale were rated as having higher leadership abilities but also as being less moral, ethical and cooperative [22]. Moving on to a real-life case, Kakkar and Sivathan's [23] surveyed 750 Americans before the 2016 U.S. presidential election and found that Donald Trump was rated higher than Hillary Clinton on the dominance scale, including

on the item assessing perceived selfishness (*'who often tries to get their own way regardless of what others (in the group) may want'*; our analysis of their online data shows a significant difference on that item, $p = .028$). Outside WEIRD societies, people also value leaders who demonstrate a certain level of selfishness and calculation of interest, as exemplified by Sahlin's description of New Guinea Highlanders leaders as combining a *'profound measure of self-interested cunning and economic calculation'* [24–27].

Even more strikingly, not being perceived as trustworthy is sometimes valued in and of itself, and not as a mere side effect of dominance. In one of the studies reported in Little et al.'s paper [6] participants displayed a preference for untrustworthy looking leaders following a war scenario. Safra et al. [13 - Study S1] then replicated this effect using avatars controlled on both dominance and trustworthiness [28] and found that untrustworthiness was valued in wartime leaders independently of perceived dominance.

Overall, it appears that the specific cognitive computations underlying leader choice do not necessarily select optimal leadership skills. One possible explanation is that these decisions are accidental outputs of a mechanism that is effective most of the time but occasionally malfunctions. If that were the case, one would expect leader choice errors to be distributed randomly across contexts. Instead, a closer analysis of the contexts in which these preferences arise reveals that people's preference for untrustworthy leaders seems to constitute a systematic response to threatening environments (e.g., war scenarios, high levels of violence and times of crisis [12,13,23,26]). Leader choice thus seems to respond to environmental threats quite systematically,

by producing leader preferences that do not favour the interests of the group. The question then is why. Why do threatening environments favour leaders who are untrustworthy or narcissistic? Why do these preferences occur even when participants identify leaders as unethical and ready to exploit other group members? What are the actual cognitive computations underlying these seemingly irrational choices? How can they shed light on the cognitive mechanisms guiding leader choices?

3. Understanding leader choice: the competence heuristic

In order to identify the cognitive mechanisms underlying leader choice, we now focus on the large body of studies investigating the traits that are valued in leaders [8,29–41]. These studies look at the predictive power of a range of personality and physiological traits on election outcomes, and mostly rely on participants' perception of basic social cues such as faces and voices. The question of whether these evaluations are accurate is beyond the scope of the current paper [42,43], but regardless of their accuracy, people's evaluations provide information about the traits that are valued during leader choice.

Among all the traits that have been investigated in the past decade, participants' answer to the question '*how competent is this person?*' is the most reliable predictor of voting decisions [33,35,37,44]. Answers to this question predict election results as accurately as voting intentions, forecasting up to 70% of election outcomes [37]. This effect is robust and persists after controlling for multiple possible confounds such as the party's name, the candidate's outfit and other traits such as attractiveness and even hypothetical

151 vote [33,37]. First impressions of competence also surpass other, presumably
152 more relevant, traits such as perceived trustworthiness or honesty [36,45].
153 Importantly, these competence judgments predict election outcomes
154 accurately even when the candidate's face is flashed for as little as 100 ms
155 [37,46].

156 This extremely robust pattern is found even when participants are not
157 aware that they are assessing actual political candidates or that they are
158 taking part in a study on political preferences. In Sussman et al.'s study, for
159 example, US participants were asked to provide their first impressions of a
160 series of 18 people and to indicate how competent each person looked [36].
161 The participants included in the study did not realise that these were in fact 18
162 portraits of candidates in the Bulgarian 2011 presidential election. Yet, their
163 answers to the question "How competent does this person look?", devoid of
164 any political context, was the single best predictor of actual election results in
165 Bulgaria. In other words, US participants' abstract judgments of faces they
166 believed to be total strangers paralleled real decisions produced by Bulgarian
167 citizens in the rich political context of a presidential election. In the same
168 study, some participants were randomized to a condition in which no
169 competence evaluation was required; instead, participants were asked to
170 imagine that the portraits were of candidates for political office, and to indicate
171 how likely they would be to vote for them. Analyses demonstrated that there
172 was a strong statistical association between hypothetical US vote and actual
173 Bulgarian election outcome. Strikingly however, this link was fully mediated by
174 perceived competence (assessed by another group of participants).

The challenge then is to understand more precisely what participants are assessing when they produce general competence judgments. Clearly, participants rely on a definition of competence that goes beyond political leadership. As Sussman et al.'s study indeed demonstrates [36], it is not necessary to ask participants about the person's competence *as a leader* or *as a politician*, for competence ratings to work as a powerful predictor of leader choice. Participants thus appear to apply a general competence heuristic when choosing leaders.

4. Understanding leader choice: competence as successfulness

So what exactly is assessed when people rate someone as "competent"? In task-specific contexts, the answer is often relatively straightforward: for example, a hair-dresser is seen as competent when able to cut hair properly, a teacher is deemed competent when displaying good pedagogical skills, an athlete when she runs fast, and so on. Interestingly, individuals perceived as competent in a given task tend to also be chosen to lead and coordinate groups to perform that same task. For example, during rabbit drives, the Washo of California follow hunt leaders who are known for their good hunting skills. Similarly, in the Mae Enga horticulturalists of New Guinea, exceptional warriors are called during wartime to be war leaders [47, but see 48 for more examples]. In very much the same way, studies on football team managers reveal that former players are often chosen as coaches [49,50]. Empirical studies also demonstrate that people's competence to complete a particular task increases their odds of being chosen to lead a group on that same task

[51,52]. In Little's study [52] for instance, participants showed a stronger preference for cooperatively skilled individuals to lead a cooperative task and for physically skilled individuals to lead a physical task.

Though these choices may make intuitive sense, it is in fact not trivial to assume that the best individual achievers make the best leaders. Going back to our previous examples, the best hair-dressers may not make the most skilled salon managers; the best teachers may not make the best head-teachers, the best athletes may not make the best coaches, etc. Empirical evidence indeed points in this direction [40,50,53]. In their study on German football for instance, Muehlheusser et al. [50] found that 89 out of 103 teams had picked a former professional player as manager even though choosing a former professional player to manage the team actually decreased the number of points won by the team per game. People thus appear to apply a basic heuristic when selecting a leader for a circumscribed task and to choose the individual they perceive as the most competent to succeed in that task, independently of their leadership skills.

When choosing political leaders, one possibility is that people apply a similar heuristic and vote for individual achievers rather than leaders. People would thus assess the candidate's overall ability to succeed given the specific constraints that are imposed by their environment. In this framework, people would recycle general cognitive mechanisms that are adequately suited to evaluate the ability of a potential partner to be successful in a given environment for a given task. Achievement evaluations, i.e., evaluations of others' ability to acquire resources and status, are routinely produced in

humans and social judgments about others are automatically formed even when scant information is available [see 54 for a review on this topic]. These competence evaluations work as a powerful guide in a wide range of social choices, such as partner choice or mate choice [55–58], and are central for social learning and partner choice [51,59,60]. When used to choose leaders however, this heuristic would lead people to select candidates with the phenotype that is deemed most likely to succeed in the current context, whether or not she has adequate leadership skills (i.e. skills to successfully lead and coordinate the group; Figure). People's leader preferences should therefore incorporate each and every phenotypic feature that plays a role in increasing the candidate's overall probability of success in the environment, including physiological or behavioural attitudes that bear no relevance to leadership. In the following section, we confront this prediction to existing data, with special attention to cases in which leader preferences are misaligned with the group's interests.

5. Predicting how the context influences leader choice

A crucial prediction of our hypothesis is that individuals choose leaders based on who is most likely to succeed given the constraints imposed by the task and the environment, independently of the consequences of their choice for group functioning. If the present theory is correct, we should thus expect people to choose leaders who are best-suited to perform the task at hand but who may not adequately promote group-functioning. Applied to political leader choice, we should thus see that people rely on the candidates' overall

competence to navigate the constraints of the environment, independently of their actual leadership abilities. Importantly, we predict that if the function of this mechanism is to identify top performers, it will not systematically yield top leaders. Instead, in cases where the very traits that increase the probability that an individual performs well in a given context decrease the probability that the group coordinates well, we should expect people to favour the former over the latter.

Trustworthiness is a case in point. Being trustworthy is beneficial in cooperative contexts where trustworthy individuals benefit from being chosen as cooperative partners but it is detrimental in free-riding contexts where individuals are exposed to exploitation risks [61]. As far as group functioning is concerned however, having a trustworthy leader is always beneficial [16,17,62] and an untrustworthy leader is always detrimental. If leader choices are the output of a more general mechanism dedicated to identifying top performers as a function of environmental constraints, we should thus find that trustworthy leaders are favoured in cooperative contexts but not in free-riding contexts. If, by contrast, leader choices are the output of a mechanism whose very function is to promote group functioning, trustworthy leaders should always be preferred.

Put differently, our prediction is that untrustworthy leaders who are likely to impair group functioning can emerge, provided that being untrustworthy increases their own probability of success in the environment. Violent and non-cooperative environments are examples of such contexts where untrustworthiness can increase the individual's probability of success.

Game theory indeed predicts that selfishness and untrustworthiness are optimal in uncooperative environments. More precisely, defection is the best course of action in a prisoner's dilemma game when the agent is facing a partner who defects or when the agent has to make decisions in an environment where defection probability is high [63]. Dominant and untrustworthy individuals are also more likely to exploit group members, to succeed in violent interactions and to avoid being exploited by others [64–66]. Untrustworthy and selfish individuals can thus be described as having the most appropriate phenotype to succeed in harsh environments (as individuals) but as having a bad phenotype to maintain group functioning and coordination. Indeed, selfish leaders are more likely to exploit their group members for their own benefit and thereby impair group success. Harsh environments thus provide an interesting test case for our theory because the qualities required for individual success are at odds with those that ensure proper group functioning [16,17,62]. In line with our prediction, both observational and experimental data indicate that individuals prefer more dominant and untrustworthy leaders in times of social threat.

Specifically, research on historical records and sociological surveys reveals systematic variations in the preference for strong leaders with exposure to environmental threats [i.e., economic and social threats 67–70]. Economic threats such as inflation and unemployment are important predictors of between-countries variations in the preference for strong leaders [69]. At the individual level, perceived threat to safety and dangerous worldviews is also associated with an increased preference for strong leaders

[23,71,72]. Similarly, Safra et al. [13] have shown that childhood scarcity is systematically associated with a preference for more dominant and less trustworthy leaders. Finally, this link has also been confirmed experimentally in studies demonstrating that social threat scenarios induce a preference for dominant and untrustworthy leaders while peacetime scenarios induce a preference for more trustworthy and less masculine leaders [4,5,13,52].

Importantly, the probability of success of a particular individual in a given environment also varies with a number of physiological traits. For instance, physical strength is an important determinant of the probability of succeeding in violent interactions. Our theory therefore posits that such physiological features will be taken into account during leader choice: physical strength should thus impact leader choice in violent environments but not in high-trust high-cooperation environments. In line with this idea, Re et al. [8] showed that height significantly influenced leader preferences in wartime contexts but no such influence was found in peaceful contexts. Similarly, our theory accurately predicts that the preference for healthier-looking leaders arises most strongly in environments with high levels of pathogen threats and in ailing voters [10,73]. These results confirm that the phenotypic traits that are taken into account during leader choice vary with environmental constraints, such that individuals perceived as the best individual achievers are preferred as leaders.

To summarise, there is evidence in favour of the idea that leader choice is driven by an assessment of success probability, and that it is guided towards the selection of individuals who are likely to succeed by themselves in

the environment, independently of their leadership abilities. Far from being puzzling, the idea that people select leaders who do not appear to have strong leadership skills and who might impair group functioning is in fact to be expected under the current framework. The flexibility of people's political decisions across contexts is therefore better accounted for than if leader choice is construed as a mechanism geared to maximize leadership efficiency. Yet, one might wonder why individuals rely on such a seemingly suboptimal heuristic.

6. Tracing back the origins of the competence heuristics

Granting more weight to the most individually competent group member is an adequate strategy to maximize the accuracy of the group's decisions in many contexts. For instance, studies on group decision making have shown that joint performance is increased when the individual identified as most competent to make the decision by herself is granted more weight [74–77]. In a perception experiment, Hertz et al. [74] demonstrated that pairing participants who had access to different quality of information improved joint performance. During individual social information gathering [60,78], relying on competence estimations to select who to take information from is also an advantageous heuristic because it decreases the potential costs associated with decision errors. The use of information provided by knowledgeable individuals has thus been identified as an evolutionarily adapted strategy to minimize the cost of trial-error decision making while maximizing decision accuracy across taxa [78,79]. When asked to select who they should grant

influence to, humans may thus recycle these evolutionarily ancient cognitive mechanisms whose primary function is to select good social information sources.

The idea that humans exapt a general social information gathering mechanism for the more specific purpose of choosing leaders makes sense given the relative recency political leadership in society. The anthropological literature indeed reveals that many hunter gatherer societies, which are believed to best reflect the human species' environment of evolutionary adaptiveness, are characterized by absent or muted political leadership [80]. One of the most striking examples of such societies is the Hadza in Tanzania, who are described as having '*no leaders whose responsibility it is to take the decisions or to guide people towards some general agreement*' [81, see also 82 for more descriptions]. Importantly, even in traditional societies in which some degree of leadership has been noted, individuals identified as 'leaders' do not hold a strong decisional power but simply have more influence in joint decisions than other community members. For instance, Lee notes that '*!Kung leaders' opinions hold a bit more weight in the decisions than the others*' [83]. Looking at group decision-making specifically, 'leaders' in these societies do not decide by themselves for the group since joint decisions are mostly taken by consensus or individual bargaining [81,84]. These informal leadership dynamics can thus be described as influence processes in which specific individuals are granted more weight than others. Therefore, political leader choice in Western societies can be construed as a generalization of

these informal leader selection processes, that do not rely on leadership evaluations *per se* but on the identification of top individual achievers.

7. Link with previous theories on leadership

Our hypothesis on leader choice relies on two main ideas. First, leader choice is guided by a cognitive mechanism that is sensitive to the environment, such that leader preferences vary depending on environmental constraints. Second, these variations are not random but are the result of the exaptation of information gathering mechanisms, guiding leader preferences towards the best individual achiever in a given environment. The idea that the environment plays an important role in explaining leader choice is of course not new. Classical contingency theories of leadership have highlighted the importance of environmental factors in electoral decisions for decades [85–87] and the central work by Van Vugt et al. on the evolutionary bases of leader choice has also emphasized that leader selection is highly context-sensitive [16].

Beyond these converging points however, we contend that leader-follower decisions did not evolve as a solution to coordination problems. Instead, we have argued that leader choice is the product general social information gathering mechanisms that are recycled for the specific problem of leader selection. These two evolutionary accounts make diverging predictions: in the former framework, leader choice ought to favour individuals who are best able to solve group coordination problems (be it by enforcing group coordination or by negotiating with other groups); in the latter view, people ought to focus on individual achievement, irrespective of the

consequences their choice may have on their own fitness. In other words, the present theory posits that an individual will be chosen as a leader if she is perceived as the most likely to succeed in all the challenges the environment brings about, even if this does not benefit to – or even damages – the group. Our theory therefore makes the unique prediction that individuals will sometimes choose leaders based on traits that are neutral for group functioning (such as health) or that can impair group functioning (such as narcissism).

8. Link with status theories

The importance granted to competence in the present framework closely echoes the theory proposed by Henrich and Gil-White on human status [60]. In their theory of social hierarchies, Henrich and Gil-White [60] propose that one way to explain status hierarchies in the human species is through the concept of prestige, which corresponds to benefits individuals give to a specific group member (e.g., priority access to resources) in exchange of learning opportunities. In this theoretical framework, assessment of individual competence is also crucial to explain group hierarchy, and social hierarchy relies on mechanisms that are primary dedicated to the acquisition of information through the social channel. At first sight, the leader choice mechanism we put forward is very similar to the one suggested by Henrich and Gil-White [60]. However, these two theoretical perspectives aim to account for different phenomena: Henrich and Gil-White [60] focus on social

413 hierarchy formation; we tackle the cognitive mechanisms underlying leader
414 choice.

415 Indeed, social status and leadership correspond to two distinct social
416 processes, although they have often been confounded in the literature (see
417 for instance Cheng et al. [88], for a description of the different
418 operationalisations of status). As noted by Van Vugt and Tybur [89], it is
419 important to distinguish between social status, which corresponds to a specific
420 position within a group hierarchy, expressed in terms of priority of access to
421 resources (be they food, mate or cooperation partner) and decisional status,
422 which corresponds to a specific position within the group decision process
423 (and can be coined as a leader position). The mechanisms by which someone
424 decides to grant social status to another group member may thus be
425 theoretically different from those by which she decides to delegate decisional
426 power. This distinction between leaders and high-status individuals have even
427 been evidenced in animals. For instance, in an experiment on gaze following
428 in which subordinate chimpanzees had more knowledge about food location,
429 higher status individuals took information from their subordinates. On the
430 contrary, subordinates did not take information from the higher status, but less
431 knowledgeable, individuals [90].

432 Besides this distinction, it appears particularly interesting to contrast
433 the framework presented in this article and the predictions on leader
434 preferences that have been derived from Henrich and Gil-White's social
435 hierarchy theory [4,7,13,23]. According to Henrich and Gil-White [60], the
436 other way to access high social status positions besides prestige is

dominance. More precisely, dominant individuals gain priority to access resources by frightening others and imposing their will to the group. In terms of leader selection, one interpretation is that dominant leaders are preferred for their ability to impose their will on the group, which increases group functioning in specific contexts [5,7,13,e.g., 23]. In the alternative framework we put forward, these preferences would derive from dominant individuals' perceived competence in these contexts, independently of their leadership skills or of the consequences for group success.

This idea that dominant individuals are preferred in some circumstances because they are seen as more competent is in line with Chapais' theory [91] on primate hierarchies. According to this author, dominant individuals acquire status because they are valuable social partners due to their skills in some domains (e.g., social manipulation and physical prowess). However, our review of the literature suggests that leaders are chosen based on their perceived competence alone, independently of other traits that influence their value as social partners.

9. Understanding and improving voting behaviour

When asked to choose the best leader for their country, individuals appear to select the candidate who displays the global phenotype that is most closely aligned with the constraints imposed by individuals' local ecology. The way citizens perceive their environment is therefore of paramount importance and it is problematic for the functioning of democracies that citizens' perception is so often at odds with reality [92–95]. The annual Gallup survey, for example,

shows that the American public greatly overestimates crime levels: while the U.S. Department of Justice reports that violent crimes have fallen drastically since the 1990s, most American citizens report, year after year, that there is more crime in the US than the previous year [93,96,97]. Similarly, while the number of people living in extreme poverty has fallen from about 2 billion in 1990 to 0.7 billion in 2015, the Swedish foundation Gapminder has shown that the majority of people think that this number has actually increased [94]. Overall, despite the increase in life expectancy and the massive decrease in violence and poverty, people around the world disagree with the idea that the world is getting better and perceive their environment as more dangerous than it is actually is [98]. According to our theory, these misperceptions may induce a stronger preference for untrustworthy and dominant leaders than what an objective analysis of their country's economic and sociological data would have predicted. Closing the gap between perception and reality by informing citizens may thus have the potential to prevent the rise of dangerous political attitudes.

In addition, although preference for a leader with specific characteristics is only one dimension of political behavior, voting decisions might also be improved by tuning citizens' competence evaluations to the specific roles political leaders play in society. Indeed, citizens are often poorly informed about the different tasks leaders accomplish, which explains why they may fail to evaluate candidates on the most relevant traits. Our theory predicts that if individuals were aware of the decisions political leaders have to make and of the qualities they have to possess to succeed as decision-

makers, they would vote, as expected by the democratic ideal, for candidates they perceive as the most able to guide their country. In line with this idea, more politically knowledgeable voters are less influenced by competence evaluations [99]. Therefore, acting on the two major components involved in leader choices (context evaluation and competence evaluation) offers a promising way to improve political dynamics.

10. Conclusion

In the present paper, we question the idea that individuals choose their leaders based on their leadership abilities. Our survey of the literature suggests that when choosing a leader, people rather select the individual who is most likely to thrive and succeed in the particular ecology they live in. This implies that cognitive mechanisms that initially evolved to serve other functions are recruited to produce leader decisions.

Importantly, our review of the literature sheds new light on political behaviours by making testable predictions regarding the kind of information that people take into account to elect their political leaders. In particular, it suggests that particular importance should be granted to the way citizens perceive their environment when designing new solutions to improve the dynamics of political choices. One prediction, for instance, is that the perception of voters' current environment might be more important to predict the outcome of an election than their perception of the their country's need. Our evolutionary perspective on leader choice is therefore especially informative to understand the link between worldviews and voting behaviour

[71,72], and may constitute part of the explanation behind the rise of far right parties across the globe. Economic crises and terrorism threats may have biased voters' to perceive their environment as increasingly dangerous and competitive, thereby conferring a political advantage to more dominant and less trustworthy leaders [23,100].

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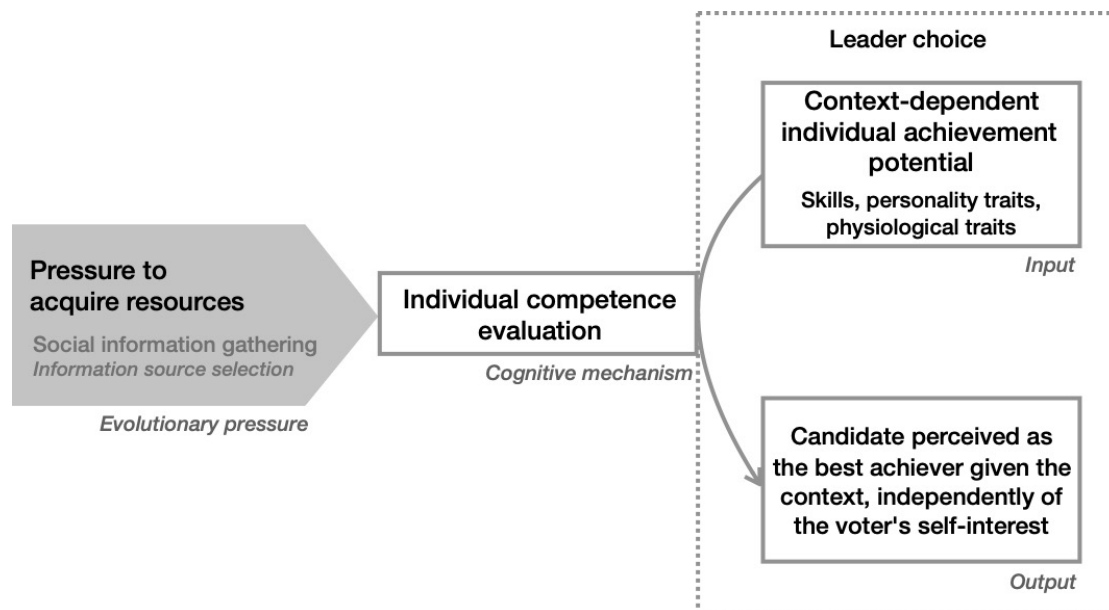


Figure. Leader choice mechanism based on individual competence evaluation.

Our review of the literature suggests that competence evaluations guide leader preferences and take into account all phenotypic features, from context-specific skills to physiological traits. These evaluations are influenced by the specific context the individual is in (either the specific task her group has to complete or the general environment she experiences). We propose that leader choice hijacks the competence evaluation mechanism that has evolved to serve different social functions, such as demonstrator choice in social learning and cooperation partner choice. As a result, individuals select the best individual achiever as leader, independently of the consequences of this choice on their own fitness.