Group Processes & Intergroup Relations
G P I R

Article

Group Processes & Intergroup Relations
16(1) 17–27

DOI: 10.1177/1368430212437211
gpir.sagepub.com
SAGE

The height leadership advantage in men and women: Testing evolutionary psychology predictions about the perceptions of tall leaders

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Abstract

Research suggests that tall individuals have an advantage over short individuals in terms of status, prestige, and leadership, though it is not clear why. Applying an evolutionary psychology perspective, we predicted that taller individuals are seen as more leader-like because they are perceived as more dominant, healthy, and intelligent. Being fit and physically imposing were arguably important leadership qualities in ancestral human environments—perhaps especially for males—where being a leader entailed considerable physical risks. In line with our expectations, our results demonstrate that by manipulating an individual's stature height positively influences leadership perception for both men and women, though the effect is stronger for men. For male leaders this height leadership advantage is mediated by their perceived dominance, health, and intelligence; while for female leaders this effect is only mediated by perceived intelligence.

Keywords

leadership, evolution, height, dominance, health, and intelligence

Paper received 15 April 2011; revised version accepted 24 December 2011.

Research shows a positive relationship between tall stature and measures of status and leadership. Height is positively associated with income (Judge & Cable, 2004), authority status in the workplace (Gawley, Perks, & Curtis, 2009) and military rank (Masur, Masur, & Keating, 1984). Furthermore, individuals in managerial positions are taller, on average, than individuals in nonmanagerial positions (Egolf & Corder, 1991), American science professors are taller than the general public (Hensley, 1993), and the U.S. presidential election outcome is partially predicted by height of the winning candidate—the taller candidate is twice as likely to become president (McCann, 2001). People also tend to judge an individual's height based on that individual's status (Dannenmaier & Thumin, 1964; Higham &

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Carment, 1992; Roberts & Herman, 1986), and judge someone's status on the basis of their height (Lindeman & Sundvik, 1994). Additionally, recent research show that individuals depict nation leaders taller than average citizens, and that taller individuals tend to show a greater interest in leadership positions (Murray & Schmitz, 2011).

Why is height associated with leadership emergence? Research has shown a link between height and dominant or assertive personality traits which may facilitate leader emergence (Melamed, 1992), but how do perceptions of tall individuals contribute to this process? Previous findings show a connection between perceptions of status and height, but important questions still remain. What underlies the perceptions about tall leaders? How can we explain the automatic association between height and leader perception? Finally, does the height leadership advantage apply to both men and women? In this article we integrate ideas from leadership categorization and implicit leadership theories (Kenney, Schwartz-Kenney, & Blascovich, 1996; Lord, Foti, & De Vader, 1984) with an evolutionary psychology framework to understand the implicit association between height and leadership.

In the current paper, leadership is defined broadly as a process of influence to achieve group goals (Bass, 1990). It is argued that taller individuals are perceived as more leader-like because height has been an important indicator of someone's dominance, health, and fitness throughout human evolutionary history. Because leadership in ancestral human environments involved significant physical risks—as it does for modern hunter gatherers—height might have provided reliable signals about someone's potential to lead others, which may still influence leadership perceptions today (van Vugt, Hogan, & Kaiser, 2008). Our hypothesis partially explains sex biases in leadership emergence as a function of height. We test this height leadership advantage hypothesis through an experiment in which we manipulate the stature of a male and female leader in a business environment.

Evolutionary leadership theory

According to evolutionary leadership theory (Spisak, Nicholson, & van Vugt, 2011; van Vugt, 2006; van Vugt & Ahuja, 2010; van Vugt et al., 2008) leadership and followership are adaptive strategies which evolved because they facilitated the social coordination of ancestral groups and helped them achieve a wide range of reproductive goals such as hunting, group movement, group defense, and maintaining social cohesion. The argument is that groups with effective leader–follower relations were more successful and as a result the capacity to follow an individual leader spread through the population and eventually became hardwired in the brain.

Evolutionary psychologists assume that the human brain evolved throughout our evolutionary history, much of which our ancestors spent living in small nomadic societies on the African savannah (for further reading, see Buss, 2005; Confer et al., 2010; Tooby & Cosmides, 1992). It is further assumed that the mind contains a wide range of evolved psychological mechanisms—likely in the shape of if-then decision rules—that helps solve a broad range of adaptive problems such as finding a mate, investing in parental support, and forming coalitions to share resources. With regard to the problem of social coordination, this likely entails various specialized psychological mechanisms to identify situations as coordination problems and select appropriate individuals to exercise influence.

An evolutionary approach to leadership suggests that leadership would have been instrumental in solving problems such as group movement (e.g., for hunting), group defense, and maintaining cohesion. Extrapolating from the animal and hunter gatherer evidence (King, Johnson, & van Vugt, 2009) it is likely that taking on the leadership role would have entailed significant physical costs because individuals often lead by example and lead from the front. For instance, leading a hunt would have been physically grueling and maintaining group unity would have involved physical risks associated with punishing individuals stepping out of line (O'Gorman, Henrich, & van Vugt, 2009). As a result, humans have evolved various psychological algorithms to help them identify suitable leaders and allow these individuals to exercise influence on them. Given the physical risks involved, early humans would have been looking for cues that these individuals would

have been physically "fit to lead"; leadership has indeed been related to properties such as physical stamina, health, and energy in a number of studies (see Bass & Bass, 2008).

We propose that one of these evolved algorithms uses physical height as an input. In ancestral environments, as well as in modern environments, someone's height is a good indicator of their fitness. Research shows that taller men have more reproductive success (Pawlowski, Dunbar, & Lipowicz, 2000) and that height is associated with greater physical strength (Lundborg, Nystedt, & Rooth, 2009) and social dominance (Melamed, 1992; Sharoni, 2006). Furthermore, the idea that height is a general fitness indicator is supported by studies suggesting that taller individuals (male and female) are more intelligent (Case & Paxson, 2008; Kanazawa & Reyniers, 2009). Note that such qualities—health, strength, dominance, and intelligence—would have been important qualities in leadership among our ancestors, and given the relatively slow pace of biological evolution these qualities may still influence leadership perceptions today (the mismatch hypothesis; van Vugt & Ahuja, 2010).

Previous research on leader perception has shown that people have implicit leadership theories about who is best suited to lead in a variety of different situations (Lord, De Vader, & Alliger, 1986). Implicit leadership theory postulates that our past experiences shape our perceptions of leaders through cognitive schemas and prototypes. Extending on that idea, leader categorization theory proposes that we match those implicit leader prototypes with our perceptions of leaders (Lord & Maher, 1991). In the traditional understanding of leader categorization, what constitutes a prototypical leader may differ across cultures, because different cultures can cause different learned cognitive schemas and stereotypes (Javidan, Dorfman, Sully de Luque, & House, 2006). However, evolutionary leadership theory suggests that in addition there may also be evolved or instinctive implicit biases concerning who is categorized as a leader. A similar evolutionary psychology approach has recently been adopted by Murray and Schmitz (2011) to explain the height-leadership association. Also, recent work has started to explore this idea concerning implicit perceptions of leadership using facial cues (Spisak, Homan, Grabo, & Van Vugt, 2011).

Based on an evolutionary analysis it is perhaps not surprising that the association between height and status is a highly automatic process. Taking an embodied cognition perspective, Giessner and Schubert (2007) suggested that people hold strong implicit beliefs, articulated in language, about the relationship between height and power (height terms such as up, high, super, top are cognitively associated with power). They showed that something as abstract as the length of a vertical line can positively influence the perceptions of someone's power position. Additionally, dominance and submission are often cognitively represented as being higher or lower in physical space (Robinson, Zabelina, Ode, & Moelle, 2008). Such findings indicate that the height–status association is automatic and unconscious. Furthermore, the implicit association between physical size and dominance occurs at an early age. Infants as young as 10 months associate size with dominance, suggesting the possibility that this association—or at least the propensity to associate height with power—is hardwired in the brain (Thomsen, Frankenhuis, Ingold-Smith, & Carey, 2011).

Thus, we argue that height affects the leadership categorization process and—based on our evolutionary analysis—this is likely to be influenced by perceptions that taller individuals are more dominant, physically healthier, and more intelligent.

Sex differences in leadership perception

Can this height leadership advantage account for sex differences in leadership emergence? Research suggests that male leadership is the norm in modern business environments (as it likely was in ancestral environments). When men and women work together in teams the male usually takes on the leadership role (van Vugt, 2006) and men tend to lead in a more authoritarian way (Eagly & Johnson, 1990). However, this is not to say that men make better leaders than women. Yet our hypothesis suggests why this male leadership bias may be hard to

eradicate, as males are on average much taller than females (Gustafsson & Lindenfors, 2004).

Height has been linked to dominance perception (Marsh, Yu, Schechter, & Blair, 2009) and to actual dominant behavior (Melamed, 1992; Sharoni, 2006), indicating that the belief that taller individuals are more dominant is not merely a cultural stereotype. Also, height may not lead to increased dominance perception in females, as individuals selectively pay attention to dominance cues in males but not in females (Maner, DeWall, & Gailliot, 2008). Additionally, research shows that at times of intergroup conflict a more masculine leadership prototype is activated because masculinity is associated with dominance (Spisak et al., 2011; van Vugt & Spisak, 2008). This leads to the prediction that, all else being equal, people should rate men as more leader-like than women, on average.

What about the different perceptions of tall men and women as leaders? Given the evolutionary importance of physically imposing leaders during conflict and group movements we suspect that height is a more important cue for leadership in men than women. Thus, we predict that, although taller men and women are seen as more leader-like than their shorter counterparts, this effect will be stronger for men than for women. Furthermore, we argued earlier that height is a general fitness indicator and there is some evidence that taller individuals are indeed healthier, more dominant, and even more intelligent. Intelligence is a predictor of leadership across many different situations (Lord et al., 1986). General intelligence has been associated with leadership effectiveness in business (Kuncel & Hezlett, 2010; Müller & Turner, 2010; Ones, Viswesvaran, & Dilchert, 2004), politics (for an overview, see Simonton, 2006), and even among monarchs (Simonton, 2001). Yet, unlike physical strength and dominance, intelligence does not differ between sexes, at least on average (Kanazawa & Reyniers, 2009). Therefore, we expect the height leadership advantage for women to be due primarily to them being perceived as more intelligent rather than physically fit and imposing.

In sum, the height leadership advantage among men might be driven by indicators of both intelligence and physical attributes such as dominance and health, whereas among women the height leadership advantage might be driven primarily by perceptions of general intelligence.

Research design

For the current research we adopt an evolutionary perspective to test the advantage of tall stature regarding leadership perception. We predict that taller individuals are judged as more leader-like by potential followers, and that this effect is driven by traits which observers automatically link to people of a certain physical height; namely health and dominance (mainly for men), as well as intelligence (for both sexes). By manipulating the height of a male and female target leader, perceivers evaluate these targets on the basis of their leadership potential. We expect that a taller version of the same individual will be perceived as more leader-like than the identical shorter version. We expect this effect to be stronger for males than for females, because dominance and physical health are more characteristic for masculine leadership roles in our ancestral past. Taller individuals are expected to be perceived as more intelligent, which should apply to both sexes. Thus, we expect that perceived intelligence mediates the effect of height on leadership perception for female target leaders, and that perceived intelligence, as well as dominance and health, mediate the effect for male target leaders.

Method

Participants and design

Participants were 256 anonymous Internet users who responded to an invitation via social media websites or via direct e-mail contact to participate in a short online study. Of these 256 respondents, 181 were female, and 230 had Dutch nationality. We employed a mixed-model design, as participants were randomly assigned to one of two height conditions (short targets, tall targets), and each answered questions regarding a male as well as a female target. Height was a between-subjects factor while gender was a within-subjects factor; every participant either saw a tall man and a tall woman, or a short man and a short woman.

Figure 1. Images shown to participants in the study.

Procedure

Manipulation Height was manipulated by using an imaging software to make the target appear 15 centimeters taller or shorter than the Dutch average male or female height. This resulted in a male short height of 1.65 meters, a male tall height of 1.95 meters, a female short height of 1.55 meters, and a female tall height of 1.85 meters. The short and tall versions of the targets, depicted on an edited photograph, were identical apart from their difference in size. The targets wore business attire and were middle-aged. See Figure 1 for the pictures used in the study.

Dependent measures First, participants viewed a photograph of either a short or tall male accompanied by supplemental information regarding his name, height, age, and hobbies. Participants then reported their level of agreement on a 10-point scale (0 = *completely disagree*, 10 = *completely agree*) to a few statements regarding their impression of the male target. Items were (in order): "*This person looks vital*," "*This person looks like a leader*," "*This person looks dominant*," and "*This person looks intelligent*." The item concerning leadership perception was the dependent variable, while the others were potential mediators of the effect of height on leadership perception. We operationalized health with the term "vital" as it encompasses health as well as stamina, energy, and vigor. We did not use "*This person looks healthy*" because this could also be interpreted as merely meaning the opposite of being ill or sick.

After viewing the photograph and responding to the items participants were asked to estimate the height of the target on a 5-point scale (1 = *Very tall*, 2 = *Tall*, 3 = *Neither tall nor short*, 4 = *Short,* and 5 = *Very short*), in order to ensure the manipulation of height was successful. The entire procedure was subsequently repeated with a female target. All items were identical for male and female targets. Finally, participants filled out information regarding their gender, height, and nationality, and were given the opportunity to leave behind their e-mail address in order to receive information about the study.

Results

For means and *SD*s of the dependent measures across the target gender and target height conditions refer to Table 1. Due to the directional nature of the hypotheses, all *p*-values reported are one-sided unless otherwise specified.

Manipulation check

A *t* test showed that the male ($t(263) = 13.42$, $p < .001$) and female target ($t(263) = 8.13$, $p < .001$) were judged significantly taller in the tall ($M = 2.86$ for male, $M = 3.75$ for female) than in the short condition ($M = 2.86$ for male, $M = 3.75$ for female). The manipulation thus successfully influenced the

Table 1. Means (and *SD*s) for leadership perception, and dominance, vitality, and intelligence perception, for short versus tall male and female targets

	Leader	Dominance	Vitality	Intelligence
Male				
Short	5.91 (1.96)	5.01 (1.84)	6.88 (1.72)	6.72 (1.76)
Tall	7.48 (1.70)	6.26 (2.14)	7.52 (1.47)	7.50 (1.53)
Total	6.66 (2.00)	5.61 (2.08)	7.18 (1.64)	7.09 (1.69)
Female				
Short	5.30 (2.17)	4.95 (2.37)	6.01 (1.75)	6.22 (1.80)
Tall	5.80 (2.39)	5.42 (2.46)	6.40 (1.99)	6.72 (1.71)
Total	5.54 (2.29)	5.17 (2.43)	6.20 (1.87)	6.46 (1.77)

participants' perception of height in the corresponding conditions.

Effects of height and gender on leader perception

A 2 (short target, tall target; between subjects) × 2 (male target, female target; within subjects) mixed model design was tested with a repeated measures ANOVA to examine the main effects of gender and height and their interaction effect on leader perception. To control for participant gender and participants' own height, we added these two variables to the model as covariates. There was no effect of participant gender ($F(1, 261) = 1.191$, $p = .276$) or of participant's own height ($F(1, 261) = .001$, $p = .974$) on leader perception (two-sided *p*-values are reported for the covariates as we had no hypothesis for participant gender or participant height).

As expected, there was a significant main effect of target gender on leader perception, $F(1, 261) = 3.41$, $p = .033$, $\eta^2 = .01$, with male targets receiving higher ratings of leader perception than female targets. Also, tall targets were rated significantly more leader-like than short targets, $F(1, 261) = 24.21$, $p < .001$, $\eta^2 = .08$. Finally, the interaction effect of target gender and target height on leader perception was also significant, $F(1, 261) = 3.41$, $p < .001$, $\eta^2 = .04$. As depicted in Figure 2, the interaction effect is driven by the fact that the positive simple effect of height on leader perception is weaker for the female target, $t(1, 261) = 1.76$, $p = .039$, than for the male target, $t(1, 261) = 6.81$, $p < .001$.

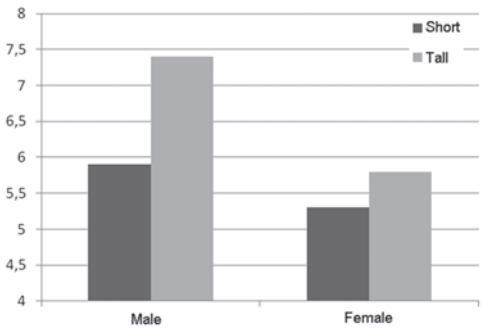

Figure 2. Interaction effect of target gender and target height on leadership perception (dependent variable "*This person looks like a leader*").

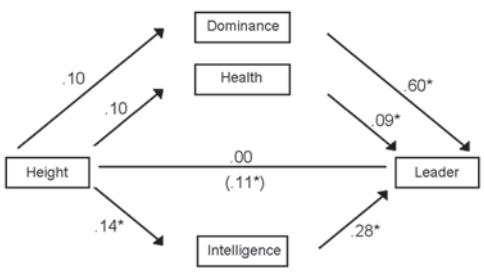

Figure 3. Mediation model showing standardized regression coefficients for female targets.
*$p < .05$ (one-sided *p*-values).

Mediation analysis

We explored the effect of height on leader perception further by performing a mediation analysis using the bootstrapping method (with 5,000 resamples) to test several indirect effects (Preacher & Hayes, 2008). We tested a multiple mediator model (see Figures 3 and 4) with height as the independent

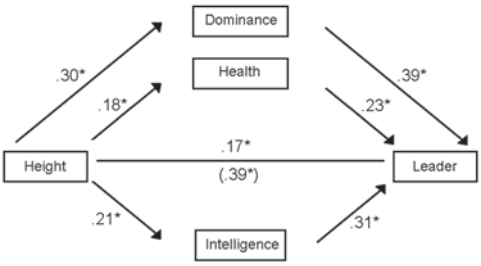

Figure 4. Mediation model showing standardized regression coefficients for male targets.
*$p < .05$ (one-sided p-values).

variable, leader perception as the dependent variable, and dominance, health, and intelligence as mediators. As our hypotheses differ for male and female targets we first tested the model on the perception of male leadership, and then repeated the process exclusively for the perception of female leadership. Finally, we tested whether the results for male and female targets significantly differed from each other. In all mediation analyses participant gender and participants' own height are controlled for by adding these variables as covariates.

Male target For the male target, we found reliable indirect effects for dominance with a 95% confidence interval of .25 to .67, for health with a 95% confidence interval of .05 to .30, and finally for intelligence with a 95% confidence of .10 to .49. The results show partial mediation, as the total effect ($\beta = .39, p < .001$) attenuates when the mediators are added to the model ($\beta = 17, p < .001$) but remains significant. Figure 3 shows these and other parameters of the mediation model.

Female target The mediation analysis applied to the female target yielded different results, as dominance did not mediate the effect of height on leader perception (with a 95% confidence interval of −.06 to .34), and neither did health (with a 95% confidence interval of −.01 to .13). However, we did find the expected indirect effect for intelligence with a 95% confidence interval between .03 and .35. The results for female leader perception show full mediation, as the total effect ($\beta = .11, p = .039$) becomes nonsignificant when the mediators are added to the model ($\beta = .00, p = .482$). Figure 4 shows all standardized regression coefficients.

Comparison of male and female target Target gender was tested as a within-subjects factor by repeating the mediation analysis with difference scores (scores for male target minus scores for female target). First, results showed that the simple main effect of height on leader perception for the male target was significantly stronger than for the female target, $t(6, 258) = 3.51$, $p < .001$, $\beta = .21$. Second, results showed that the indirect effect of height on leader perception through dominance was significantly stronger for the male target than the female target (with a 95% confidence interval of .05 to .64). The indirect effects through health (with a 95% confidence interval of −.05 to .15) and intelligence (with a 95% confidence interval of −.09 to .36) did not differ significantly for male and female targets.

Summary of results

Overall, the results support our hypotheses by demonstrating that men are seen as more leader-like than women, and tall individuals are seen as more leader-like than short individuals. Also, the effect of height on leader perception is stronger for men than for women. Additionally, the results indicate that tall men are seen as more leader-like because of their perceived dominance, health, and intelligence; but taller women are only seen as more intelligent and therefore more leader-like. Height did not have a significant effect on female health or female dominance. As expected, the indirect effect of dominance was significantly stronger for the male target than for the female target, and the indirect effect of intelligence did not differ across target gender. However, although health was a significant mediator for men but not women, the indirect effect of health was not significantly stronger for the male target than for the female target. Participant gender and participant height were controlled for throughout all analyses.

Discussion

The results of the study support our hypotheses. Our findings show that taller individuals are evaluated as more leader-like than shorter individuals; and this effect appears to be particularly strong

when evaluating male targets on leadership potential. The gender difference was not completely attributable to height, as the male target was seen as more leader-like overall than the female target when controlling for height. The tall male target was judged as more leader-like due to perceptions of dominance, vitality, and intelligence, while for the female target only intelligence mediated the effect. Comparing the results for males and females, we found that the mediating effect of dominance was significantly stronger for men, while the mediating effect of intelligence was equally strong for male and female targets. Even though health significantly mediated the effect of height on leader perception for males but not for females, our results did not show a significantly stronger effect for the male targets than for the female targets. The largest discrepancy between the effect of height on male and female leader perception appears to be perceived dominance.

Many studies have shown a correlation between height and leadership, and our results now offer experimental support to such findings. It was previously demonstrated that manipulating size predicted dominance perception in male targets (Marsh et al., 2009), which was also replicated with the current study. We extended this effect to leadership perception in male and female targets, and showed that this is not only because of inferred dominance but also because people expect taller individuals to be more intelligent, and in the case of men, more healthy.

Previous findings on the relationship between height and measures of status and leadership have been inconsistent for females. Several individual studies have demonstrated the effect for males but not females (Deck, 1968; Frieze, Olson, & Good, 1990; Gawley et al., 2009), though a meta-analysis indicated an overall relationship between height and income for females (Judge & Cable, 2004). Our findings are consistent with such an overall effect, but demonstrate that height is more readily used as a cue in males to infer leadership potential.

Although height did not lead to increased dominance and health perception in females, we did find that perceived dominance and health were strongly related to female leader perception. Apparently observers used perceived dominance to gage leadership potential of the female target, yet it remains unclear how the observer inferred how dominant the female target was. Due to the sexually dimorphic nature of dominant physical traits such as strength and size, individuals may use other cues than physical formidability to infer female dominance, or have a different concept of dominance when pertaining specifically to females. Also, intelligence fully mediated the effect of height on leadership perception, while for males the effect remained strong controlling for intelligence, dominance, and health. Case and Paxson (2008) argued that the height premium is due to increased cognitive capacity. Perhaps they are right, but more so for females. Tall males seem to have an added advantage of being perceived as more dominant and healthy, and therefore more leader-like.

For the current study we operationalized tall and short stature as relative to the average height within that gender, meaning that "short" and "tall" indicated different heights across the two targets. It seems possible that females were perceived as less leader-like simply because the tall female was shorter than the tall male. However, comparing the means, the short male (at 165 cm) was perceived as equally leader-like as the tall female (at 185 cm), though the tall female was substantially taller than the short male (illustrated by gender's significant main effect after controlling for height). Thus, we would expect that if we had a male and female target of equal stature, the male would be perceived as more leader-like than the female. The "think leader think male" prototype is thus only partially explained by height discrepancy between the sexes. However, here we have demonstrated that "think leader think tall" may also be an implicit rule-of-thumb in judging leadership potential.

The male leadership advantage was to be expected in our study because we induced a competitive business context and showed potential leaders in business attire. Research has shown how situational factors can lead to diverging judgments and preferences concerning masculine and feminine leaders (Spisak et al., 2011; van Vugt & Spisak, 2008). Perhaps by framing leadership in a less prototypically masculine context—for example a school or hospital environment—we would not have found such a strong gender effect. Also, we were looking at a very

broad definition of leadership. Categorization happens at the superordinate level of leader versus nonleader as we measured in the current study, but also occurs at more basic and subordinate levels (Rosch, 1978). For instance, height may be associated with basic leader categories described by Lord et al. (1984) such as business or military leader, but may not be associated with less competitive and less masculine leadership prototypes. Also, at a subordinate level, we expect height to be a predictor of, for instance, perceived autocratic or authoritarian leadership, as dominance figures strongly in such leadership styles (van Vugt, Jepson, Hart, & De Cremer, 2004). However, there may not be a strong connection between height and perceptions of relational or democratic leadership styles.

As is the case for many social species, human bodily size signals dominance (Marsh et al., 2009). However, dominance is not the only measure of human status; in human societies status is often based upon prestige (Henrich & Gil-White, 2001). Whereas dominance is achieved through force and intimidation, prestige is based on the free conferral of status from followers. Leaders may adopt either a more dominant or prestigious strategy; prestigious leaders attain their position by means of their superior knowledge, expertise, or ability in a certain domain. Height may lead to dominance as well as prestige perception, as our findings show that individuals do seem to use height as a cue to infer intelligence. Morphological cues signaling dominance have been widely studied. Perhaps considering morphological cues which possibly signal prestige (for instance by means of signaling intelligence) is an important area for future research on human leadership.

Limitations and implications

There are a few limitations to the study. Firstly, we used single items to measure perceptions of dominance, health, and intelligence. A more careful construction of scales measuring more specific domains of dominance (for instance physical strength, intimidation, fighting ability), health (physical health, vitality, energy, stamina), and intelligence (analytical skills, problem-solving capacity) is advisable for future endeavors. Also, the order in which the male and female target were presented was not counterbalanced, meaning that judgments of the female leader might have been relative to the male leader, while the male leader received a more independent judgment. However, males and females are not judged independently from each other in life outside of the lab. Higher positions of leadership in the business world are male-dominated, and female leaders are likely judged relative to their male colleagues. Finally, by using target leaders dressed in business attire, we narrowed down leadership perception to one particular context. For this first study, it might have been better to present a neutral context, and address situational differences with additional experimental conditions or additional studies.

Despite limitations, by using a paradigm where height is manipulated, we have been able to demonstrate that a height difference does lead to an actual change in leadership perception. Also, we have been able to show that the particular male height leadership advantage is due to them being perceived as more dominant, healthy, and intelligent. Although such automatic perceptions may have been helpful for survival in our ancestral past by selecting the physically strongest and fittest individuals as leaders, people should be aware that when selecting leaders today we should be careful not to overlook potentially effective leaders merely because they fail to match the cognitive leadership prototypes we have evolved. Leader perceptions do not necessarily match leader effectiveness (Lord & Hall, 2003); dominance may be a prime example of this. Inherent perceptions of leadership may especially be a hindrance for aspiring female leaders, even more so in typically masculine contexts. Adopting an evolutionary psychology perspective to understand our implicit perceptions of leadership can facilitate demonstrating why leadership remains male-dominated, while suggesting that our current environment does not necessarily justify these perceptions anymore.

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