# Stand tall, but don't put your feet up: Universal and culturally-specific effects of expansive postures on power

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# Stand tall, but don't put your feet up: Universal and culturally-specific effects of expansive postures on power

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## HIGHLIGHTS

- Previous research suggests that expansive postures are universally connected to power.
- We propose that this link varies by cultural background and type of posture.
- Expansive-hands-spread-on-desk and upright-sitting poses universally produced power.
- Expansive-feet-on-desk pose was viewed as the least compatible with East Asian norms.
- This pose led Americans, but not East Asians, to feel powerful and to take action.

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## ABSTRACT

Previous research suggests that there is a fundamental link between expansive body postures and feelings of power. The current research demonstrates that this link is not universal, but depends on people's cultural background (Western versus East Asian) and on the particular type of expansive posture enacted. Three types of expansive postures were examined in the present studies: the expansive-hands-spread-on-desk pose (Carney et al., 2010), the expansive-upright-sitting pose (Huang et al., 2011; Tiedens & Fragale, 2003), and the expansive-feet-on-desk pose (Carney et al., 2010). Of these postures, the expansive-feet-on-desk pose was perceived by both Americans and East Asians as the least consistent with East Asian cultural norms of modesty, humility, and restraint (Study 1). The expansive-hands-spread-on-desk and expansive-upright-sitting postures led to greater sense of power than a constricted posture for both Americans and East Asians (Studies 2a–2b). In contrast, the expansive-feet-on-desk pose led to greater power activation (Study 3) and action orientation (Study 4) for Americans, but not for East Asians. Indeed, East Asians in the expansive-feet-on-desk pose showed less power activation and action orientation than Americans in this pose. Together, these findings support a basic principle of embodiment — the effects of posture depend on: (a) the type of posture, and (b) the symbolic meaning of that posture.



## Introduction

In 2010, General Motors CEO Daniel Akerson was photographed at a Detroit auto event with his head held high and arms extended in an open, expansive pose (Fig. 1a). His gestures seemed fitting given that GM was on an upswing, and in 2011, was lauded as the world's largest automaker. One year earlier, Toyota Motor Corporation was also honored as the world's largest automaker, but its CEO, Akio Toyoda, was pictured in a very different pose — with his head bowed and arms down by his side (Fig. 1b). Although both pictures were taken at a time when these companies and their leaders enjoyed power and prestige, these images suggest that expressions of power in one culture may not generalize to other cultures.

One of the most widely cited findings in the literature is that open, expansive body postures reflect power and dominance (e.g., Darwin, 1872/2009; de Waal, 1998; Ellyson & Dovidio, 1985; Hall, Coats, & LeBeau, 2005; Tiedens & Fragale, 2003). Expansive posture is not only a marker of having power, but it also affects power-related thoughts (Huang, Galinsky, Gruenfeld, & Guillory, 2011), feelings (Tiedens & Fragale, 2003), behavior (Huang et al., 2011), pain endurance (Bohns & Wiltermuth, 2011) and neuroendocrine responses (Carney, Cuddy, & Yap, 2010). Indeed, expansive postures activate power at an implicit level and lead to greater action orientation than constricted postures, and these effects are independent of the power of the roles that people inhabit (Huang et al., 2011). Together, these findings demonstrate that brief, nonverbal displays of

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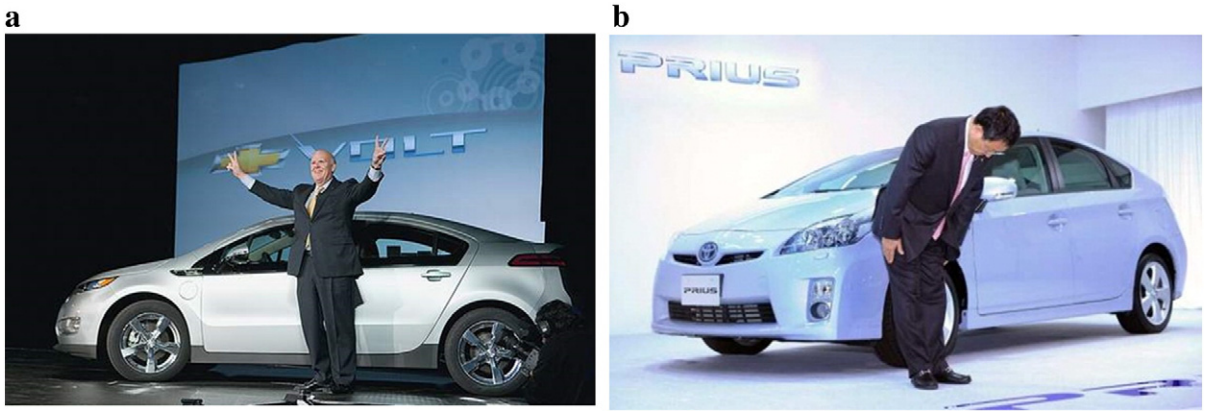


**Fig. 1.** a. General Motors CEO Daniel Akerson. b. Toyota Motor Corporation CEO Aiko Toyoda.

expansive postures facilitate an array of power-related outcomes. Further, the links to the animal kingdom suggest that these embodied effects are a universal experience of being a primate.

The current research challenges whether this link between posture and power is so fundamental and invariant. In particular, we propose that not everyone reaps the same psychological benefits from engaging in expansive postures. Rather, people's subjective experiences may depend on the "fit" of specific body postures with the norms and values that are embedded in one's cultural background.

### *Cultural variation in embodied cognition*

Although some scholars suggest that the effects of bodily movements are the result of innate physiological structures, others suggest that the association between motor movements and concepts is learned and culturally-specific (Barsalou, 1999; Niedenthal, Barsalou, Winkielman, Krauth-Gruber, & Ric, 2005). For example, extending the middle finger – an expression of hostility in Western societies – led participants in the U.S. to interpret a target's ambiguous behavior as hostile, whereas upward extension of the thumb – a gesture of approval in the U.S., but not in other parts of the world (Axtell, 1998) – led to favorable evaluations of the same target (Chandler & Schwarz, 2008).

Extending these ideas, we suggest that even seemingly universal body postures, such as expansive postures, may be imbued with culturally-specific meaning. In Western cultures, the self is construed as independent, unique, and separate from others; the self is an efficacious, autonomous agent, and the cultural norm is to express one's inner attributes and feelings, self-enhance, and stand out relative to others (Markus & Kitayama, 1991; Morling, Kitayama, & Miyamoto, 2002). It makes sense then, that power in Western cultures would be conceptualized in terms of personal influence, entitlement, and assertiveness (Zhong, Magee, Maddux, & Galinsky, 2006).

In contrast, East Asian philosophies, such as Confucianism and Buddhism, conceptualize the self as inherently interconnected and interdependent with others. Within these traditions, personal distinctiveness and self-esteem are less important than maintaining social relationships, preserving ingroup harmony, fulfilling duties and responsibilities, and striving for self-improvement (Crocker & Park, 2004; Heine, Lehman, Markus, & Kitayama, 1999; Markus & Kitayama, 1991; Triandis, 1989). In such cultures, because the self is construed in relation to others, the cultural norm is to not stand out, but to display modesty and humility, and to adjust one's own behavior to fit in with the group (Heine et al., 1999; Kim & Markus, 1999; Morling et al., 2002). Accordingly, values of self-discipline, restraint, and responsibility for others are thought to correspond to East Asian views of power (Zhong et al., 2006).

Cultural norms and values may be further communicated by the types of postures that people display. From this perspective, even postures that have been previously assumed to be universal in meaning may produce different psychological experiences for people from different cultures. Whereas expansive postures that emphasize independence, self-expression, and entitlement are compatible with Western norms and values, such postures may conflict with East Asian norms of modesty, humility, and restraint, and therefore not produce the same power-related effects for people from these cultures.

### *Overview of present research*

The current studies sought to replicate and extend previous research on embodiment and power by examining: (a) whether expansive postures vary in their compatibility with East Asian cultural norms and values, and (b) whether expansive compared to constricted postures have culturally-specific effects on power and power-related outcomes. To test these ideas, we first assessed the degree to which various expansive versus constricted body postures were perceived to violate East Asian cultural norms. Next, we examined effects of participants' cultural background and enactment of expansive versus constricted postures on the activation of power (Studies 2a–2b, Study 3) and on power-related consequences (i.e., action orientation, Study 4). We hypothesized that expansive postures that do not conflict with East Asian cultural norms would boost feelings of power for all individuals, regardless of cultural background. In contrast, expansive postures that violate East Asian norms and values were expected to produce power-related effects for people from Western cultures (e.g., the U.S.), but not those from East Asian cultures (e.g., China, Japan, Korea).

These studies offer two important contributions. First, they seek to demonstrate that the purported robust link between power and posture varies as a function of one's cultural background. Second, they suggest that embodiment depends on two key features: (a) the physical posture itself, and (b) the symbolic meaning of the posture. If the effects of body posture differ by cultural background, then posture itself doesn't have a direct effect on behavior and cognition, but carries its influence through its symbolic meaning.

## Study 1: posture and cultural norms

Study 1 examined whether a variety of expansive versus constricted body postures were perceived to be consistent or inconsistent with East Asian cultural norms and values. We tested whether three main expansive postures studied in the literature – (a) an expansive-hands-spread-on-desk posture (Carney et al., 2010), (b) an expansive-upright-sitting posture (Huang et al., 2011; Tiedens & Fragale, 2003), and (c) an expansive-feet-on-desk posture (Carney et al., 2010) – were perceived to conflict with qualities that are valued in East Asian cultures (e.g., humility, modesty, restraint).

*Participants and procedure*

Eighty undergraduate students (50 men, 30 women; 39 born in the U.S., 41 born in East Asia — i.e., China, South Korea, Taiwan, Vietnam) participated in the study.[1] Participants were randomly assigned to view a photo of a male target in one of the following postures (see Appendix A): (a) an expansive-hands-spread-on-desk posture (Carney et al., 2010), (b) an expansive-upright-sitting posture (adapted from Huang et al., 2011; Tiedens & Fragale, 2003), (c) an expansive-feet-on-desk posture (Carney et al., 2010), or (d) a constricted-sitting posture (i.e., sitting with hands under thighs, Huang et al., 2011).

Participants rated the target on a series of traits using a 7-point semantic differential scale where 1 = *very* (e.g., *humble*) and 7 = *very* (e.g., *proud*). Items were developed based on past theorizing and research on qualities that are normative and valued in East Asian cultures (Markus & Kitayama, 1991; Zhong et al., 2006). The items were: *humble–proud* (reversed), *arrogant–modest*, *impolite–polite*, *rude–well-mannered*, *respectful–disrespectful* (reversed), *responsible–irresponsible* (reversed), *restrained–unrestrained* (reversed), *disciplined–undisciplined* (reversed), *careless–careful*, and *cautious–reckless* (reversed).

*Results and discussion*

To determine the overall factor structure of the items, we conducted a principal components factor analysis with varimax rotation. Results revealed a one-factor solution with an eigenvalue of 5.86 that explained 59% of the variance. Items were thus averaged together ($\alpha = .92$) such that higher scores reflected greater perceived conformity of the target to East Asian cultural norms and values.

For our primary analysis, we conducted a 2 (culture of participant) × 4 (target posture) ANOVA to examine whether perceptions of the target differed as a function of participants' cultural background and the target's posture in the photo. There was a significant main effect of target posture, $F(3,72) = 32.92$, $p < .001$; no other main effects or interaction were significant ($ps > .21$). Overall, participants rated the target in the expansive-feet-on-desk posture ($M = 2.70$, $SD = .60$) as possessing traits that were less compatible with East Asian cultural norms and values than targets in the constricted-sitting posture ($M = 4.84$, $SD = .72$; $p < .001$, $d = -3.23$), expansive-hands-spread-on-desk posture ($M = 3.43$, $SD = .76$; $p < .001$, $d = -1.07$), or expansive-upright-sitting posture ($M = 3.57$, $SD = .73$; $p < .001$, $d = -1.30$). Ratings of targets in the expansive-hands-spread-on-desk posture and expansive-upright-sitting posture did not differ from each other ($p = 1.00$), but did differ from the constricted-sitting posture ($ps < .001$). In sum, Study 1 shows that the expansive-feet-on-desk posture is universally perceived as being less compatible with East Asian cultural norms and values than a constricted-sitting posture or other expansive postures.

## Studies 2a–2b

In the next set of studies, we examined the effects of expansive versus constricted postures on feelings of power among Westerners and East Asians. In particular, we investigated whether the expansive-hands-spread-on-desk posture (Study 2a) and the expansive-upright-sitting posture (Study 2b) would boost feelings of power for both Americans and East Asians.

[1] All of the Asian participants in these studies were born in East Asia and were currently attending college in the U.S. Average age upon moving to the U.S. was: Study 1 ($M = 15.50$, $SD = 4.39$); Study 2a ($M = 14.54$, $SD = 5.86$); Study 2b ($M = 16.13$, $SD = 4.40$); Study 3 ($M = 16.69$, $SD = 3.89$); Study 4 ($M = 14.65$, $SD = 4.75$).

*Study 2a: expansive-hands-spread-on-desk posture*

*Participants and procedure*

Two-hundred and thirteen undergraduate students (102 men, 111 women; 128 from the U.S., 85 from East Asia) participated in the study. Participants were led to believe that researchers were collecting pilot data for a future study. They were told that they would be holding a particular posture for 3 min and would then be rating their experience. Participants held their body posture while completing a filler task that involved forming mental impressions of a series of faces that appeared one at a time on a computer screen in front of them (see Carney et al., 2010).

Participants who were assigned to the expansive-hands-spread-on-desk posture condition were asked to stand up, place their hands on the desk in front of them so that their hands were slightly more than shoulder-width apart, and keep their elbows straight. In the constricted-standing posture condition, participants were asked to stand up, cross their legs at the ankles, and cross their arms across the chest so that their hands touched their back (adapted from Carney et al., 2010).

After 3 min, the experimenter returned to the room and administered the sense of power scale (Huang et al., 2011). Specifically, they were asked to think about how *in control*, *in charge*, *powerful*, *dominant*, *weak* (reversed), *dependent* (reversed), and *powerless* (reversed) they felt on a scale from 1 (*not at all*) to 11 (*very much*) ($\alpha = .83$).

*Results*

A 2 (culture of participant) × 4 (posture condition) ANOVA revealed a significant main effect of condition, $F(1, 209) = 10.52$, $p = .001$, $d = .49$, such that participants in the expansive-hands-spread-on-desk posture ($M = 6.57$, $SD = 1.79$) felt more powerful than those in the constricted-standing posture ($M = 5.71$, $SD = 1.73$). No other main effects or interaction were significant ($ps > .28$). In sum, regardless of cultural background, both U.S.-born and East Asia-born participants experienced greater feelings of power when they enacted the expansive-hands-spread-on-desk posture versus the constricted-standing posture.

*Study 2b: expansive-upright-sitting posture*

*Participants and procedure*

One-hundred and nineteen undergraduate students (41 men, 78 women; 63 from the U.S., 56 from East Asia) participated in the study. Participants were told that researchers were collecting data on perceptions of the ergonomic quality of the chairs used in the lab. In the expansive-upright-sitting posture condition, participants crossed their legs so that the ankle of their right leg rested on top of their left knee, their left arm rested on the armrest of the chair, and their right hand rested on the right corner of the desk in front of them (adapted from Huang et al., 2011). In the constricted-sitting posture condition, participants placed their hands under their thighs, placed their legs together, and dropped their shoulders (Huang et al., 2011). After 3 min the experimenter returned to the room and administered the same sense of power scale as in Study 2a ($\alpha = .81$).

*Results*

A 2 (culture of participant) × 2 (posture condition) ANOVA revealed a significant main effect of condition, $F(1,115) = 8.87$, $p = .004$, $d = .65$. Participants in the expansive-upright-sitting posture ($M = 6.69$, $SD = 1.54$) felt more powerful than those in the constricted-sitting posture ($M = 5.56$, $SD = 1.91$). There was also a main effect of participant culture, $F(1,115) = 7.15$, $p = .009$, $d = .60$, such that East Asians ($M = 6.68$, $SD = 1.32$) reported a greater sense of power than Americans ($M = 5.65$, $SD = 2.06$). The culture × condition interaction was not significant ($p = .40$). Overall, the results of Studies 2a–2b replicate previous findings (Carney et al., 2010; Huang et al., 2011) by showing that certain expansive postures – specifically, the

expansive-hands-spread-on-desk posture and expansive-upright-sitting posture – produce greater sense of power than constricted standing or sitting postures for both Americans and East Asians.

## Study 3: expansive-feet-on-desk posture and power activation

Study 1 found that certain expansive postures (e.g., putting one's feet on a desk) were perceived to violate cultural norms of modesty, humility, and restraint, which are highly valued in collectivistic cultures. Based on these findings, we predicted that this expansive posture –putting one's feet on a desk – would not be universally beneficial, and might even decrease feelings of power for those from East Asian cultures. To further examine the power-related effects of posture and to ensure that our results are not affected by the limitations of self-report, the current study assessed implicit power activation in addition to explicit activation of power.

### *Participants and procedure*

One-hundred and six students (64 men, 42 women; 61 from the U.S., 45 from East Asia) participated in the study. As in Study 2b, an experimenter asked participants to sit in a computer chair in a specific posture to ostensibly test the quality of the chairs in the lab room. In the expansive-feet-on-desk posture condition, participants leaned back in their chairs with their feet on top of the desk in front of them, legs crossed at their ankles, hands placed behind their head, fingers interlocked and elbows spread out wide (Carney et al., 2010). The constricted-sitting posture condition was the same as in Experiment 2b: participants placed their hands under their thighs, legs pressed together, and shoulders dropped. After 3 min the experimenter returned to the room and administered the dependent measures.

### *Implicit activation of power*

Implicit power activation was assessed using a word-completion task. There were five power-related fragments that could be completed as *power*, *command*, *direct*, *lead*, and *authority* (Huang et al., 2011). The remaining seven fragments were filler items. Each completed word received a score of 1 if it was related to power, or a score of 0 if it was unrelated to power. For example, completing "l_ad" as "lead" would result in a score of 1, but completing this fragment as "load" would result in a score of 0.

### *Sense of power*

Participants completed the same sense of power scale as in the previous studies ($\alpha = .76$).

### *Results and discussion*

### *Implicit activation of power*

We conducted a 2 (culture of participant) × 2 (posture condition) analysis of covariance (ANCOVA), controlling for English as one's native language.[2] There was a main effect of culture, $F(1,101) = 4.56$, $p = .035$, qualified by a significant culture × condition interaction, $F(1,101) = 4.02$, $p = .048$ (see Fig. 2). Among participants in the expansive-feet-on-desk posture condition, East Asians showed less implicit power activation than those from the U.S., $F(1,101) = 8.62$, $p = .004$, $d = -.55$. Participants from the U.S. showed greater implicit power activation when enacting the expansive-feet-on-desk posture ($M = 1.86$, $SD = 1.14$) versus constricted-sitting posture ($M = 1.23$, $SD = 1.07$, $F(1, 101) = 4.09$, $p = .046$, $d = .57$), whereas East Asians' implicit power activation did not differ by posture condition (expansive: $M = 1.30$, $SD = .86$; constricted: $M = 1.64$, $SD = 1.22$), $F(1,101) = 0.83$, $p = .40$.

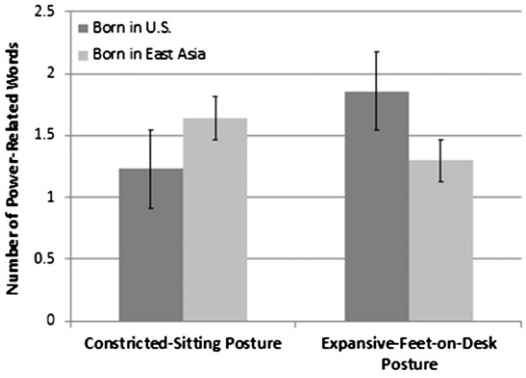


**Fig. 2.** Total number of power-related words generated by participants in the word-completion task in Study 3 as a function of cultural background of participant and posture condition, controlling for English as first language. Error bars represent ±1 SEM.

### *Sense of power*

A 2 (culture of participant) × 2 (posture condition) ANOVA revealed a main effect of culture, $F(1,102) = 6.37$, $p = .013$, qualified by a significant culture × condition interaction, $F(1,102) = 4.50$, $p = .036$ (see Fig. 3).[3] Among participants in the expansive-feet-on-desk posture condition, East Asians felt less powerful than those from the U.S., $F(1, 102) = 10.78$, $p = .001$, $d = -.92$. Participants from the U.S. felt more powerful when enacting the expansive feet-on-desk posture ($M = 7.48$, $SD = 1.78$) versus the constricted-sitting posture ($M = 6.73$, $SD = 1.33$), $F(1, 102) = 4.21$, $p = .043$, $d = .48$; there was no effect of posture on East Asians' sense of power (expansive: $M = 6.17$, $SD = .95$; constricted: $M = 6.61$, $SD = 1.25$), $F(1,102) = 1.06$, $p = .30$.

Overall, Study 3 revealed that enacting the expansive posture of putting one's feet on a desk differentially affected people from individualistic versus collectivistic cultures. Whereas people from the U.S. showed greater implicit power activation and felt more powerful when putting their feet on a desk (expansive pose) versus their feet together and their hands under their thighs (constricted pose), those from East Asia did not differ in their implicit or explicit sense of power as a result of enacting these postures. In fact, East Asians showed *less* implicit power activation and felt *less* powerful than those from the U.S. when enacting the expansive feet-on-the-desk pose. Together, these findings suggest that certain expansive postures (e.g., feet-on-desk pose) do not universally make people feel more powerful.

## Study 4: expansive-feet-on-desk posture and action-orientation

The final study examined effects of body posture on the tendency to take action — an important behavioral consequence of feeling powerful (Anderson & Galinsky, 2006; Galinsky, Gruenfeld, & Magee, 2003; Magee, Galinsky, & Gruenfeld, 2007). Because putting one's feet on the desk is perceived to violate East Asian cultural norms, we predicted that whereas people from the U.S. would make more action-oriented, risk-taking decisions after enacting this posture (as opposed to constricted postures), people from East Asian cultures would not.

### *Participants and procedure*

Eighty-three undergraduate students participated in the study (46 men, 37 women; 52 from the U.S., 31 from East Asia). Participants

[2] We included this covariate due to the nature of the task, which involved word completions, and because there were 7 participants from the U.S. for whom English was not their native language (1 Asian participant reported that English was their native language). Without this covariate, the culture × condition interaction was still significant, $F(1,102) = 4.94$, $p = .028$, and the pattern of results remained the same.

[3] We did not control for English as native language for sense of power (Study 3) or action-orientation (Study 4) because it was not significantly correlated with these dependent measures.

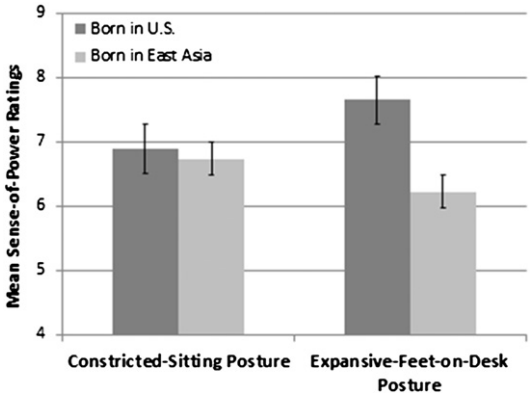


**Fig. 3.** Mean sense-of-power ratings in Study 3 as a function of cultural background of participant and posture condition. Error bars represent ±1 SEM.

were randomly assigned to the same posture conditions as in the previous study. Afterwards, participants made a decision to take action or not in the following scenarios (Huang et al., 2011; Tversky & Kahneman, 1981): (a) whether to leave the site of a plane crash to find help, (b) whether to join a movement to free a prisoner who was wrongly imprisoned, and (c) whether to choose a sure loss of $750 or a 75% chance to lose $1000 and 25% chance to lose nothing. Our dependent measure was the total number of times each participant chose the action-oriented, risky option (0–3).

*Results and discussion*

A 2 (culture of participant) × 2 (posture condition) ANOVA revealed a significant culture × condition interaction, $F(1,79) = 4.24$, $p = .043$ (see Fig. 4). No other effects were significant ($ps > .22$). Among participants in the expansive-feet-on-desk posture condition, East Asians showed significantly less action-orientation than those from the U.S., $F(1,79) = 4.61$, $p = .035$, $d = -.72$. Participants from the U.S. in the expansive-feet-on-desk pose condition ($M = 2.36$, $SD = .78$) made more action-oriented decisions than those in the constricted pose ($M = 1.75$, $SD = .85$), $F(1,79) = 7.21$, $p = .009$, $d = .75$; East Asians did not differ in their action-orientation between the expansive ($M = 1.79$, $SD = .80$) and constricted pose conditions ($M = 1.94$, $SD = .83$), $F(1, 79) = 2.80$, $p = .60$.

## General discussion

The current research suggests that cultural norms and values influence people's perceptions and experiences linked to body postures.

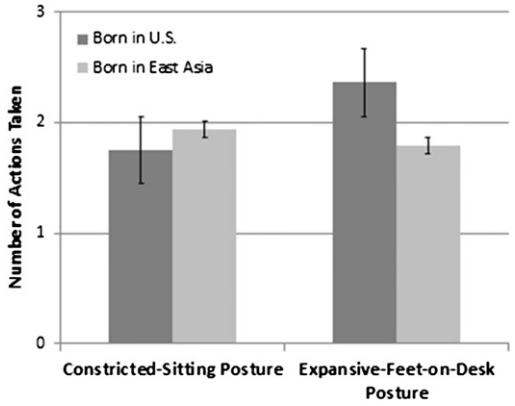


**Fig. 4.** Total number of times that participants took action in Study 4 as a function of cultural background of participant and posture condition. Error bars represent ±1 SEM.

Whereas previous research implied that there was a fundamental and universal link between expansive postures and power, we found that postures differ in how compatible they are with cultural norms and values, and as a result, cultural background predicts when a particular posture is linked to power.

We examined three expansive postures in the current studies — the expansive-hands-spread-on-desk posture (Carney et al., 2010), the expansive-upright-sitting posture (Huang et al., 2011; Tiedens & Fragale, 2003), and the expansive-feet-on-desk posture (Carney et al., 2010). Study 1 found that the expansive-feet-on-desk posture was universally perceived as the least consistent with East Asian cultural norms of modesty, humility, and restraint, whereas the other two expansive postures did not seem to violate East Asian cultural norms. Accordingly, both Americans and East Asians felt more powerful when they enacted the expansive-hands-spread-on-desk pose and expansive-upright-sitting pose. However, when East Asians enacted the expansive-feet-on-desk pose, they felt less powerful, had less implicit power activation, and showed less inclination towards action than Americans. Further, whereas Americans showed greater power activation and action in the expansive-feet-on-desk pose compared to a constricted pose, East Asians did not differ in their psychological responses to this particular expansive posture versus a constricted posture.

*Towards a basic principle of embodiment*

Building upon the idea that the body and mind reciprocally influence one another, we propose that the effects of embodiment depend on two key features: (a) the physical posture, expression, or movement itself, and (b) the symbolic meaning of the gesture within different contexts. The effect of enacting a posture thus depends on the larger meaning that posture carries.

Similar arguments were recently put forth by Adam and Galinsky (2012) regarding what they called "enclothed cognition." In their research, enclothed cognition depended on both the physical experience and symbolic meaning of wearing certain clothes. For example, a lab coat increased performance on attention-related tasks, but only when: (a) people were physically wearing it and (b) the lab coat was described as a doctor's coat, and not a painter's coat. In their studies, the symbolic meaning of clothes came from its occupation. In the current studies, the symbolic meaning of expansive postures depended on one's cultural background and the norms and values embedded within that culture.

*The importance of norms*

Study 1 of the current research revealed that postures differ in whether they violate cultural norms. More broadly, this raises the question of cultural norms surrounding power. In Western cultures, the norms around power highlight volitional capacity and assertive action; powerful individuals are freer to behave as they wish, regardless of situational constraints (Galinsky et al., 2003; Keltner, Gruenfeld, & Anderson, 2003; Zhong et al., 2006). Indeed, the powerful are given greater latitude in behavior; as a result, power is disinhibiting (e.g., gesturing more, interrupting, speaking loudly; Hall et al., 2005; Hirsh, Galinsky, & Zhong, 2011; Keltner et al., 2003). Behavioral disinhibition may also lead to the conferral of power — studies with Western participants in the Netherlands, for example, found that individuals who acted without constraint (e.g., dropping cigarette ashes on the floor; putting feet on a table) were perceived as more powerful than those who did not show these behaviors (Van Kleef, Homan, Finkenauer, Gündemir, & Stamkou, 2011).

In contrast, the current findings suggest that the expansive postures that are the most disinhibited – leaning back in a chair with one's feet up – are perceived to violate East Asian cultural norms of humility, modesty, and restraint. Thus, being disinhibited by enacting this posture did

not make everyone feel more powerful; Americans, but not East Asians, evidenced greater feelings of power and action-orientation when in this posture.

Given that norms reflect appropriate behavior in certain contexts, future research could examine the conditions under which different postures do or do not violate cultural norms. For example, because East Asians are more influenced by social cues (e.g., schematic faces; Kitayama, Snibbe, Markus, & Suzuki, 2004) than European Americans, exposure to social stimuli might amplify cross-cultural differences in the effects of embodiment. Future research could investigate further the boundary conditions and reciprocal relationship between the body and mind in context and their influence on important outcomes (see Balcetis & Cole, 2009).

*Conclusion*

The current research demonstrates that the robust link between power and posture is not invariant, but depends on the type of posture enacted and one's cultural background. Expansive postures are not universally the proximate cause of power-related behavior. Rather, certain expansive postures appear to ignite feelings of power in people from individualistic cultures, but do not produce a similar spark of power for those from collectivistic cultures. Specifically, whereas Americans felt more powerful when enacting the expansive-feet-on-desk posture, people from cultures that value modesty, humility, and restraint – i.e., East Asians – did not benefit psychologically from enacting this posture. Other expansive postures, such as the expansive-hands-spread-on desk

**Appendix A. Photos of target in postures (Study 1)**

*Expansive-Hands-Spread-on-Desk Pose*

*Expansive-Upright-Sitting Pose*

*Expansive-Feet-on-Desk Pose*

*Constricted-Sitting Pose*

posture and the expansive-upright-sitting posture, were not viewed as strongly violating East Asian norms, and thus, both Americans and East Asians felt more powerful when enacting these particular postures compared to constricted ones.

Across the globe, it appears that sitting/standing up tall or spreading out one's limbs can make people feel more powerful. Making oneself look big on the vertical or horizontal dimension is designed to signal dominance across a range of animal species (Darwin, 1872/2009; de Waal, 1998). It is not surprising, then, that the expansive postures most linked to dominance in the animal kingdom are also the ones that appear to be universally linked to power among humans. However, expansive postures that are more specific to humans, such as putting one's feet on a desk, do not make an individual feel powerful if they violate that person's cultural norms. It is therefore the symbolic meaning of a posture, rather than the posture itself, that ultimately shapes the psychological experiences of individuals from different cultural backgrounds.

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