Postures and Perceptions: Expansive and Contractive Postures on Perceptions of Power and Likeability

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Posture (expansive, neutral, contractive) serves as non-verbal cues that convey meaning influencing perceptions of power and likeability. Expansive postures are often linked to dominance and power, while contractive postures are associated with approachability. We hypothesized that expansive postures would lead to higher perceptions of power than contractive poses with a stronger effect for men. Additionally, we predicted that women in contractive poses would be perceived as more likeable, whereas men would appear more likeable in expansive poses. We assessed 128 University of San Diego participants, who rated images of men and women in expansive or contractive postures on power and likeability. Results supported our prediction that expansive postures convey greater power, with men in expansive stances receiving the highest power ratings. However, contrary to our hypothesis, women in contractive postures were not rated as more likeable. Instead, contractive postures overall were viewed as more likeable than expansive ones, regardless of gender. These findings suggest gender influences the interpretation of postural cues, with broader implications for social and professional interactions.

Postures shape our every moment. From confident power stances to relaxed sitting positions, every movement is interpreted differently (Zloteanu et al., 2021). For instance, a man standing proud and broad chested may be discerned as powerful, while a woman sitting in a relaxed and comfortable position may be perceived as approachable (Zloteanu et al., 2021). Postures act as a nonverbal cue that shapes how others perceive a person (Bailey et al., 2017). The connection between posture and communication can be rooted in the theory of Embodied Cognition, which explains how body positioning influences perception and interaction. The Role Congruence Theory furthers the idea that gender is more positively evaluated when men and women act in their stereotypical roles. These frameworks explain how gendered nonverbal cues influence how people position themselves, which can ultimately shape perceptions in reference to power and likeability. Our study explores how the intersection of body posture cues and gender shapes both perceived power and perceived likability, adding understanding of the subtle dynamics of nonverbal communication.

Postures (expansive and contractive)

There are three types of postures: expansive, neutral, and contractive. Expansive poses are created when the body is positioned to make it appear bigger, wider, and taller than its neutral state. Conversely, contractive poses are created when the body is concave and inward, making the body emerge as smaller and more petite than the body's neutral position (Elkjær et al., 2020). Body expansion or open stances—including dominant nonverbal behaviors—are sometimes implicit, signaling confidence in ways that may not be consciously recognized by perceivers; however, stances are still influential in shaping social interactions (Williams & Tiedens, 2016). For instance, it is generally unlikely that someone who tends to be more reserved will feel comfortable approaching someone who appears more powerful in an expansive posture. Therefore, various postures have an impact on perceptions of power and likeability. Nonverbal cues, such as body posture, play a crucial role in shaping how others perceive an individual's status and power. Specifically, social status impacts nonverbal movements. For example, a person who holds a position of power typically portrays expansive postures (Fişek et al., 2005). The difference between expansive and contractive postures can signal perceived power (Bailey et al., 2017). In other words, body postures play a significant role in influencing perceptions.

Further, the theory of Embodied Cognition suggests that our physical posture and movements shape how we perceive ourselves; essentially, our own body posture affects our own emotional states (Adams, 2010). Though this is not directly applicable to how we perceive others, the concept is similar, as posture clearly has an emotional effect on perception. Thus, embodied cognition highlights the complex interplay between physical posture, gender norms, and how these factors affect perceived power and likability. Broadbent and Lin (2023) examined the connection between physical stance and emotional experience. People who adopted expansive stances elicited feelings of power and confidence, while contractive poses correlated with sadness and a sense of low control. Further, Elkjær et al. (2020) investigated how certain body posture changes affect behavior (the connection between someone's feelings and actions). Both research studies asked the participants to mirror the postures of the image the participants were shown, which led to power and confidence. Although embodied cognition is about perception of ourselves, the same thought process could be applied to how we perceive others and how others perceive us.

Although expansive postures can convey a sense of power, they do not always enhance likability. In the United States, social norms often associate certain contractive postures with likability. Rennung et al. (2016) explores how adopting open and expansive high-power postures can lead to higher perceptions of power and a higher likelihood of being admired. However, it also notes that power poses may elicit envy and contempt, and a reduced probability of being liked. This indicates that while expansive postures can enhance perceptions of power, they may also lead to mixed social reactions. Conversely, Abdurazak et al. (2013) found that open body language, to an extent, is seen as more likable than contractive. For example, someone with arms by their side is seen as more friendly than someone with their arms crossed. Thus, body language, such as open or closed postures, can influence perceptions of likeability.

Gendered Postures

The way men and women hold their bodies can communicate different levels of power, influence, and how likable they appear. For example, expansive postures—such as standing tall with broad shoulders—are often associated with dominance and confidence. However, these postures may be interpreted differently depending on the individual's gender. Research has shown that when men adopt such expansive postures, they are typically seen as more powerful (Bailey & Kelly, 2015). In contrast, women in expansive postures may face mixed perceptions, with some viewing them as more powerful but potentially less likable, as societal expectations often associate femininity with more reserved or submissive body language.

Society's rigid stereotypes are understood through the Role Congruence Theory, which explains how men and women differ in behavior, based on existing societal constructs (Eagly & Karau, 2001). When an individual's or group's characteristics align with these role expectations (i.e., when there is congruence), they are more likely to be positively evaluated. Conversely, when characteristics do not align with the expected role (i.e., incongruency), this can lead to negative evaluations or bias. Furthermore, Role Congruence Theory explains that, through society's standards, men should not appear weak or feminine, and women not powerful or authoritative (Eagly & Karau, 2001). These cultural biases link power with masculinity and warmth with femininity. Ultimately, these dynamics interpret the complex and often restrictive expectations placed on both men and women's nonverbal postures.

Traditionally, gender has been correlated with status in relation to social power, which generalizes societal role assumptions about powerful and likable postures (Dovidio et al., 1988). In societal gender roles, men are normally seen in an expansive posture, asserting dominance and attaining power. On the other hand, women often viewed in more contractive poses, are seen as submissive and weak (Bailey & Kelly, 2015). These Western societal assumptions play a key role in stereotypes of gendered posture expectations. Since these societies are accustomed to certain behavioral norms, it is surprising when women express expansive postures and men express contractive postures (Eagly & Karau, 2001). These various postures determine the perceived power and likeability of the individual at hand.

Power

Research states that expansive posture results in differing perceptions of men and women (Eagly

& Karau, 2001). The way that men and women are frequently viewed creates a feeling of familiarity, which sways perceptions about likeability. Men in more expansive postures create a more powerful presence (Broadbent & Lin, 2023). Conversely, women are commonly in contractive postures. A woman's expectation to be submissive makes it more challenging to assert dominance through nonverbal communication (Aguinis & Henle, 2001). Furthermore, women are perceived to be more likable, but less powerful because the nonverbal cues, like contractive posture, can influence perceptions of power and authority (Aguinis & Henle, 2001). Moreover, these perceptions of postures challenge traditional gender roles. For example, powerful and dominant women defy expectations of appropriate behavior (Williams & Tiedens, 2016). These patterns reveal how nonverbal cues can subtly reinforce societal expectations. Dominant or expansive poses are generally valued in men, but can challenge traditional views when displayed by women (Rennung et al., 2016). Women can leverage nonverbal postures, which can shift others' perceptions of their power (Bailey & Kelly, 2015). However, these counter-stereotypical postures often come at a social cost. A woman's assertive poses may conflict with societal norms that traditionally associate high-power displays with men and low-power displays with women. Such disruptions suggest that nonverbal cues, like dominant or submissive postures, can reshape impressions of power and likeability.

Likeability

Men who adopt more contractive, low-power postures may be perceived as weak, yet also more approachable because these stances may signal warmth, friendliness, or likeability. Contractive postures may be seen as more likable, and expansive postures may be seen as more powerful, but could be perceived differently when it comes to gender.

Women, in particular, face unique challenges, as societal biases often lead to their assertive postures being interpreted as significantly less likable compared to men's assertive postures. The perception gap of likeability may be influenced by traditional gender norms and stereotypes that associate women's physical expression with submissiveness rather than dominance. In American culture, warmth is a valued quality in women, reinforcing a social norm that expects them to exhibit nurturing and accommodating behaviors (Williams & Tiedens, 2016). This bias signifies that women who assume expansive or assertive postures, often associated with power, may inadvertently convey a lack of warmth or friendliness, which can lead to unfavorable perceptions and reduce their overall likeability. Men are often more strictly policed for deviations from masculine behavior. If their behavior deviates from societal norms, individuals might doubt their strength and authority. While dominance in men is often seen as a positive indicator of confidence and leadership potential, the same behaviors in women can be perceived as threatening or overly assertive. These patterns reveal how nonverbal cues can subtly reinforce societal expectations: expansive poses are generally valued in men but challenge traditional views when displayed by women. This understanding of nonverbal cues and societal expectations sets the stage for exploring how physical stance not only influences social perceptions but also impacts emotional experiences.

However, our study aims to explore how different perspectives influence the perception of a target, rather than the emotion of physically enacting the motion. Both research studies highlighted the contradictions in gender-based perceptions: women are often viewed unfavorably in dominant, expansive positions, whereas men displaying similar behaviors are seen as more likable, as they are more congruent. These studies emphasize the complex relationship between body language, societal expectations, and perceived likability.

Our Present Study

Our study explores the perceptions of power and likeability when participants view images of both men and women adopting identical expansive or contractive postures. Previous research suggests that men adopting expansive postures and women in contractive postures align with the social gender norms prevalent in the United States, although there is little research on the associations of gendered postures with perceived power and likeability (Rennung et al., 2016). We hope to gain more knowledge about how perceptions of power and likeability are understood from looking at different body positions.

In our study, we aimed to examine how nonverbal body posture cues influence perceptions of power and likability, specifically by exploring interactions between body posture (expansive or contractive) and gender (male or female). We predicted that expansive postures would lead to higher perceptions of power compared to contractive postures, whether that is from a male or female, although it will have more of an effect on men. This effect may be because of established societal perceptions associating power with masculinity. Traditional assumptions about the dominance associated with expansive stances aligns with our observation that expansive poses might convey qualities potentially linked to power. We tested our hypothesis by asking participants to rate images of males and females in expansive, neutral, or contractive body position in regards to perceived power and likeability.

We also predicted that the main effects of posture would differ by gender of the target: women should be perceived as more likable when in contractive poses compared to expansive poses, while men will be perceived as more likable when in expansive poses when compared to contractive. Specifically, females in contractive poses will have the greatest likability response overall. Women in contractive poses will elicit this greater response due to such postures aligning with societal expectations of female warmth, friendliness, and approachability.

Method

Participants

The sample included 128 college-aged students (19 men, 95 women) between the ages of 18 and 28 (M = 20.04, SD = 1.780). We recruited University of San Diego psychology students through posters on campus (N = 84) as well as Introduction to Psychology courses in the psychology department (N = 44). Some participants were not compensated for their work; however, the Introduction to Psychology students received one point of course credit for their participation. The participants were of 5 racial groups (45.3% Caucasian, 24.2% Latinx, 8.6% Asian, 6.3% African American, and 4.7% other).

Procedure and Design

This experiment was a 2 (postures: contractive, expansive) x 2 (target gender: female, male) mixed model factorial design, with postures as a within-subjects variable. The dependent variables were perceived likeability and perceived power of the target. Potential participants were invited to participate in a survey completed via Qualtrics. In the survey, the participant viewed 3 images of different men and women sitting in either an expansive, neutral, or contractive posture. Participants were randomly assigned to two experimental targets of the same gender in different postures and one filler target of the opposite gender in the neutral pose. Participants rated each target on 8 questions, measuring likeability and power including one filler question to distract participants from the purpose of the study. Then the participants completed the manipulation check and filled out their demographic information (age, race, gender, majors). In the debriefing, participants were informed that the study was designed to explore how postures influence perceived likeability and perceived power.

Materials

Target Images

This study used 10 total black and white images, 8 of which were part of the experimental design. Those 8 pictures consisted of 2 men and 2 women who each posed in both expansive and contractive postures. The contractive postures and expansive postures were modeled after Bailey and Kelly (2015). In the contractive condition, the image showed a person sitting in a more submissive, inward-facing posture, with arms close to chest and legs touching. In the expansive condition, the photo showed a person sitting in a more dominant, outward-facing posture, with their arms and legs spread out wide for all images. Participants were randomly assigned to see two of the experimental pictures: either two women, one in a contractive posture and one in an expansive posture, or two men, one in a contractive posture and one in an expansive posture. The specific men and women in the images were counterbalanced across conditions. The other two pictures were a different man and woman sitting in a neutral posture. Participants saw one of these images as a filler item in the opposite gender as the experimental targets. The two filler images were found online, but experimental images were taken for the purpose of this study by asking people unknown to potential participants to pose in either an expansive or contractive posture.

For all images of expansive, neutral, contractive, and manipulation check, see Appendix A.

The gender of the targets in the images were manipulated as either male or female. Although all the targets wore neutral clothing, the women had longer hair and the men had shorter hair, and the target gender should have been clear to participants.

Measure of Perceived Likeability

We used 3 questions to measure the participants' perceived likeability of each target on a 5-point Likert scale from 1 (*not at all*) to 5 (*a great deal*). The items included: "How much do you think you would like this person if you knew them?," "If you were their age, would you want to be friends with this person?," and "How pleasant to be around does this person seem?" These three items were added to create a measure of likeability for each posture (Cronbach's alpha for the contractive posture = .83 and for the expansive posture = .88).

Measure of Perceived Power of Target

We used 4 questions to measure the participants' perceived power of each target on a 5-point Likert scale from 1 (*not at all*) to 5 (*a great deal*). The items included: "How powerful do you think this person is?," "How confident does this person seem?," "How likely is this person to speak up in a public setting?," and "How high-status do you think this person's job is?" These four items were added to create a measure of perceived power for each posture (Cronbach's alpha for the contractive posture = .73 and for the expansive posture = .73).

Gendered Posture Manipulation Check

To test if the postures were received as feminine or masculine representing, participants viewed images of gender-neutral stick figures in the same two postures and rated perceived gender on a 5-point Likert scale from 1 (*very masculine*) to 5 (*very feminine*). To see the manipulation check stick figures, see Appendix A.

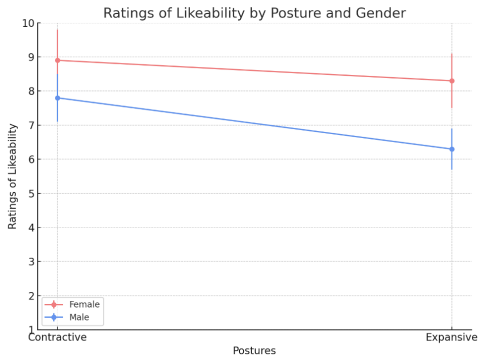
Results

Perceived Likeability

We conducted a 2 (postures: contractive, expansive) x 2 (gender: female, male) mixed model ANOVA on likeability, with posture as a within-subjects variable. The main effect of postures was significant, $F(1, 110) = 9.92$, $p = .002$. Despite our predictions, expansive postures ($M = 7.24$, $SD = 3.09$) were rated as less likeable than contractive postures ($M = 8.34$, $SD = 2.66$). The main effect of gender was significant, $F(1, 110) = 14.90$, $p = < .001$. As predicted, males ($M = 7.06$, $SD = 2.09$) were rated as less likeable than females ($M = 8.60$, $SD = 2.15$). The Gender x Posture interaction was not significant $F(1, 110) = 1.9$, $p = .171$.

Figure 1.

Participant Ratings of Perceived Likeability based on Posture and Gender



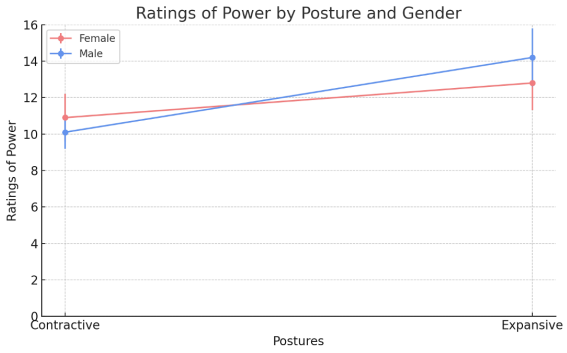
This graph shows likeability ratings for male and female participants across contractive and expansive postures, including error bars for each data point.

Perceived Power

The main effect of postures was significant, $F(1, 112) = 55.49$, $p = < .001$ As predicted, expansive ($M = 14.12$, $SD = 3.31$) were rated more powerful than contracted ($M = 12.78$, $SD = 2.73$). The main effect of gender was not significant, $F(1,112) = 0.216$, $p = < .64$. The Gender x Postures interaction was also significant, $F(1, 112) = 8.25$, $p = .005$. As predicted, expansive postures ($M = 13.49$, $SD = 3.11$) were rated as more powerful than contractive postures ($M = 10.44$, $SD = 3.06$). Posthoc tests showed that, as predicted, men in expansive postures ($M = 14.12$, $SD = 3.31$) were more powerful than in contractive postures ($M = 9.98$, $SD = 3.31$), $t(2) = 7.378$, $p = < .001$. Women in contractive postures ($M = 10.94$, $SD = 2.95$) were less powerful than women in expansive postures ($M = 12.78$, $SD = 2.73$), although the effect will be larger for men than women $t(2) = 7.378$, $p = <.001$.

Figure 2

Participant Ratings of Perceived Power based on Posture and Gender



This graph shows that both males and females report higher power ratings with expansive postures. Males show a more pronounced increase in power ratings from contractive to expansive posture. Error bars indicate variability, with overlapping ranges suggesting some uncertainty in precise comparisons.

Manipulation Check

We created a manipulation check using stick figures in contractive and expansive postures to see if the participants could correctly identify which postures are more feminine and masculine. We computed one sample t-test comparing the mean rating to the midpoint of the scale (3). The expansive posture (M = 1.33, SD = 0.49) was significantly higher than the midpoint $t(113)$ = -36.18, p< .001. The contractive postures were (M = 3.89, SD = 0.08), $t(113)$ = 11.60, p< .001.

Discussion

Discussion of Results

Power and likeability can be perceived through expansive and contractive body positioning. These dynamics can differ between men and women based on societal expectations. Theories such as Embodied Cognition and Role Congruence Theory can explain how body postures are linked to social norms in the real world. Embodied Cognition is related to the emotions of an individual performing these poses, as they may feel more confident in expansive poses and approachable in contractive poses (Adams, 2010). Role Congruence Theory explains how stereotypical social norms determine what type of body posture men and women usually enact. When men pose more dominantly, in expansive postures, and women submissively, in contractive posture, they are congruent with their societal roles (Eagly & Karau, 2001). We hypothesized that expansive postures would lead to higher perceptions of power compared to contractive postures, and that this effect would interact with gender—such that men in expansive postures would be perceived as especially powerful due to alignment with societal gender norms compared to contractive postures. A study by Lin & Broadbent (2023) supports our hypothesis as researchers found that expansive postures are seen as more powerful and dominant than contractive. Our study confirmed this finding as the main effect of expansive poses were significantly more powerful than the contractive poses. Although not hypothesized, in our Qualtrics survey, we found a significant main effect of gender on power, where men were rated as more powerful than women. This difference, rooted in Role Congruence Theory, likely explains why men were perceived as more powerful even when adopting similar postures to women. We took a similar approach to research from Bailey et al. (2017), when providing the participants images of men and women in high (expansive) and low (contractive) postures. This method allowed us to isolate body posture as the primary factor influencing perceptions, allowing for a clearer understanding of how nonverbal cues shape our judgments of power. Further, we could understand how body language is interpreted by observers in a more detached and cognitive manner. Our study differed in that we did not ask the participants to hold the poses they were viewing, but rather perceive them. Our results were similar in that expansive postures were viewed and felt as more powerful. Most importantly, however, we predicted an interaction between posture and gender, such that men in expansive poses were rated the most significant, more than any other variation. Role Congruence Theory affirms that men in expansive poses are viewed as more powerful because those poses are congruent with their role expectation, linking power with masculinity (Eagly & Karau, 2001). Conversely, women in the same poses are incongruent with their role expectation of being less powerful and authoritative, so although women appear more powerful in expansive poses, this effect is muted by role incongruence.

For likability, we hypothesized in an interaction that women should be perceived as more likable when in contractive poses compared to expansive poses, while men will be perceived as more likable when in expansive poses when compared to contractive. These poses align with societal expectations noted in Role Congruence Theory, in which females in contractive poses seem warm and submissive and men in expansive poses seem powerful and dominant (Eagly & Karau, 2001). Therefore, it was hypothesized that the alignment of body posture with these gender role expectations would influence perceptions of likeability.

Despite societal norms associating expansive postures with power and dominance (particularly for men) and contractive postures with warmth and submission (particularly for women), there was no significant effect of gender on likability. Both men and women were rated as more likable when in contractive postures than expansive ones. Consequently, the predicted interaction effect was not significant. This may have been due to the use of black-and-white static images to assess perceptions. Judging likeability from a still picture can be challenging, as it does not fully capture the dynamic process of human interaction that influences how likable someone is. Nonverbal cues such as facial expressions, tone of voice, and body language in motion can significantly impact perceptions of likeability, which may not be accurately conveyed through a single image (Chanes et al., 2018). In addition, a person's appearance or attractiveness in pictures may influence their perceived likeability. These findings confirm the role of nonverbal cues in shaping social perceptions while revealing that the impact of gender on likability may be less pronounced than anticipated.

Although not explicitly hypothesized as a main effect, we found that contractive poses were rated as more likable than expansive poses, which was supported by previous research stating a main effect that linked contractive body language to likability (Abdurazak et al., 2013). Our data supported this hypothesis with a main effect of posture on likability, where people in contractive poses were seen as more likable than expansive poses. This effect was interesting as it showed that body postures do have an effect on perceptions of likability despite gender.

Strengths

One of the key strengths of this study is its strong internal validity, as it effectively establishes a cause-and-effect relationship between body posture and perceptions of power and likeability. By structuring the study in a 2x2 mixed-model factorial design, we were able to isolate and analyze how the combination of posture (contractive versus expansive) and gender (male versus female) influenced participant responses, which enhanced the reliability of the findings. By examining multiple factors simultaneously, a mixed-model factorial design increases the statistical power (the probability of detecting an effect) of the study. When we analyze the combined effect of posture and gender, we were more likely to detect an effect that may have been overlooked if only one factor (like posture) had been considered in isolation, which allowed us to reduce type I (false positives) and type II (false negatives) errors. Additionally, the study demonstrates control over extraneous variables, such as the inclusion of neutral filler images which provided a baseline of posture to reduce biases introduced by repeated exposure to experimental target images. Also, by addressing potential confounds with a mixed-model design, the study has a high internal validity. By comparing how the same participants respond to different conditions, we were able to control for individual differences (personality and prior experiences) that could influence the results. This reduces the risk of confounding by participant-level variability.

Another notable strength of the study is its use of established measures, which enhanced the clarity, reliability, and accuracy of the research. By understanding what contractive, expansive, and neutral postures were based on, from prior research, the study ensured that participants were provided with carefully designed images that visually exemplified each posture type. This helped to minimize ambiguity and allow for consistent interpretation across the different samples. This led to a higher construct validity, as a more concrete understanding was able to be assessed from specific operational definitions.

Lastly, we used a gender-neutral stick figures manipulation check to verify that the participants perceived the postures as intended. The goal was to confirm that the postures were successfully conveyed through the images, and that participants

could differentiate between the two types of postures without the influence of gender-related stereotypes. The use of gender-neutral stick figures was essential in ensuring that gender did not influence the perception of the posture itself, allowing us to focus on the effects of posture on perceptions of likability and power. Since gender norms and stereotypes can shape how we perceive people in different postures (expansive postures in men might be viewed as confident and powerful, but in women, they could be seen as arrogant or unlikable), removing gender from the images ensured that the study was not biased by these pre-existing societal expectations. This methodological choice allowed us to test whether the effect of posture on perceptions of power and likability was consistent across gender lines.

Limitations and Future Research

There were several important limitations in this study that should be considered. One limitation could be the lack of psychological realism, which affects the external validity of the findings. Since the study was conducted online, participants engaged with the task in a self-directed, uncontrolled environment. This setup differs greatly from real-world interactions, where social cues such as body posture are often observed within conversations. Real-world social interactions are dynamic and complex, encompassing continuous motion, vibrant colors, and contextual cues that static, black-and-white images cannot replicate. Introducing non-static, colorful, and interactive stimuli could significantly enhance the psychological realism and external validity of this research. By using dynamic stimuli, such as videos or confederates, researchers could capture more authentic responses, better simulating how posture interacts with other nonverbal cues like facial expressions or tone of voice in everyday settings.

A limitation of this study is the use of a WEIRD (Western, Educated, Industrialized, Rich, and Democratic) participant sample, which may limit the generalizability of the findings to the broader global population (Henrich et al., 2010). The sample consisted of University of San Diego participants, the majority being Caucasian and female. Previous research has shown that cultural differences can influence how body posture is perceived, particularly in relation to power (Körner et al., 2022). For instance, studies have found that expansive postures may have stronger effects on perceptions of power in Western countries, such as the U.S. and Germany, compared to Eastern countries like Japan or Malaysia (Körner et al., 2022). Nonverbal cues, including posture, may be interpreted differently across cultures, which could lead to varying perceptions of power and likeability. The findings from our study may, therefore, be culturally specific, and the results might not apply to individuals from non-WEIRD cultures where social norms and perceptions of power may be influenced by different values. Future research should aim to replicate this study with a more diverse range of populations, particularly those from non-WEIRD cultures, to examine how different cultural contexts perceive body posture. To conduct a future study, researchers could recruit participants from a variety of cultural backgrounds, ensuring a balance between individualistic and collectivistic societies. In these cultures, the emphasis on hierarchy, group harmony, and social context might lead to different interpretations of expansive and contractive postures (Körner et al., 2022). For instance, in collectivistic cultures, nonverbal cues such as posture might be less about individual power and more about the dynamics of the group or community. By broadening the participants to include non-WEIRD populations, future studies could contribute to a more globally applicable understanding of how posture influences power and likeability, ultimately improving the external validity.

Lastly, another limitation is the timing of the assessments for likeability and power. These two constructs were assessed simultaneously, but research suggests that people tend to evaluate power more quickly and instinctively than likeability (Koski et al., 2015). This difference in processing speed could have skewed the results, as power may have been judged before likeability could be fully considered. Given that power is often perceived faster, it is possible that the participants' perceptions of power were more automatic, while their judgments of likeability may have required more thoughtful reflection (Farley, 2008). Power may have an overshadowing effect, which could decrease the impact of the likeability interaction of women in contractive poses being seen as more likeable than men in contractive poses. Therefore, the null interaction on likeability might be a result of the intermixed power and likeability questions when rating the image, rather than an inherent characteristic of posture itself.

The difference in how the participants judged these poses could have impacted results by having a quick interpretation instead of thinking of the poses, especially in this short ten-minute study where people may not have time to fully recognize their thoughts about their perceptions of the poses. Future research should test these two constructs separately either in separate studies or one full target image related to power and another related to likeability. This might give a more accurate representation of how each variable is influenced by body posture, as power will then not overwhelm likeability and they can be judged differently. Further, research shows that likeability is better assessed and understood when people can have a personal interaction (Rivera et al., 2023). Therefore, it would be interesting to have future research investigate if an actual interpersonal interaction would confirm our hypothesis that women in contractive postures are seen as more likable than men in contractive postures.

Application

Our study highlights the importance of posture as nonverbal cues significantly influence perceptions of power and likeability. Expansive postures are linked to higher perceptions of power, particularly for men, reinforcing societal norms associating dominance with authority. Conversely, contractive postures are perceived as more likable due to their association with warmth and approachability. This research underscores how nonverbal communication, often operating subconsciously, shapes social perceptions and interactions. By examining the interplay of posture, gender, and implicit biases, the study reveals how these factors influence perceptions and interpersonal dynamics in both professional and social contexts.

Our study offers suggestions for implementation postures in various domains. Highlighting how nonverbal communication, such as posture, can contribute to gender inequality in the workplace could help reduce gender bias by raising awareness of how certain postures are interpreted differently based on gender, influencing perceptions among colleagues and superiors. Further, gender biases could lead to different interpretations of the same posture depending on whether it is adopted by a male or female. For instance, a male individual adopting an expansive posture during a job interview or workplace meeting may be seen as more powerful than females in the same physical position (Lin & Broadbent, 2023). Conversely, contractive posture may signal approachability and warmth, which may be beneficial when someone needs to engage in a one-on-one conversation. By recognizing these biases, organizations can work towards a more equitable evaluation of behavior and leadership potential, ensuring that individuals are judged based on their abilities and qualifications rather than their physical posture.

This study could also contribute to leadership development by helping leaders navigate high-stakes situations, where balancing authority with the ability to foster empathy may be influenced by nonverbal cues. Aspiring leaders can learn how to adopt body postures that convey confidence and authority while also understanding how their gestures may be interpreted differently based on gender. For female leaders, in particular, awareness of societal biases and strategies to navigate them can be empowering, enabling them to balance perceptions of power and approachability effectively. Women could do this by creating an expansive posture in situations where they want to be heard and a contractive posture when they need to signal empathy or approachability. Incorporating these strategies does not mean conforming to narrow stereotypes or forcing unnatural behaviors, but rather understanding how body language and social dynamics work together to shape perceptions and outcomes.

Beyond professional settings, the study's findings are relevant to everyday social interactions. Understanding how posture influences perceptions of likeability and power can help individuals navigate social situations more effectively by allowing them to consciously adjust their body language to align with their desired impression. Adopting and understanding how expansive and contractive postures are interpreted provides individuals and organizations with valuable tools to navigate challenges and enhance their interactions. By recognizing the impact of nonverbal cues, individuals can adjust their posture to shape how they are perceived, thereby improving their ability to communicate, foster relationships, and achieve success in both social and professional environments. Understanding these dynamics is crucial for enhancing our awareness of how the body language of ourselves and others impacts social interactions.

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Appendix A

Contractive Postures




Expansive Postures




Neutral Poses

Manipulation Check of Gender-Neutral Stick Figures: