

## STRIKE A POSE: THE PERCEIVED FLIRTATIOUSNESS OF MEN'S NONVERBAL BEHAVIOR

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### ABSTRACT

*The present research examined how men and women with long and short term mating preferences perceive static male nonverbal behavior. Participants saw images of interacting men depicting different degrees of: space maximization, reciprocated/non-reciprocated intrasexual touch, gesticulation patterns of gesture/no gesture and palm up/neutral gestures, head cant (tilt), auto-manipulations, and open/closed limb positioning. They had to choose which of the 2 men was most attractive, and more flirtatious. We hypothesized that men in each dyad who displayed more: space maximization, non-reciprocated intrasexual touch, palm up gesturing, head cants (tilts), auto-manipulations, and open limb positioning would be rated as most attractive and more flirtatious. The results were consistent with the hypothesis. Specifically, men: exhibiting: palm up gesturing, open limb positioning, touch initiation, being a non-reciprocated touch recipient, auto manipulations in the hair area and neutral head positioning were rated as most attractive. Also, men exhibiting: palm up gesturing, open limb positioning, touch initiation, space maximization, automanipulations in the hair area, and a head cant(tilt) were rated as more flirtatious. Findings are discussed in terms of male self-presentational motives, and prior research.*

**Keywords:** attractiveness, flirtatiousness, poses, nonverbal behavior, mate potential

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## INTRODUCTION

One of the challenges men and women interested in forming a relationship face is attracting mates. One way to overcome this challenge is by flirting. Flirting involves indicating to potential mates that one is interested in dating/spending time with them (see Downey & Vitulli, 1987; Henningsen, 2004; Moore, 2002; Whitty, 2003). Apostolou and Christoforou (2020), whose findings were consistent with Wade and Feldman (2016), report that being intelligent, and having a gentle approach are the most effective flirtation traits. Some might find the effectiveness of a gentle approach to be surprising. However, Bendixen et al. (2019) report that coming on too strong, i.e., being too bold in one's approach, to a potential mate is unattractive. Coming on too strong might suggest too high a level of dominance, or masculinity, which is unappealing (Johnston et al., 2001). Additionally, an approach that is not gentle may possibly suggest a high level of narcissism also which is unappealing (Morris, 1994; *The Human Animal: Part 4, The Biology of Love*, 1995).

Individuals can flirt verbally as well as nonverbally. The nonverbal mode plays an important regulatory role in the progression of relationship contingencies (Givens, 1978). Additionally, nonverbal cues are given more credence than verbal cues (Archer & Akert, 1977; Argyle et al., 1971), behavioral displays somewhat reflect conditions of men (Gangestad et al., 2004), and women, in particular, are highly sensitive to nonverbal messages (Hall, 1978, 1984). Additionally, women rate nonverbal flirtation as more effective than men do (Apostolou & Christoforou, 2020).

The analysis of nonverbal behavior in courtship settings also provides information about mate choice parameters from a self-presentational perspective. To that end, Bendixen et al. (2019) report that the self-presentation individuals engage in is a product of the attraction they feel. However, while self-presentation can play a role, it has been argued that some nonverbal expressions are directly perceived, that the human perceptual apparatus is hard-wired to pick up some aspects of nonverbal information without needing any additional contribution of the higher order cognitive processes (Buck, 1988). With the aforementioned information in mind, to the extent that male nonverbal messages may be targeting female adaptive preferences, the implication for mate selection research is substantial.

Within the initial phases of courtship, one can assume that nonverbal signaling tends to follow a pattern. Following this logic, Perper (1985) outlined a fixed and gradual courtship sequence of turning toward the person, touching, and movement synchronization in both males and females. But, it is women's behavior that controls the interaction. Kendon (1975) filmed a couple seated on park bench in order to record the role of nonverbal cues in the progression of a kissing round. He found that it was the female's behavior, particularly her facial expressions, which moderated the behavior of the male.

Moore (1985), focusing particularly on the courtship behavior of females, analyzed nonverbal signaling within different settings to construct an ethogram of female nonverbal solicitation signals/cues. When a woman elicited certain nonverbal signals/cues (e.g. eye contact followed by immediate eye aversion), it was found that those signals/cues directly or indirectly resulted in the approach and/or maintained attention of a man. A follow-up study indicated that female nonverbal signaling was so potent a cue that an observer could predict, with 90% accuracy, interactional outcomes (whether an approach such as a request to dance or a request to join her will occur) with surrounding males (Moore & Butler, 1989).

In both the 1985 and 1989 studies, Moore based her findings upon a female-choice/adaptive foundation. She concluded, following Birdwhistell (1970) and Morris (1971), that women, given their higher reproductive investment, are the 'selectors' and, thereby, the

'initiators' in the courtship process, and that the communication of this selection was done through nonverbal channels. Following up on this, Renninger et al. (2004) found that as a context became increasingly mate relevant, male nonverbal behavior changed in specific ways; Males exhibited more total glancing behaviors, more space maximization movements, and more total auto-manipulations (particularly targeting the beard-growth area). Auto-manipulations are self-directed behavior that involves touching, scratching, or caressing various parts of one's face, neck, hair, or clothing (see Renninger et al., 2004). Additionally, Renninger et al. (2004) report that males who exhibited this type of behavior received more signals from women and had more successful contact outcomes with women. More recently, Vacharkulksemsuk et al. (2016) found that Postural Expansiveness, i.e., expanding the body in physical space, was most predictive of attraction, and primarily for men. Moore's (1985, 1989) research, Renninger et al.'s (2004) research, and Vacharkulksemsuk et al.'s (2016) research is informative. However, these were naturalistic studies. While naturalistic studies are informative they often lack some of the control that is inherent in experimental research, and one is less able to discern and conclude precisely how the variables involved affect behavior (Dunn, 2013; Morling, 2014). Gangestad et al. (2004), in a controlled experimental study, examined how men's behavioral displays affect women's preferences for long and short term dating and found that women preferred men who displayed more social presence and direct intrasexual competitiveness during their high fertility days. However, to date no research has sought to examine both the attractiveness and flirtatious intent of male nonverbal flirtatious behavior in a controlled laboratory setting. Additionally, no prior experimental research has been conducted that takes into account both male and female perceptions of male nonverbal flirtatious behavior. The perceptions of both men and women should be examined together since prior research indicates that each sex's preferences affect the behaviors the opposite sex engages in (Buss, 1989; Buss, & Dedden, 1990; Fisher, 2013). This awareness allows each sex to enact the behavior that should be most appealing to the opposite sex and consequently garner an opportunity to further present one's self as a potential mate. In addition, while we know that sexual strategies (long term vs. short term mate preferences) may influence mate assessment standards (Buss & Schmitt, 1993; Kenrick et al., 1990) prior research on men's flirtatious nonverbal behavior has not examined how sexual strategies affect evaluations of men's nonverbal flirtatious behavior. The present research seeks to fill these voids using static images of male dyads.

Which male poses should engender high attractiveness and flirtatiousness perceptions? Women prefer mates who are dominant (Buss, 1989; Buss & Schmitt, 1993) and find these men attractive (Renninger et al., 2004; Buss, 1989; Gangestad et al., 2004). But, in addition to wanting dominant men, women desire men who are also warm, and nurturant (Buss, 1989; Buss & Schmitt, 1993; Buss & Barnes, 1986). So, male poses that convey dominance and male poses that convey warmth should be perceived as most attractive. Prior research shows that men who maximize space are viewed as more dominant (Renninger et al., 2004). So, male poses that exhibit space maximization should be rated as most attractive. Touch initiation can also be a sign of dominance and women find dominant men appealing (Buss, 1989; Renninger et al., 2004). Thus, poses involving a man initiating touch with another man should be most attractive. A pose with a man reciprocating touch after being touched may also be attractive since reciprocating touch may be viewed as not being overly masculine and unwilling to touch another man. Women do not find men who are overly masculine appealing (Johnston et al., 2001). This pose may also convey warmth.

Givens (1978) reports that palm-up gesturing is chosen as most attractive since it is viewed as a sign of warmth. Therefore, poses with palm up gesturing should be appealing. Open body postures also convey warmth and positivity (Givens, 1978; Vacharkulksemsuk et al. 2016). Thus, male poses that show an open body posture should be most attractive.

Women also desire mates that are healthy (see Scheib et al., 1999; Wade 2000, 2003). So, poses that involve auto-manipulations that direct attention to areas of the body that index health should be attractive. Male poses that involve auto-manipulations to the hair area may be attractive since the pose calls attention to the hair, and the look and condition of the hair can indicate health and age (Hinsz et al., 2001; Mesko & Bereczkei, 2004) and hair and age are foci for assessments of men's mate value (Wade, 2000; 2003).

Prior research reports that the face carries the most weight in ratings of men (Gangestad et al., 1994; Symons, 1995; Wade, 2000). Therefore, poses that allow the face to be seen most fully or completely should be most attractive. So, a head neutral pose may be most attractive since a neutral pose of the head allows the face to be seen more completely.

The aforementioned characteristics may be perceived as most flirtatious also since they were perceived as most flirtatious in dynamic images in prior observational research conducted by Renninger et al. (2004).

Should sex of perceiver differences be expected? Following research findings on mate preferences (Buss, 1989) and intersexual and intrasexual competition (Buss & Dedden 1990; Fisher, 2013) sex of perceiver differences should not be expected. Men and women need to be aware of the mate preferences and attraction related behaviors of the members of their sex as well as the opposite sex in order to most effectively compete intrasexually and intersexually.

### ***Hypotheses***

(1) Men in poses that display more:

- space maximization
- non-reciprocated intrasexual touch,
- palm up gesturing,
- head neutral positioning
- auto-manipulations to the hair area
- open limb(body) positioning

should be rated as most attractive, and flirtatious because focusing on such actions allows women to execute an adaptation that facilitates their identification of potentially good sires for offspring and potentially good mates (see Renninger et al., 2004).

(2) Prior research has not explored sexual strategies in this realm so this aspect of the research is exploratory.

(3) Since each sex's preferences affect the behaviors the opposite sex engages in (Buss, 1989; Buss, & Dedden, 1990; Fisher, 2013), men and women are not expected to differ in their perceptions of the attractiveness and flirtatious intent of the male poses.

## **METHODS**

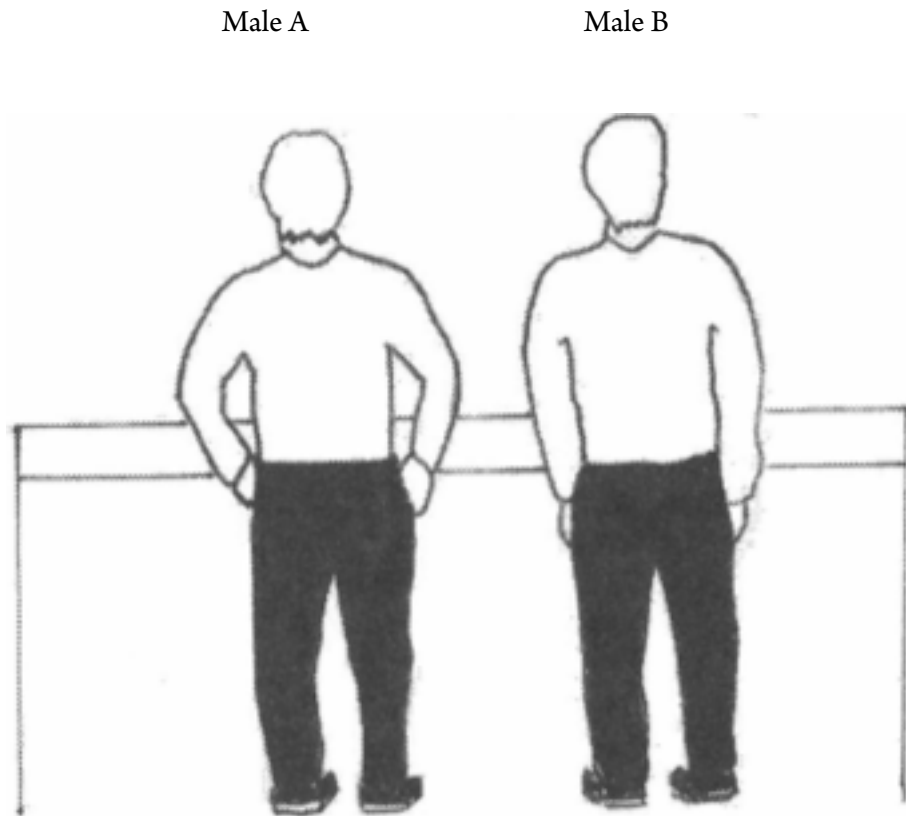
### ***Participants***

Participants were 77 women and 44 men (ages 17-24,  $M = 19.16$ ,  $SD = 1.55$ ) from a private University in the Northeastern US. Their participation was in partial fulfillment of research participation requirements associated with the introductory psychology course.

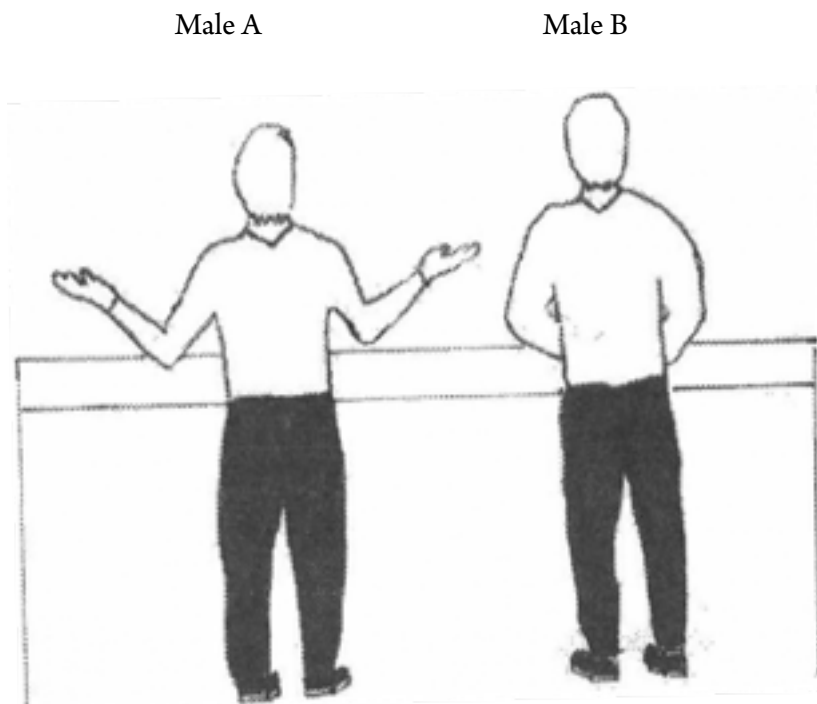
### ***Procedure***

Participants were told they were taking part in a perception experiment and given an answer key. The answer key asked for their age, and whether they preferred long or short term relationships (Do you prefer short or long term relationships?). Thirty eight participants (16 men, 22 women) preferred short term relationships and 81 participants preferred long term relationships (28 men and 53 women). Next, participants were presented with nine black and white drawings of male dyads in various interactions that obscured the faces of the men in the dyads, and controlled for attire, height, somatotype, and positional symmetry. Additionally, during data collection the poses were presented to groups of participants in different orders. These drawings were created by a professional artist. Throughout the interactions depicted in the dyads, the body language of the men was systemically manipulated to show different degrees of space maximization, reciprocated/non-reciprocated intrasexual touch, gesticulation patterns of gesture or no gesture and palm upward or neutral gestures, head cant(tilt), auto-manipulations, and open versus closed limb/body positioning.

The poses used in this research followed the specifications/descriptions from the behavioral catalog of Renninger et al. (2004). The space maximization pose involved one man in the dyad having both hands placed on or near his waist with elbows extended maximally. The reciprocated intrasexual touch pose involved depiction of reciprocation of an initiated touch by one male in the dyad. The non-reciprocated touch pose involved one man in the dyad touching the other man in the dyad with the other male not returning the touch. The gesture pose involved a depiction of one man in the dyad moving both hands as if to accompany a verbal message. The palm upward gesture pose involved one of the men in the dyad having his hand upward with the palm visible. The palm neutral gesture pose involved one of the men in dyad having his palms downward towards the floor. The no gesture pose involved the focal man in the dyad not making any gestures. The Head cant(tilt) pose involved one of the men in the dyad having the head tilted to one side. The auto-manipulations to the hair area pose involved one of the men in the dyad touching/caressing his hair. The auto-manipulations to the beard area pose involved one of the men in the dyad touching his face in the area where the beard grows. The open limb positioning/open body pose involved the man having arms upward, outward and away from the upper body while the closed limb positioning/closed body pose involved the man having his arms crossed in front of his body as if to close off the upper body (see Figures 1 and 2 for two examples of pose images).



**Figure 1:** Space Maximization pose versus no Space Maximization pose.



**Figure 2:** Open Body pose versus Closed Body pose.

Data collection was done in a large group format where each drawing was presented on a screen for 7 seconds and participants were asked to indicate which man in each of the 9 dyads was most attractive, and then which man in each of the 9 dyads was more flirtatious. The following scripts were utilized:

*You are about to see a series of sketches that represent two actual males interacting in a bar setting. Each drawing will be presented for 7 seconds. After you have viewed the drawing you will be asked to indicate your response to the two questions listed on your answer key. Please read each question carefully. For example, Question 1 asks you to speculate which male, Male A or Male B, you believe females would find most attractive. "Attractive" here refers to most desirous for flirtatious interaction.*

At the end of Question 1, the following script was read:

*Now that you have completed Question 1, we will move on to Question 2. You are about to again see sketches that represent males interacting in a bar environment. Please indicate your response, Male A or Male B, to the following question: When interacting with females which male do you think is the more flirtatious of the two?*

The stimuli for Question 2 were then shown for 7 seconds each, each in a different order. Across 5 data collection sessions, the order of the stimuli presentation was randomly varied in an attempt to control for order effects. Also, in the group sessions, Male A and Male B changed across poses. For example for "Space Maximization versus No Space Maximization" Male A may be the male engaging in Space Maximization while Male B was not while for "Toucher versus Touched" Male B may be the "Toucher" and Male A is the "Touched" individual for some group data collection sessions.

## **RESULTS**

Logistic regressions were computed to determine whether sex and relationship preference affected the perceived attractiveness, and perceived flirtatious intent choices for the dyads. Sex and relationship preference were the predictors and the frequencies for the male chosen in the male posture dyads were the dependent measures. No significant effects were obtained.

A series of Chi-squares were computed to see if overall differences occurred for perceived attractiveness choices, and then for the perceived flirtatious intent (flirtatiousness) choices for the dyads.

### ***Attractiveness***

The following men in the dyads were chosen as most attractive: Palm-up over neutral gesturing,  $X^2(118) = 6.53, p < .011$ , Palm-up over no gestures,  $X^2(118) = 8.67, p < .003$ , Open over closed body,  $X^2(118) = 30.51, p < .0001$ , Toucher over Touched,  $X^2(118) = 54.24, p < .0001$ , reciprocated touch initiator over non-reciprocated touch initiator,  $X^2(118) = 16.41, p < .0001$ , reciprocated touch recipient over non-reciprocated touch recipient,  $X^2(118) = 22.92, p < .0001$ , Space maximization movements man over neutral/no space maximization,  $X^2(118) = 43.2, p < .001$ , Auto-manipulations in hair area over beard area,  $X^2(118) = 5.63, p < .02$ , head neutral over head cant,  $X^2(118) = 71.73, p < .0001$ .

### ***Flirtatiousness***

The following men in each dyad were chosen as more flirtatious: Palm-up over neutral gesturing,  $X^2(120) = 19.20, p < .0001$ , Open over closed body,  $X^2(120) = 6.53, p < .02$ , Toucher over Touched,  $X^2(121) = 81.00, p < .0001$ , Space maximization movements man over neutral/no space maximization man,  $X^2(121) = 94.62, p < .0001$ , Auto-manipulations in hair area over beard area,  $X^2(121) = 5.17, p < .023$ , and head cant over head neutral,  $X^2(120) = 22.54, p < .0001$ . Table 1 shows the percentages for the man chosen as most attractive and more flirtatious in each postural dyad.

**Table 1:** Frequency Percentages for Attractiveness and Flirtatiousness choices

<b>Poses</b>	<b>Attractiveness</b>	<b>Flirtatiousness</b>	<b>Difference</b>
Palm up versus Neutral Gesturing	63%, N = 118	69%, N = 120	6 %
Palm up versus No Gesturing	64%, N = 118	---	---
Open versus Closed Body	75%, N = 118	62%, N = 120	13 %
Toucher versus Touched	84%, N = 118	91%, N = 121	-7 %
Reciprocated Touch Initiator versus Non-reciprocated touch Initiator	69%, N = 118	---	---
Reciprocated Touch Recipient versus Non-reciprocated Touch Recipient	72%, N = 118	---	---
Space Maximization versus No Space Maximization	80%, N = 118	95%, N = 121	-15 %
Automanipulations in Hair Area versus Beard Area	62%, N = 118	60%, N = 121	2 %
Head Cant(tilt) versus Head Neutral	90%(Head Neutral), N = 118	72%(Head Cant(tilt)), N = 120	---

Note: This table shows differences in percentages for Attractiveness choices compared to Flirtatiousness choices for the items showing significant effects. For the percentages, with the exception of Head Cant versus Head Neutral, the first pose listed was chosen more often for each question. --- means that there was no higher choice for those poses for flirtatiousness. Higher numbers mean higher percentage. For the Difference column, positive numbers mean that attractiveness had the higher choice percentage, and negative numbers indicate that flirtatiousness had the higher choice percentage. For each pose dyad, other than the Head Neutral and Head Cant dyad, the first pose listed was chosen more often for each question. Items with --- were not compared because there was no higher choice for those poses for flirtatiousness. Also, Head Cant versus Head Neutral, were not compared since Head Neutral was chosen more often for attractiveness and Head Cant was chosen more often for flirtatiousness.

### ***Percentage Differences***

Additionally, a descriptive statistical analysis, see Table 1, shows the differences in percentages for Attractiveness choices compared to Flirtatiousness choices for the items showing significant effects above. Table 1 shows that Attractiveness and Flirtatiousness



choices were similar for 1 item (automanipulations in the hair area) while there was a higher percentage of choices for Attractiveness for 4 items (palm up gesturing versus no gesturing, open body, reciprocated touch initiator, and reciprocated touch recipient). There were higher choices for Flirtatiousness for 3 items (palm up gesturing versus neutral gesturing, toucher, and space maximization). Additionally, for the item head neutral versus head cant(tilt) 90% chose head neutral for Attractiveness while 72% chose head cant(tilt) for Flirtatiousness.

## DISCUSSION

It was hypothesized that the man in a pose that displayed more: space maximization, non-reciprocated intrasexual touch, palm up gesturing, head neutral positioning, auto-manipulations to the hair area, and open limb positioning would be chosen as most attractive and more flirtatious. No sex of perceiver differences were also hypothesized. The results were consistent with the hypotheses, and prior research on nonverbal flirtation (Moore, 1985, 1989; Renninger et al., 2004). Here is a list of the poses in the dyads presented that were chosen as most attractive, and more flirtatious:

- Palm up Gesturing
- Open Body
- Toucher
- Reciprocated Touch Initiator
- Reciprocated Touch Recipient
- Space Maximization
- Automanipulations in Hair Area
- Head Cant(tilt)-more flirtatious only
- Head Neutral-most attractive only

Static poses that are exhibited in interaction contexts can convey attractiveness and flirtatiousness. These actions may be perceived this way because they display potent courtship signals.

### ***Attractiveness***

#### *Palm up Gesturing*

The image of the man engaging in palm-up gesturing was chosen as most attractive in corroboration with research indicating that palm-up gesturing is viewed as a sign of warmth (Givens, 1978) and women find warmth appealing in mates (Buss, & Barnes, 1986).

#### *Open Body Posture*

The image of the man with the open body posture being chosen as most attractive is consistent with other research findings that support the appeal of open body postures (Givens, 1978; Vacharkulksemsuk et al., 2016).

#### *Space Maximization*

The image of the man engaging in space maximization may have been chosen as most attractive since men who maximize space are viewed as more dominant and women find dominant men attractive (Renninger et al., 2004; Buss, 1989, Gangestad et al., 2004).

#### *Auto-manipulations to the Hair Area*

The image of the man making auto-manipulations to the hair area may have been chosen as most attractive because that action calls attention to the hair, and the look and condition of the hair can indicate health and age (Hinsz et al., 2001; Mesko & Bereczkei, 2004) which are foci for assessments of men's mate value (Wade, 2000; 2003).

#### *Touch Initiation and Reciprocated Touch Initiation*

The image of the male toucher, and reciprocated touch initiator having been chosen as most attractive is consistent with other research showing that initiating touch can be a sign of dominance which women find appealing in men (Buss, 1989; Renninger et al., 2004). The image of the reciprocated touch recipient may have been chosen as most attractive because reciprocating touch may be viewed as not being overly masculine and unwilling to touch another man. Women do not find men who are overly masculine appealing (Johnston et al., 2001). Additionally, following Anderson and McCormack's (2015) research on touch and male homosociality, a male who reciprocates touch may be seen as more caring, which women find appealing in a man (Buss & Barnes, 1986). Alternatively, since a male who reciprocates touch from another man is not viewed as a less dominant male (Sekerdej, et al., 2018), and women find dominance appealing in a man (Buss, 1989; Renninger et al., 2004), this man is also chosen as attractive.

#### *Head Neutral Pose*

The head neutral pose may have been selected as most attractive compared to the head cant(tilt) pose because a neutral pose of the head allows the face to be seen more completely, and prior research reports that the face carries the most weight in ratings of men (Gangestad et al., 1994; Symons, 1995; Wade, 2000).

#### ***Flirtatiousness***

With the exception of the head neutral pose, the actions discussed above for perceived attractiveness were also perceived as more flirtatious in the static images in the present research since they were perceived as most flirtatious in dynamic images in prior observational research conducted by Renninger et al. (2004).

#### *Head Cant(tilt) Pose*

The head cant(tilt) pose may have been chosen as more flirtatious than the head neutral pose, differing from the perceived attractiveness results obtained, because it may more directly convey an indication of interest than a neutral head pose. Additional research is necessary to verify that explanation.

#### ***Sex Differences***

Sex differences did not occur consistent with the research indicating that men and women both need to be aware of the flirtatious actions that members of their sex as well as the opposite sex engage in in order to compete successfully intrasexually and intersexually (see Fisher, 2013).

#### ***Relationship Preferences***

Relationship preference differences may not have occurred because prior research shows that flirtatious actions engaged in for short and long term mate attraction do not differ (Wade & Slemph, 2015; Wade & Feldman, 2016). Participants may have preferred long term

relationships over short term relationships (68% versus 32%) due to their age and the environment they were in. The sample reported an average age of 19.16 and was composed of college students. Prior research shows that on college campuses, and among the age range of the present sample, the predominant type of relationship is a short term mating relationship (a hookup), which the students and individuals report being unhappy with, i.e., they desire long term relationships (Flack et al., 2007; Garcia & Reiber, 2008; Shukusky & Wade, 2012). Thus, this preference for long term relationships in the present study may be rooted in the sample's desire for something other than a hookup relationship. Additional research is necessary to ascertain the validity of this explanation.

### **Limitations**

The present research did not find an effect for long versus short term mating preferences. However, the present research used a single item measure of long versus short term mating preferences since single item measures can be as effective and psychometrically advantageous as multiple item measures (Gardner et al., 1998; Hoeppepner et al., 2011). Nevertheless, additional research using the SOI-R should be conducted to further verify whether long or short term mating preferences do not play a role in the perceived attractiveness and perceived flirtatiousness of male poses. Additionally, the present research focused on heterosexual attractiveness and flirtatiousness. Future research should examine the poses focusing on non-heterosexual attractiveness and flirtatiousness. Also, the present research did not ask participants to report their sexual orientation. Future research should endeavor to determine if sexual orientation affects the perceived attractiveness and perceived flirtatiousness of the poses.

### **Conclusion**

This research shows that poses can also convey attractiveness and flirtatiousness. With the exception of a head cant(tilt) versus a neutral head pose, the same poses that convey attractiveness also convey flirtatiousness. This research indicates that one can signal potential mates without having to engage in active behavior. These findings may be useful for individuals who are shy and may be taciturn regarding actively signaling potential mates. Also, this research indicates that attractiveness and flirtatiousness perceptions from static images may be linked. But, additional research is necessary to determine the exact nature of that linkage.

### **ETHICAL STATEMENT**

This study was approved by the ethics committee of Bucknell University and conducted in accordance with the 1964 Helsinki declaration and later amendments or comparable ethical standards.

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