

Discrimination of Attractiveness Between Face and Face-Body Images

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What constitutes an individual's discrimination of attractiveness? Is it the face that plays a large part in the discrimination of attractiveness? Or is the body *and* the face a better model for discrimination of attractiveness? Discrimination is the ability to discern between different stimuli, while generalization is the tendency for individuals to show the same response to a variety of similar situations. In the current study, demonstrating the ability to show discrimination between face and body was of considerable interest. It is said that the tendency to show discrimination of attractiveness may depend on a variety of specific factors. According to Miller (2012), attractiveness ratings of others can be based on the similarity to oneself. Other factors, according to DeBruine et al. (2007), include facial symmetry, averageness, femininity and masculinity. A fair amount research has identified other specific factors which play a part on ratings of attractiveness, including Body Mass Index (BMI), and Waist-to-hip Ratio (WHR) (Cornelissen, Tovee, & Bateson, 2009; Smith et al., 2007; Swami, Caprario, Tovee, & Furnham, 2006). Each of these studies have suggested that the body is the main determinant for predicting attractiveness. While these factors may play a part in ratings of attractiveness, what can be said for faces? A study by Alicke et al., (1986) (as cited in Peters, Rhodes, & Simmons, 2007), assessed the combination of attractive faces/unattractive bodies, as well as unattractive faces/attractive bodies, and found a highly significant correlation for the attractive face/unattractive body, where ratings of attractiveness were reduced when these were paired as opposed to the other pairing. This suggests that faces do have a general impact on attractiveness, but that body size may be the ultimate predictor of attractiveness ratings. However, findings in the study by Peters, Rhodes, & Simmons (2007) suggested that body attractiveness predicted overall attractiveness less strongly than did facial

attractiveness. This finding appears to be in stark contrast to the finding that body attractiveness is the main predictor in attractiveness discrimination. Our study attempted to understand the use of discrimination in using full body with face or just face as a predictor in ratings of attractiveness. We hypothesized that there would be better group cohesion (80% agreement) in ratings of attractiveness among those who viewed the full bodies as opposed to the faces. As suggested in the literature on previous research, bodies would allow for better discrimination of attractiveness, while faces alone would not give enough data to make an appropriate discrimination.

## **Methods**

### *Participants*

A classroom of forty-five students in a university psychology course participated in the experiment. There were ten males and thirty-five females.

### *Design*

The nature was a between- subjects design, but we considered results between- subjects also. The participants were split randomly into two groups based on location in classroom. The independent variable was face only or full body with face. The dependent variable was the attractiveness rating of “*yes* or *no*” and “*why?*” on the questionnaires (see appendix).

### *Procedure*

Group B was asked to leave the room while Group A participated in the experiment. Researchers distributed a survey on which the subjects indicated whether or not stimuli were attractive by selecting *yes* or *no*. Researchers advised participants to use the following internal scaling system to determine whether a person was unattractive, *no* (rating 1-5) or attractive,

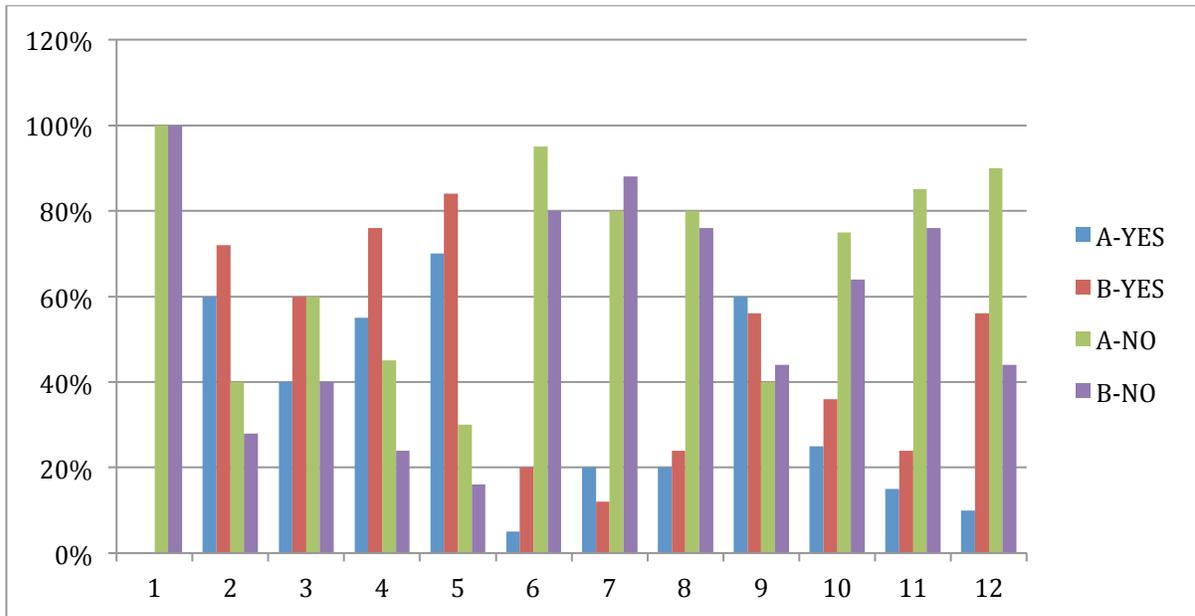
*yes* (rating of 5-10). Participants were asked to indicate their gender at the top of their survey. At this point, participants were told that if they were uncomfortable with the requirements of the experiment they could leave the room or choose not to fill out the survey. Group A was shown a series of 24 images of both male and female human faces. Participants were given 10 seconds to indicate whether they thought the person in the image was attractive or not, and why. After Group A completed the experiment, the surveys were collected and they then left the room for Group B to enter. The same procedure was used for Group B. The images shown for Group B, however, were of entire body images of the individuals shown in the images from Group A. Group B was asked to indicate, more thoroughly, if their perceived attraction was based on body or facial features. After Group B completed their survey, Group A was asked back into the room where a discussion was conducted with both groups, facilitated by the researchers.

### **Results**

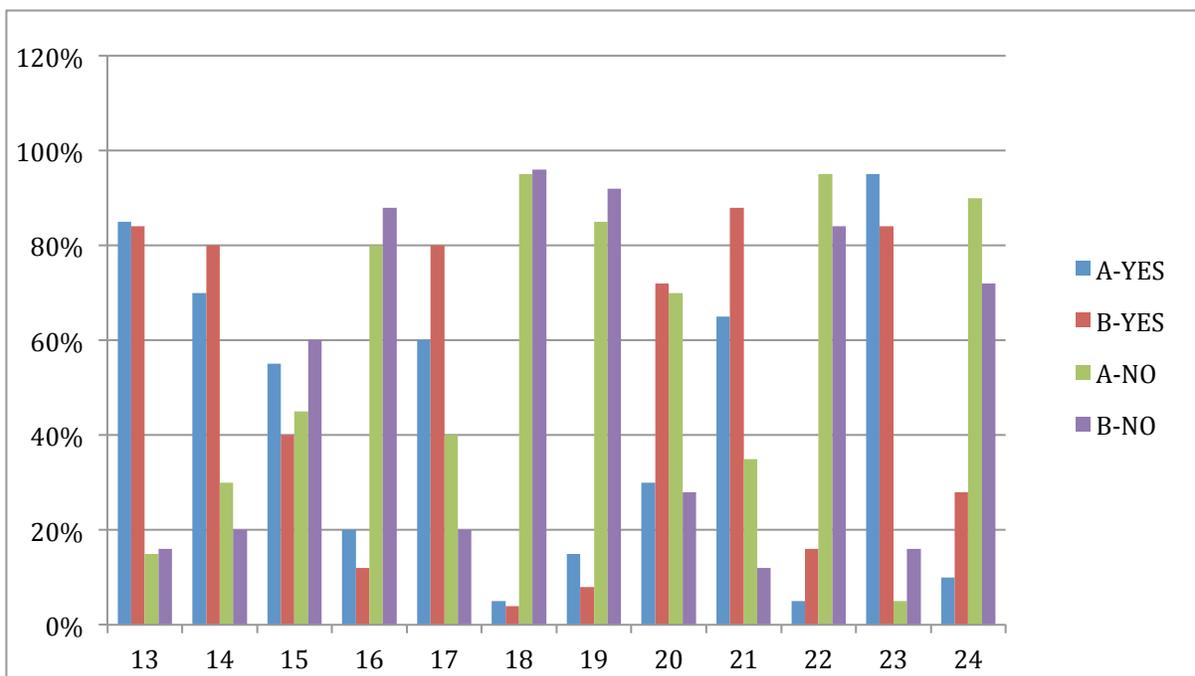
Each of the 24 images were tallied based on the amount of subjects who chose *yes*, for attractive, and *no*, for unattractive for both versions of the experiment. The tally of each image was then converted into a percentage. Results show that based on the percentage of subjects who chose *yes* or *no* in both versions, there was very little difference in the discrimination of attractiveness. For most images, the results showed less than a 12% difference between ratings of attractiveness (see figure 1 & 2), with the exception of 6 of the images. Image 12 showed that 10% of subjects in version A chose the image to be attractive (while 90% chose the image to be unattractive), whereas in version B, 56% of subjects chose the image to be attractive (while 44% chose the image to be unattractive). Image 20 showed that 30% of subjects in version A chose the image to be attractive (while 70% chose the image to be unattractive),

whereas in version B, 72% of subjects chose the image to be attractive (while 28% chose the image to be unattractive). Overall, group A answered *no* to attractiveness 63% of the time and, along with that, group B responded *yes* 63% of the time.

**Figure 1**



**Figure 2**



### Discussion

Our hypothesis predicted that participants viewing full body images would agree on attractiveness ratings and depending on our definition of cohesiveness (80% agreement) only 46% of the images were agreed upon in the full body photos. Further to that, we predicted that full bodies would allow for better discrimination and results indicated that participants did discriminate, but insignificantly. In all, 75% of the images shown to participants produced a standard deviation of approximately 12%, whereas the most significant findings in the current research were the discriminations exhibited for photos (in order of most significant first) numbered 12, 20, 21, 17, 4, and 3. Several reasons for this difference can be offered. Perhaps Group A was deceived by the unattractiveness of a face and concluded that the entire body must be unattractive. This would be consistent with the previously indicated research by Cornelissen, Tovee, & Bateson (2009); Smith et al., (2007); Swami, Caprario, Tovee, & Furnham, (2006), with the relationship between body mass index, waist-to-hip ratio and participants' perceptions of attractiveness. Another consideration is the sexual orientation of the females in the study. Participants that are gay or bisexual could have been deceived along with the possible deception of the male participants.

In regards to group B reporting a *yes* answer more often than group A, it could be inferred that displaying a full body image excites our attraction more so than face only. Further to that, group A responded *no* the majority of the time and that seems to simply confirm that a full body image generates more attraction in the viewer despite the level of beauty. These findings demonstrated only a range within 12% between each *yes* and *no* response and occurred, overall, 13% more. This result is not overly significant, but is not a statistic to be overlooked. A potential use for this research is in the application of online

dating. An individual's profile usually requires pictures of them and they could potentially benefit from whole body photos as opposed to face only photos.

Although we controlled for ethnic appearance (Caucasian), age range (20-40 years), semi- neutral clothing (to eliminate perception of wealth) and limited body art, there were several limiting factors of this current research. In research of this nature, there are numerous variables that we were unable to control for such as completely neutral clothing, a broader range of images, all ethnicities, colorings of hair and eyes, amount of clothing worn and many more. Additionally, participants in this research were predominantly female, Caucasian, and university students, so our sample of participants were not representative of the population.

The strengths of this current research was that it provided some noteworthy results for at least a starting point for future research on the subject. Additionally, we were able to identify differences between groups on almost every image, which shows an element of some discrimination- we were able to partially achieve the whole purpose of this experiment regarding the topic of discrimination.

Directions for future research is for participants to view live models for face only and full body. Participants responding to attractiveness for live people rather than photos will give the most realistic feelings of attractiveness. As well, some photos do not truly represent a person's beauty or ugliness and the live models will eliminate deception in photography. Another consideration is to attempt to understand differences between male and female choices and comparing those results.

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