

FACE-ISM AND THE EFFECTS OF FACIAL PROMINENCE MANIPULATION

By

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A Thesis Submitted to The Honors College

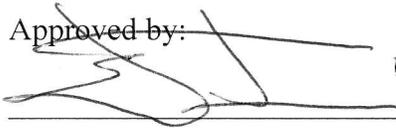
In Partial Fulfillment of the Bachelors Degree  
With Honors in

Communication

THE UNIVERSITY OF ARIZONA

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Approved by:



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## *Abstract*

*Previous research has found that the media tends to portray men in terms of their faces and women in terms of their bodies. The measure of this face to body ratio is called facial prominence, or face-ism. High face-ism has been associated with higher perceptions of positive attributes. In this study, online survey participants were asked to help design a prestigious company's print advertisement. Participants were shown three different stimulus persons, each in a high face-ism condition and a low face-ism condition, and were asked to choose which image of the person best portrayed dominance, intelligence, attractiveness, and ambition. Surprisingly, participants more frequently chose the low face-ism images of the stimuli to represent these traits. Participants showed preference for male stimuli with high facial prominence and preference for female stimuli with low facial prominence. No significant relationship was found between participants' amount of daily media consumption and facial prominence preference. No significant relationship was found between facial prominence of the stimuli and participants' ability to remember detail about the stimuli. Further research is warranted because facial prominence manipulation has many potential effects and the existing research on the topic is inconsistent.*

## Literature Review

### Introduction to Face-ism

Face-ism is “the relative prominence of the face in a photograph, drawing, or other depiction of a person” (Archer, Iritani, Kimes, & Barrios, 1983, p. 726). The higher a subject's face to body ratio, the higher the face-ism level. The term was first used in Archer et al.'s (1983) article in the *Journal of Personality and Social Psychology* that presented five studies of relative facial prominence. In these five studies, which included content analyses and experiments, Archer et al. examined the levels of facial prominence of men and women in various contexts. It was in this groundbreaking work that the first face-ism differences between men and women in the media were revealed.

Archer et al. (1983) designed a ratio and a simple set of rules for measuring face-ism in a reliable and consistent manner. These guidelines are still referred to today by scholars who study face-ism. The face-ism ratio, or index, is calculated by dividing a numerator by a denominator where the numerator is the distance from the top of the head to the lowest point of

the chin and the denominator is the distance from the top of the head to the lowest visible part of the subject's body. Both distances can be measured in millimeters or any other reliable unit. A face-ism ratio of 1.00 means that only the person's face is shown in the image. In other words, the image is 100% face, and 0% of the body is shown. A face-ism ratio of .40 means that the image is 40% face and 60% body. The more space that the face takes up in an image, the higher the face-ism ratio. Archer et al. coded images in the media using five rules. The rules helped limit the coded images to photographs in which the subject's facial prominence was not influenced by extraneous factors. The rules are listed here, exactly as they are written in Archer et al.'s 1983 article (p. 726):

1. Photographs may contain only one human subject
2. Photographs that aim to capture some particular body region, movement, problem, or gesture cannot be counted
3. Photographs with a co-subject cannot be used
4. Photographs printed several times are counted only once
5. Photographs of disembodied heads are not counted

Archer et al. (1983) conducted three content analyses using the face-ism ratio and rules described above. The first analysis included 1,750 images from five American publications: *Time*, *Newsweek*, *Ms.*, *The San Francisco Chronicle*, and *The Santa Cruz Sentinel*. Images that illustrated stories and images in advertisements were both included, but were coded separately. The second analysis included 3,500 images from 13 publications in 11 different countries. The third analysis included 920 painted portraits or self-portraits from across six centuries (15<sup>th</sup>-20<sup>th</sup> centuries). The coding scheme for this analysis included four additional rules due to the different artistic nature of paintings and photographs in periodicals. The results of all three analyses

indicated a difference in face-ism levels of men and women. Men were consistently portrayed with a higher face-ism ratio than women (men  $\bar{x}$  = .65, women  $\bar{x}$  = .45;  $t=18.23$ ,  $p < .001$ ). The results indicated that even across cultures and history there has been a tendency to represent men with their faces and women with their bodies.

After having found that these differences exist in published images, Archer et al. (1983) designed an experiment to analyze unpublished images. The experiment analyzed the amateur drawings of 80 college undergraduate students. The students were asked to draw either a woman or a man, and were told that the study's purpose was to examine different drawing styles. The results replicated those of Archer et al.'s previous content analyses in that the drawings of men had a significantly higher level of face-ism than the drawings of the women (men  $\bar{x}$  = .37, women  $\bar{x}$  = .21). Interestingly, the drawings of the men included more facial features (eyebrows, mouth, nose, etc.) than the drawings of the women. Furthermore, the female students drew both women and men with higher face-ism levels than the male students did.

Since Archer et al. (1983) introduced the concept of face-ism in the early 1980s, several researchers have used the face-ism ratio to further examine what Matthews (2007) calls "hidden sexism" in the mass media. During the 1984 presidential election, Vice Presidential Candidate Geraldine Ferraro was the first female candidate in a U.S. presidential election. Ferraro claimed that she had been treated in a sexist manner throughout the campaign (Sparks & Fehlner, 1986 as cited in Ferraro, 1985). Using Archer et al.'s (1983) eligibility rules, Sparks and Fehlner (1986) analyzed the face-ism ratios of 124 images of the candidates that had appeared in *Time* and *Newsweek* during the campaign period. Contradictory to Archer et al.'s (1983) original findings on sex differences in face-ism (which also used images from *Time* and *Newsweek*), there was *not* a significant difference in the face-ism ratios of the female Ferraro and her male counterparts

Reagan, Mondale, and Bush. In fact, Ferraro's face-ism ratio tended to be significantly higher than Bush's (Sparks & Fehlner, 1986, p. 75).

Because Sparks and Fehlner's (1986) results did not replicate Archer et al.'s (1983) results, the researchers designed a second study using random images of females and males from the same issues of *Time* and *Newsweek* that the candidates' photos came from. The purpose of the study was to see if the candidates' photos had been uniquely proportioned or if an actual change in the depiction of men and women had taken place in the three years since Archer et al.'s (1983) first face-ism study. The analysis, which included 292 photos from 22 consecutive issues of each magazine, took the depicted person's occupation into account as well, which Archer et al. did not do. The two-tailed t-test analysis showed that men had a higher average face-ism ratio ( $\bar{x} = .64$ ) than women ( $\bar{x} = .58$ ) across all occupations. When each occupation was isolated, results showed that female and male government officials and journalists were represented with a relatively equal face-ism ratio. In the actor and other entertainer occupations, men had a significantly higher face-ism ratio than women. Overall, this study found that women had an average face-ism ratio of .58, which is over 25% higher than the average ratio of .45 that was reported in Archer et al.'s (1983) article three years earlier.

In another study that examined the relationship between face-ism and the depicted person's assumed occupation, Matthews (2007) found that published images of men depicted in intellectual occupations (e.g. businesspersons, politicians, scientists, educators) had significantly higher face-ism ratios than women depicted in these same professions (men  $\bar{x} = .52$ , women  $\bar{x} = .45$ ). Furthermore, images of men in physical occupations (e.g. athletes, actors/entertainers, models) had significantly lower face-ism ratios than women depicted in these same professions (men  $\bar{x} = .35$ , women  $\bar{x} = .42$ ). Matthews suggests that this portrays men as superior to women

both in intelligence and physical ability. The 779 images used for the analysis were taken from six popular American print publications, including *Time* and *Newsweek*.

Overall, face-ism content analyses have revealed that the media depicts men with a significantly higher face-ism ratio than women (Archer et al., 1983; Dodd, Harcar, Foerch, & Anderson, 1989; Copeland, 1989; Zuckerman, 1986; Zuckerman & Kieffer, 1994). Two content analyses found significant sex differences in face-ism, but only when occupation was taken into account (Matthews, 2007; Sparks and Fehlner, 1986). Other studies have found that face-ism differences are larger in what might be considered “traditional” publications such as *Time* and *Newsweek* than in women’s interest publications such as *Ms.* and *Working Woman* (Archer et al., 1983; Zuckerman, 1986).

### The Effects of Face-ism

After discovering face-ism’s existence, Archer et al. (1983) conducted a study to examine the effects that face-ism might have on humans’ perception of others. Archer et al. created two booklets with images of the same six men and six women in each. The same negatives were used to produce one high face-ism image and one low face-ism image of each stimulus person. Each stimulus person appeared in each booklet only once – in either a high-face-ism condition or a low-face-ism condition. 60 college students were given one of the two booklets and they rated the stimulus persons on a 10-point semantic differential scale (low and high) for intelligence, warmth, ambition, and physical appearance. Archer et al. explained that these qualities were chosen somewhat arbitrarily as qualities that *might* be impacted by the face-ism ratio. Stimulus persons with higher face-ism were rated higher on their levels of intelligence, ambition, and

physical appearance than those persons with lower face-ism. However, stimulus persons with higher face-ism were rated lower on their levels of warmth.

In a similar experiment, Schwarz and Kurz (1989) asked participants to rate high face-ism and low face-ism stimulus persons on 14 trait adjectives. The adjectives measured competency (e.g. intelligent, assertive, ambitious) and emotional expressiveness (e.g. warm, sensitive, likeable) (p. 313). In consensus with Archer et al.'s (1983) findings, both male and female stimulus persons with high face-ism were rated as more competent (Archer et al. used the words intelligent and ambitious) than those with low face-ism. These results were the same regardless of the sex of the participant. Results also showed that that a person in a high face-ism condition does not mean that his or her expressiveness and likeability is sacrificed for his or her appearance of high competency and intelligence. This conclusion is different than those of Archer et al. (1983) and Zuckerman (1986), however, whose studies suggest that higher face-ism *does* elicit lower ratings of perceived warmth (although in both cases these results did not quite reach significance).

Perhaps Schwarz and Kurz's (1989) most significant expansion on Archer et al.'s research was their analysis of whether or not high face-ism simply magnifies stimulus persons' preexisting negative or positive qualities. The researchers studied this by measuring the prior likeability of each stimulus person. The positive ratings given to high face-ism stimulus persons were not impacted by the stimulus persons' *a priori* likeability. Thus, the results suggest that high face-ism does not inflate both negative *and* positive attributes, but actually increases positive ratings for both unlikeable and likeable people.

Zuckerman and Kieffer (1994) found similar effects in their study on face-ism and its potential impact on first impressions. Their experiment manipulated the face-ism ratios of

stimulus persons in different test booklets, and participants rated the stimuli on six 7-point scales. The bipolar trait scales used were “analytical-emotional, competent-incompetent, intellectual-not intellectual, mature-immature, sexual-not sexual, and dominant-submissive” (p. 90). Stimulus persons with high face-ism ratios were rated as more dominant ( $\bar{x} = 3.73$ ) than those with low face-ism ratios ( $\bar{x} = 3.92$ ). Another finding revealed that female participants rated high face-ism stimulus persons as more sexual while male participants rated low face-ism stimulus persons as more sexual. Although these findings are interesting, Zuckerman and Kieffer conclude, “There was no evidence that differences in face-ism imply perceived differences in mental ability. Ratings on adjectives such as intellectual, mature, competent, and analytical failed to distinguish between portraits high and low in facial prominence” (p. 91). The above findings replicate those found previously by Zuckerman (1986), in which participants rated high face-ism stimulus persons as more dominant but not necessarily more intelligent.

### Explaining the Effects of Face-ism

Researchers agree upon two things: first, that face-ism exists in the media and second, that it has significant effects on viewers’ first impressions of a person. Explanations of these effects still remain largely debated, however. Archer et al. (1983) suggest that because the center of mental life exists in the head/face, a depiction that emphasizes this part of the body will also enhance the depicted person’s supposed mental attributes such as intelligence and competence.

According to Argyle (1979, as referenced in Schwarz and Kurz, 1989) people generally interact with liked others at a closer distance than they do with disliked others. When this happens during interpersonal communication, each person’s face is at a close distance. Perhaps seeing an image of a person with high face-ism simulates talking to someone at close proximity,

which in turn evokes feelings of liking, trust, or dominance. When a person's face is closer or enlarged in an image, the depicted person's eyes and expressions are more readily available which might increase viewers' feelings of trust and understanding of the depicted person (1979).

Finally, common figures of speech may provide clues as to how faces are associated with dominance and competence in many cultures (Zuckerman and Kieffer, 1994). For example, to "face" another person or do something "face to face" usually implies confidence and willingness to embrace a challenge (p. 92). Furthermore, many cultures are concerned with "saving face" at all costs. In such a situation the face is used as a synonym for dignity and reputation. If someone has "lost face", it usually means they did something embarrassing. Zuckerman and Kieffer (1994) suggest, "targets in pictures low in face-ism literally have 'lost face'" (p. 92). Research has not yet answered whether it is the amount of facial detail or just the literal size of the face that makes a high face-ism image more desirable.

### Statement of Relevance

Archer et al. (1983) attempted to explain sex differences in face-ism by suggesting that "the essence of a man is thought to reside in his face and head, whereas that of a woman is thought to reside more generally in her body" (p. 726). Therefore, they conclude, men will generally always be portrayed in terms of their faces and women will generally always be portrayed in terms of their bodies. This social norm may be accepted, but it is potentially problematic because the face and head are "the centers of mental life – intellect, personality, identity, and character" (p. 726). If women are consistently portrayed in terms of their bodies, their mental attributes are belittled. The generally low face-ism photographs of women found in the media might result in "lower evaluations of women's dominance, ambition, and

assertiveness” and might activate gender stereotypes (Levesque & Lowe, 1999, p. 244). This has implications for how men and women are presented and valued in society.

In a more constructive application, face-ism could be helpful to advertisers and graphic designers who wish to communicate a persuasive message via a spokesperson or model. Because higher facial prominence has been associated with attributions of competence and intelligence, perhaps a model with high facial prominence would more effectively persuade an audience than a model with low facial prominence.

When hiring new employees, businesses (especially those associated with the performing arts) sometimes request that candidates include a recent headshot with their résumé. Because a high face-ism image will be more appealing to the viewer, job applicants might wish to provide a high face-ism image of themselves to potential employers. The same is true for current employees who are featured in employee profiles on websites or in other publications.

Face-ism might also be useful during political campaigns when candidates are featured prominently in newspapers, magazines, and other media materials. Candidates might wish to be depicted in high face-ism images so the public will see them as more appealing and competent. In a similar vein, photographers for magazines and other publications might wish to make themselves familiar with face-ism effects so they can use them to their clients’ advantage.

### Focus of Current Study

The present study seeks to replicate the results of prior face-ism effects research and to explore the possibility of other effects that have not yet been studied. Instead of rating stimulus persons’ level of intelligence, ambition, dominance and attractiveness on a scale as previous studies have done, this study more indirectly asks participants to choose the version of the stimuli that they think represents these qualities the best. This method might more closely

represent the way that people make quick character judgments about people they see in the media. This study can also be considered a pilot study for examining the relationship between face-ism preference and media consumption as well as the effects of face-ism on memory.

### Hypotheses/Research Questions

1. Participants will choose high face-ism stimuli to represent dominance, ambition, intelligence, and attractiveness more often than they will choose low face-ism stimuli to represent these traits.
2. There is a relationship between the sex of the stimuli and participants' facial prominence preference.
3. High consumers of television media will choose male stimuli in the high face-ism condition and female stimuli in the low face-ism condition more often than low consumers of television media will.
4. High consumers of print media will choose male stimuli in the high face-ism condition and female stimuli in the low face-ism condition more often than low consumers of print media will.
5. Participants will score higher on a memory test about high face-ism employee profile stimuli than they will score on a memory test about about low face-ism employee profile stimuli.

### Methods

#### Sample

This study used the responses of 93 undergraduate students at the University of Arizona. The students were members of an upper division Communication class. The students were compensated with extra credit points for their voluntary participation. The average age of

participants was 21. Participants ranged from 19 years old to 28 years old. 66 participants (71%) identified as female and 27 participants (29%) identified as male. 68 of the respondents were white (73%), 11 were Hispanic/Latino (12%), 6 were Asian (6%), 2 were Black or African American (2%), and 6 identified as something other than these ethnicities (6%).

## Research Design

Participants were invited to take an online survey for extra credit. The survey was designed using Qualtrics Survey Software. Participants took the survey on their own personal computers on their own time. On the first page of the survey, participants were greeted with a message asking them to assume the role of a Marketing Team Member for the (fictional) Duke Software Company. The company was described as a prestigious business software company that wants to represent intelligence, ambition, and dominance in the market. Participants were then asked to help “choose the new face” for a Duke Software Company advertisement that would be published in *The Wall Street Journal*. Participants were shown three sets of images. Each set of images consisted of a stimulus person shown in a high face-ism condition directly adjacent to the same image of the stimulus person in a low face-ism condition. There were four stimuli total (a white woman, a white man, a black woman, and a black man) and they were all dressed comparably in business attire. Each participant was only shown three of the four stimuli persons. The computer randomly chose which three stimuli were shown to each participant. Participants were then asked to choose which version of the stimulus person would best represent Duke Software Company’s desired image for the advertisement. Participants were given the option to explain the reasoning behind their choice in a free response text box. Participants were then asked to indicate their daily television consumption and daily print media consumption on a

scale ranging from less than one hour to 10+ hours. Next, participants were asked to read two employee profiles that consisted of a short biography and a photograph of an employee. There were eight different employee profiles (four different stimuli persons, each in a high face-ism or low face-ism condition) and the computer randomly chose which two conditions were shown to participants. Participants then answered a series of multiple-choice questions about the employees that they just read about. This was meant to test participants' memory of the facts in the employee biographies. Finally, participants answered a series of demographic questions and entered their names on a separate page to receive extra credit.

## Results

Chi-square analyses were performed to address the first four hypotheses in this study.

Hypothesis one, that participants will choose high face-ism stimuli more often than they will choose low face-ism stimuli, was not supported. There was a highly significant relationship between facial prominence and stimulus choice ( $\chi^2(1, N=374) = 88.56, p < .001$ ), but it was not in the predicted direction. Participants chose low face-ism stimuli 74% of the time ( $n = 278$ ) and chose high face-ism stimuli only 26% of the time ( $n = 96$ ). The face-ism ratio of the stimuli did significantly influence participants' image choice for the advertisement, but not in the way that was hypothesized.

Hypothesis two, that there is a relationship between the sex of the stimuli and participants' facial prominence preference, was supported ( $\chi^2(1, N=374)=5.61, p < .05$ ). Overall, participants showed a preference for male stimuli with high facial prominence and for female stimuli with low facial prominence. Participants chose male stimuli with high facial prominence 34% more often than they chose female stimuli with high facial prominence ( $n = 58$ ,

n = 38). Participants chose female stimuli with low facial prominence 15% more often than they chose male stimuli with low facial prominence (n = 149, n = 129).

Hypothesis three, that higher consumers of television will choose male stimuli with high facial prominence and female stimuli with low facial prominence more often than low consumers of television will, was not supported ( $\chi^2 (1, N=206)=0.41, p > .05$ ). For this study, “heavy consumption” was defined as three or more hours of television viewing per day and “low consumption” was defined as zero to three hours of viewing per day. Television consumption does not appear to have a significant impact on participants’ facial prominence preference.

Hypothesis four, that higher consumers of print media will choose male stimuli with high facial prominence and female stimuli with low facial prominence more often than low consumers of print media will, was not supported ( $\chi^2 (1, N=206)=0.05, p > .05$ ). The definitions of high and low print media consumption were the same as those of television media consumption. Print media consumption does not appear to have a significant impact on participants’ facial prominence preference.

Hypothesis five, that participants would remember more information about high face-ism employee profile stimuli than they would about low face-ism employee profile stimuli, was not supported. An independent samples t-test showed that the memory scores for high face-ism employee profiles (M=3.62, SD=2.93) and low face-ism employee profiles (M=3.58, SD=3.17) were not significantly different ( $t(184)=1.66, p > .05$ ).

## Discussion

Hypothesis one predicted that participants would show preference for the stimuli with high facial prominence. Previous research suggests that participants would choose the stimuli

with higher facial prominence more often because they would associate those faces with the traits that Duke Software Company wanted to convey in its advertisement (ambition, intelligence, attractiveness, and dominance). Thus, the results of this study were highly unexpected as the majority of participants considered the *low* face-ism versions of the models to be more representative of those desirable traits. This study therefore failed to replicate the conclusions of existing face-ism effects literature. One possible explanation is that the prior face-ism effects studies have used a scale to rate stimuli on different traits while this study used a less straightforward method and asked participants to choose between two different versions of the same image. Putting the participants in the role of marketer may have caused them to pay more attention to the stimuli's clothing or body language when choosing which version they wanted for the advertisement. Although a full content analysis was not performed on the free response answers that were collected, many participants mentioned that the professional attire and assertive body language of both the female and male stimuli caused them to favor the images that showed more body (i.e. low face-ism). Future research could use a similar design, but it would be interesting to see how stimuli preference would change if the advertisement was for a company in a different industry, such as entertainment or manual labor. Future research might also consider showing more than three stimulus persons to each participant.

Hypothesis two predicted that participants' image choice for the advertisement would be influenced by the sex of the stimuli. Previous research suggests that men in business and other intellectual professions are usually depicted with higher face-ism ratios than women in similar professions (Matthews, 2007; Sparks and Fehlner, 1986). That trend was replicated in this study, as participants showed preference for male stimuli with high face-ism and preference for female stimuli with low face-ism. This once again supports the idea that "the essence of a man is

thought to reside in his face and head, whereas that of a woman is thought to reside more generally in her body” (Archer et al., 1983, p. 726). Perhaps people are so accustomed to seeing men and women portrayed in this way in the media that they now subconsciously prefer it. It is important to remember that the vast majority of the participants in this study were female (71%), so the results might not be the most representative of the general population. Future studies should attempt to have a more equal ratio of male and female participants. In any case, this study showed a significant preference for women depicted in terms of their bodies and for men depicted in terms of their faces.

Hypotheses three and four were not supported, as this study did not find evidence to suggest that heavier media consumption is related to a preference for high face-ism male stimuli and low face-ism female stimuli. Regardless of their level of television or print media consumption, most participants chose the low face-ism stimuli across both sexes. Because the media tends to represent men in terms of their faces and women in terms of their bodies, it was hypothesized that heavier consumers of media would be accustomed to seeing the world in such a way and would therefore choose the stimuli that matches the media’s portrayal. However, this does not seem to be the case. A possible limitation of this study is that most participants were low media consumers. Future studies on media consumption and face-ism should include more heavy media consumers in the sample. Future studies could also do a more thorough analysis of participants’ media consumption habits.

Hypothesis five, which predicted that high face-ism would aid in the memory of employee profile information, was not supported. An independent samples t-test was conducted to compare the two means of the memory test scores for employee profile information. There was not a significant difference in scores for the high face-ism ( $M = 3.62$ ,  $SD = 2.93$ ) and low

face-ism ( $M = 3.58$ ,  $SD = 3.17$ ) conditions. There was also not a significant difference in scores for male ( $M = 3.49$ ,  $SD = 3.07$ ) and female ( $M = 3.70$ ,  $SD = 3.30$ ) employee profiles. One limitation in this study is that each participant was shown two employee profiles in a row, and may have paid closer attention to the second employee profile once they realized that they would be quizzed on the information given. Another limitation is that this study only asked five questions about each stimulus person. Future studies could ask a longer set of questions or could provide a longer employee profile with more detailed information. Future studies could further examine the relationship between the facial prominence of a stimulus person and viewers' ability to remember information associated with him or her. This could be done in the context of a print advertisement or a television commercial. A similar test could be done to examine the impact of facial prominence on persuasiveness. Participants could be shown a stimulus in two face-ism conditions and could be asked to rate how willing they are to believe the stimulus person or how willing they would be to buy a product endorsed by the stimulus person. Because there is currently no published research on face-ism's impact on attention to detail or memory, this should be a priority for future face-ism research.

## Conclusion

This study sought to replicate previous face-ism effects research and explore possibilities for future research. Archer et al.'s (1983) and Schwarz and Kurz's (1989) findings that high face-ism stimulus persons are associated with higher competence, intelligence, ambition, and physical appearance were not supported here. However, this study was not the first that failed to replicate those results (Zuckerman and Kieffer, 1994). Participants did show a preference for women with a low face-ism ratio and for men with a high face-ism ratio. This shows that participants thought women appeared more dominant, intelligent, ambitious, and attractive when

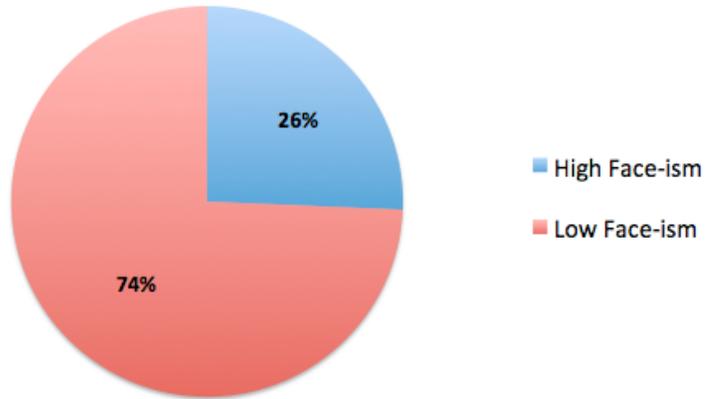
they were depicted primarily with their bodies. Because this suggests that women appear *more* powerful when they are shown in low face-ism conditions, perhaps the frequent low face-ism depictions of women in the media are not as damaging as previously thought. Or, perhaps this is further evidence of society's tendency to judge a woman's value by the way her body looks.

Advertisers, marketers, politicians, photographers, and graphic designers should be aware of the face-ism ratio because it impacts first impressions and trait attributions. If future research does find that memory and persuasiveness increase with higher face-ism, the aforementioned professionals could use the face-ism ratio to their advantage. Finally, although this study did not find a relationship between heavy media consumption and an increased preference for high face-ism images of men and low face-ism images of women, it would be interesting to research this potential relationship further.

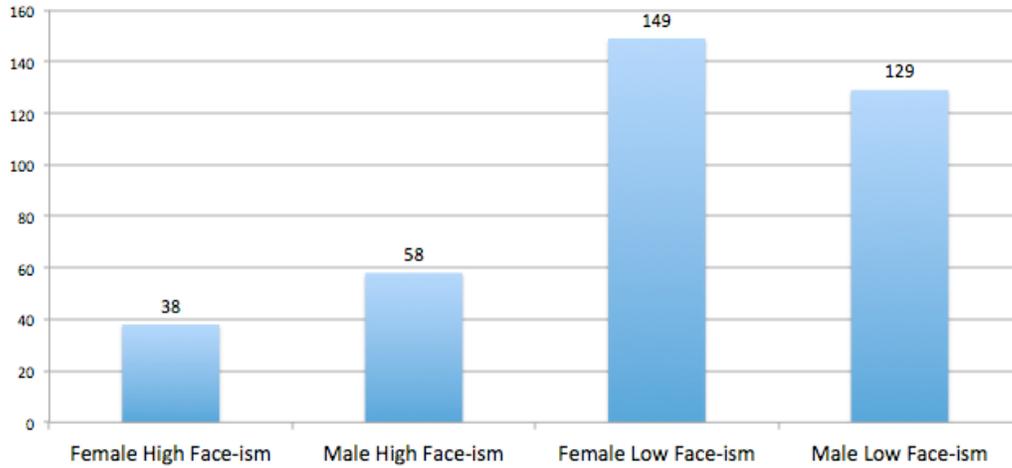
Face-ism is still a relatively unknown phenomenon even though it exists in every portrait of every person throughout all of history and in all countries. It influences the way people form first impressions. It influences the way men and women are valued and portrayed in society. It silently influences the traits that we attribute to others. This study has only scratched the surface of face-ism and its potential as a topic for further research and application.

# Appendix

### Stimuli Choice by Face-ism Level



### Face-ism Choice By Sex of Stimuli



## References

- Archer, D., Iritani, B., Kimes, D. D., & Barrios, M. (1983). Face-ism: Five studies of sex differences in facial prominence. *Journal of Personality and Social Psychology*, 45(4), 725-735.
- Key, J. P. (1997). *Chi square*. Retrieved from <http://www.okstate.edu/ag/agedcm4h/academic/aged5980a/5980/newpage28.htm>
- Levesque, M.J., Lowe, C.A. (1999). Face-ism as a determinant of interpersonal perceptions: The influence of context on facial prominence effects. *Sex Roles*, 41(314), 241-259.
- Matthews, J.L. (2007). Hidden sexism: Facial prominence and its connections to gender and occupational status in popular print media. *Sex Roles*, 57, 515-525. doi: 10.1007/s11199-007-9276-3
- On-line chi-squared table*. (n.d.). Retrieved from <http://www.unc.edu/~farkouh/usefull/chi.html>
- Reporting results of common statistical tests in APA format*. (2010). Retrieved from <http://web.psych.washington.edu/writingcenter/writingguides/pdf/stats.pdf>
- Schwarz, N., & Kurz, E. (1989). What's in a picture? the impact of face-ism on trait attribution. *European Journal of Social Psychology*, 19, 311-316.
- Sommer, B. (n.d.). *Methods manual: Chi-square - selected critical values*. Retrieved from [http://psychology.ucdavis.edu/sommerb/sommerdemo/stat\\_inf/tutorials/critvalues.htm](http://psychology.ucdavis.edu/sommerb/sommerdemo/stat_inf/tutorials/critvalues.htm)
- Sommer, B. (n.d.). *Methods manual: Chi-square - hand calculation* . Retrieved from [http://psychology.ucdavis.edu/sommerb/sommerdemo/stat\\_inf/tutorials/chisqhand.htm](http://psychology.ucdavis.edu/sommerb/sommerdemo/stat_inf/tutorials/chisqhand.htm)
- Sparks, G.G. (2013). *Media effects research: A basic overview*. (4th ed.) Boston, MA: Wadsworth Cengage Learning.
- Sparks, G.G., Fehlner, C.L. (1986). Faces in the news: Gender comparisons of magazine photographs. *Journal of Communication*, 70-79.
- Zuckerman, M., Kieffer, S.C. (1994). Race differences in face-ism: Does facial prominence imply dominance?. *Journal of Personality and Social Psychology*, 66(1), 86-92.