

The Red River Psychology Journal

PUBLISHED BY THE MSUM PSYCHOLOGY DEPARTMENT

ISSUE: 2015 VOLUME: 1

The Effect of Eyeglasses on Intelligence Perceptions.

Aubrey Borgen.

Minnesota State University Moorhead

Abstract. This study was conducted to examine the relationship between perceptions of intelligence and the authenticity of an individual's eyeglasses. Nonprescription eyeglasses have become an increasingly popular trend, and psychological studies have yet to examine the stereotypes associated with this accessory. Participants were college students asked to look at images of individuals without glasses, with prescription glasses, and with nonprescription glasses. They rated their perceptions of each individual on different characteristics, which focused on intelligence. The expectation was that perceptions of intellect would be different for the individuals depending on their eyewear condition. Results showed that there were significant differences in intelligence perceptions of each model, but not for the different glasses-wearing conditions. This suggests that judgments of a person's intelligence are largely affected by individual characteristics, and not necessarily their eyewear.

Physical attractiveness rules over our interactions with others, or at least it appears to in everyday interactions (Mackinson, Jordan, & Wilson, 2011). Features of a person's outward appearance can affect first impressions, judgments of personality, interpretation of behavior, and various other aspects, as seen in research about student seating choice. In a study conducted by Mackinson et al. (2011), students were found to sit more closely to others with certain physical characteristics. This study shows that we automatically make assumptions about individuals based on their appearance, and this dictates our actions and interactions with the person. The smallest of features or accessories can cause us to make inferences about the individual's personality (Harris, 1991).

Humans attempt to manage both their temporary and constant attributes by changing appearance, as stated by Hellström and Tekle (1994). These alterations and differences in human appearance that vary from individual to individual cause observers to create ideas in their mind about who the person is. As an

explanation for these ideas, Terry and Stockton (1993) stated that this assignment of characteristics is caused by the placement of the person into a certain schema. These hypothetical cognitive structures are developed uniquely by individuals, giving them a set of inferences to make about other individuals. Schemas can encompass stereotypes, preconceptions, and other assumptions. People will automatically place others into personality schemas based on their appearance, even if the judgments do not accurately apply to them (Terry & Stockton, 1993).

Although many perceptions about a person are contrived from the features of the whole body, humans often focus on the facial region. Through facial features, such as the eyes and mouth, we convey our emotions and what we are thinking at the present point in time. Leder, Forster, and Gerger (2011) claim that these features can also give clues to others about our age, gender, attractiveness, and overall identity. People look at our face to not only hear our verbal communication, but also





to see the nonverbal communication that is evident. It also has been shown that specialized brain regions work to process facial features, showing their importance in the perception of a whole individual (Leder et al., 2011).

Usually, another's face is right at the height of the observer's eyes, so it is much more subject to detailed scrutiny than other parts of the body. Terry and Stockton (1993) claim that children, from their first moments of social interaction, form prototypes of facial features. These prototypes, or original models, dictate how newborns feel about certain faces and determine what schema they place the face into. Facial prototypes stay with individuals as they grow older, placing a precedent for how they scan the face and make assumptions about others. Mackinson et al. (2011) have found that as adults, we even prefer children that have similar facial features to our own. Overtime, our schemas develop to tell us that those with babyish faces are less mature, and those with strong jaws are competent (Leder et al., 2011). We often only have the face of a person to make judgments from, such as in newspapers (Hellström & Trekle, 1994).

Despite the importance of the facial region in social perceptions, one section of it is the most dominant: the eyes. As the biblical saying goes, "eyes are the window to the soul," and can tell us multiple things about an individual. Terry and Stockton (1993) claim that many studies about children have shown that they focus much more on the eye region than other parts of the body. Because of facial scanning measures, researchers have been able to determine that eyes are fundamental in the early formation of prototypes and schemata (Terry & Stockton, 1993). Eyes are the first thing to be focused on in most social interactions, because they hold many clues to what the person is thinking. Like much of the face, an individual can look at the eyes to gain information about a person's emotional state. In particular, muscles in the eye region are involved in many different emotional displays

(Leder et al., 2011). While other features of the face can be changed to portray a desired emotion, the eyes will usually tell the truth. From early on, we learn that eye gaze is an essential factor in social interactions, and that we can recognize what another person is feeling based on nonverbal cues (Leder et al., 2011).

Because of the prominence of the facial region in general, many studies have been conducted to research the effects of different features of a face. For instance. Hellström and Tekle (1994) studied the effects of baldness and beards on the perceptions of faces. In earlier studies, beards were shown to increase the perception of masculinity and aggressiveness. However, baldness caused a lower rating of social likability. In this experiment, the researchers had participants judge the pictures of men based on assumed occupations and characteristics. Using these minimal clues about a person, the participants consistently judged the men as having particular occupations. Another study, conducted by Lundberg and Sheehan (1994) looked at the effect of adding weight to a face. Female participants judged the picture of a woman to be much more attractive when she was shown to be of normal weight, instead of heavier. These studies show that minimal additions to a face can greatly affect how a person judges another, even though the basic facial features are essentially the same. The schemas of participants show that many stereotypes and biases are present, and come into play when only the face of a stimuli individual is shown.

Even though many things can be done to change a face and manipulate impressions, one of the most prominent aspects that can be changed is the eye region. Because this is the central locus of evidence for emotions and the first facial aspect to be analyzed, the manipulation of it can more greatly affect perceptions (Leder et al., 2011). One of the most obvious ways that this region can be changed is through the addition or subtraction of eyeglasses. The evidence of how influential

this small item can be is often seen in the media and society. Many common statements convey stereotypes about the wearer of glasses, including "Men seldom make passes at girls who wear glasses," "dressed for success," or "I'm a nerd," (Harris, 1991). Society assumes that wearing glasses tells others something about the individual's personality. Leder et al. (2011) claimed that children who are cursed with lower than average eyesight are subject to being called "four eyes," and are victims to bullying when they are younger. These researchers also stated that the stereotypes of society often contradict themselves, portraying a bespectacled person as an unattractive nerd but also a sleek businessperson. Opinions of glasses also differ depending on the time period, with glasses becoming much more acceptable in later years. No matter what, a glasses-wearing person must be prepared for any kind of stereotypes that he or she may encounter on a daily basis.

Researchers have been studying the effect of glasses on perceived characteristics for decades, and many of them follow the same methodology. Most studies that concern opinions of eyeglasses show participants the pictures of different individuals, and ask for them to rate this person on different qualities (Walline, Sinnott, Johnson, Ticak, Jones & Jones, 2008). One of the most basic examples of this is a study conducted by Hasart and Hutchinson (1993), in which two photos each were taken of a male and a female student: one with glasses and the other without. Participants were then asked to answer questions about the photos concerning interpersonal, task, and social attraction. A similar study conducted by Harris (1991) also used this methodology, but used five photos of females and five photos of males. Like most of the studies concerning this subject, photos were taken of the individuals once without glasses and once with. The subjects were asked to keep their same posture and facial expression to exclude any extraneous variables from affecting opinions. To control

these variables to a further extent, some studies used the same photo and just added eyeglasses with a photo editing program (Lo, Yang, Lin, Hsieh, Liu, & Chiou, 2012).

The simplicity of this methodology enables it to be used with many populations, including children. Because the effect of eveglasses on children was not studied in earlier decades, much more recent research has looked at this population (Terry & Macy, 1991). Researchers Terry and Macy (1991) gave reason for their study by claiming that children use negative stereotype words such as "nerd" or "blind" more frequently than adults. However, studies with children as participants have found many different results concerning opinions about eyeglasses. Terry and Stockton (1993) found that children rated other children wearing glasses more negatively in aspects of sociability, attractiveness, school performance, conduct, and whether he or she wanted to be their friend (sociometric choice). Also, Terry and Macy (1991) found that younger and older children have similar negative reactions to other children wearing glasses. These studies paint a very negative view of children's perceptions of eyeglasses, coinciding with the common assumption that children tease and bully those with "four eyes." However, this may also be a reflection of the time period. In a more recent study, it was found that children rated glasses-wearing peers as similar to other peers in many aspects (Walline et al., 2008). This may show a trend in more positive opinions of glasses as they have become more acceptable in recent years. However, the children participating in the earlier studies are most likely college students now, and may have or may have not brought those negative stereotypes with them.

While many of these studies have looked at the impact of glasses on children, many experiments have also studied how different genders react to glasses (Harris, 1991). Because most studies include both genders, it must be taken into account that they will most likely have different opinions. For children, an obvious trend is that girls tend

to rate the girl photos higher and the boys tend to rate the boy photos higher (Terry & Stockton, 1993). Although this may seem to be an obvious difference to those that have worked with children, it has also been found that both genders judge girls more harshly when wearing eyeglasses (Terry & Macy, 1991). This judgment can also appear as these children grow into adults, as women without glasses were seen as more socially and physically attractive than men without glasses, and both genders with glasses (Hasart & Hutchinson, 1993). However, this finding contradicted Harris' (1991) study showing that men rated women with glasses as more physically attractive than the men. Many of these gender stereotypes may be expanded when the glasses condition is added, which is why often studies will often ask for participants to report their gender. It must be assumed that certain participants will prefer certain genders, whether they are wearing glasses or not.

Despite what variables these studies include in their method, most of them are focusing on the same thing: different opinions of those who wear glasses. The perceptions to be focused on are most often materialized in rating systems, and the majority of these studies have attractiveness as one of their factors. Because of society's concern with appearing attractive to others, this is something that many researchers intentionally measure. The prominent opinion is that eyeglasses make an individual less physically attractive to others, and many studies confirm this stereotype, including those conducted by Lundberg and Sheehan (1994), and Terry and Stockton (1993). From an early age, children have been found to rate other children as less attractive when they are wearing glasses (Terry & Stockton, 1993). In studies concerning adults, the same trend is shown. Women have been shown to see another woman as less physically attractive when wearing glasses (Lundberg & Sheehan, 1994). Even when the shapes of the frames are modified, adults still tend to judge other adults as less physically attractive (Lo et al., 2012). Going beyond physical attractiveness, those with glasses are even rated more negatively in task and social attractiveness (Hasart & Hutchinson, 1993). When looking at the results of these studies, it may seem strange that individuals still wear glasses and detract from their physical attractiveness.

However, many studies have shown that there is a redeemable impact of wearing glasses: a boost in intelligence perceptions. Despite the many negative opinions of children about glasses, they tend to view peers with glasses as having a higher level of intellect (Walline et al., 2008). Even though this is a strong positive element, many children that are being bullied by others may not see this advantage as outweighing the strong negatives associated with the use of glasses during this younger age range. Those with glasses are also stereotyped to have jobs that require higher levels of education. Pictures of men wearing glasses were more often described as a professor, and least likely described as a factory worker (Hellström & Tekle, 1994). Even though both beards and baldness were also studied in their effectiveness of job stereotypes, glasses were shown to be the most important in decisions.

Unlike other researchers, Leder et al., (2011) looked at whether rimless glasses would have this same effect on perceived intelligence as rimmed glasses. Their study showed that both types of glasses elicited positive perceptions of those wearing glasses in terms of intelligence. Those who wear glasses also hold this stereotype, as they feel more intelligent and capable when they are wearing them (Harris, 1991). Despite some of the negative stereotypes, it seems as though glasses-wearing individuals hold on to this positive stereotype and believe that they leave this intelligent impression on others.

Even though studies have been conducted about the different effects of rimless and rimmed glasses or different frames of glasses, no experiments have been conducted on the effect of nonprescription

glasses. Many of the studies concerning eyeglasses are older, and the wearing of fake glasses is a fairly modern phenomenon. As stated by Leder et al. (2011), glasses have recently become one of the most frequently worn fashion accessories. Because many people do not have poor eyesight and require optical aid, nonprescription glasses are an obvious option (Frangos, 2011). While psychological studies have ignored this topic, many publications, such as *The Wall Street Journal*, have analyzed this trend. Frangos portrayed the differing views of fake glasses in Hong Kong, as many people rushed to buy them while others were conflicted about the trend. Psychological research has yet to study the impact of fake glasses on perceptions, so it is undetermined whether they may have a detrimental or positive effect. Because the impact of nonprescription glasses has not been researched, and because opinions of glasses have greatly changed in the last few years, new studies must be conducted measuring the effects of these trends in social schemas. As seen in studies on children, those that participated in studies recently have much higher opinions of those that wear glasses in comparison to children studied more than ten years ago (Terry & Macy, 1991; Walline et al., 2008).

The present study examined the effects of both prescription and nonprescription glasses on perceptions of intelligence. It followed the common methodology of previous studies, but with the added variable of faux spectacles. Each stimulus model was photographed three times instead of twice: one without glasses, once with fake glasses, and the other with real glasses. The study participants rated the individuals in the photographs on multiple rating scales, with the focus being on intelligence. These perceptions were predicted to be significantly different for each of the glasses conditions. Because there has not been past research on fake glasses, it was possible that they could cause lower or higher levels of perceived intelligence. However, it was hypothesized that those

wearing real glasses are seen as more intelligent than those without glasses, as found in other studies. If those wearing fake glasses were also seen as less intelligent than those wearing real ones, this would support the theory that bespectacled people are thought to be more intelligent because of myopia (Harris, 1991). The null hypothesis was that those with fake glasses are perceived to be equally intelligent as those with real glasses, which would show that it is only the appearance of glasses that cause these impressions. The aim of this study was to greatly contribute to both psychological studies concerning modern opinions of glasses, and also practices of everyday adornment.

Method

Participants

The participants were sixty-three college-aged men and women who are students at Minnesota State University Moorhead. Three of the participants did not complete the study due to computer malfunctions, therefore results from sixty students (35 women, age range: 18-22 years) were included in the analysis. With three different types of photographs, twenty students experienced each condition. Many of them were students taking lower level psychology courses, and participated in the experiment to receive extra credit. However, there was also a minority of students that participated to learn more about the experiment process and did not receive extra credit. This was a convenience sample, or more specifically a volunteer sample, as most of the students signed up to participate while some of them walked-in when they had spare time. The study treated the participants in accordance with the ethical principles of the American Psychological Association.

Materials

Four people were selected for photographs, including two men and two women. These stimuli individuals are of average attractiveness, the average age of college students (18-22 years), and Caucasian.



They are from colleges other than MSUM, so that there would be a small chance of preconceived impressions of intelligence. The models were wearing simple clothing, and the females had minimal makeup with their hair tied back so that their face could be seen completely. Three photographs were taken of each individual: once without glasses, once wearing glasses with lenses, and once wearing the glasses without lenses. The same pair of eyeglasses were used with each individual, and were a generic type similar to the neutral Ray-Ban Wayfarers that can be worn by both genders. The complete glasses were used for the real glasses condition, and the lenses were removed for the fake glasses condition. Removing the lenses provides an easy way to tell that the eyeglasses are fake, as there is no glare in the photographs. The lighting was manipulated in a way to ensure that the photographs containing lenses did not show an obvious glare. Each individual was asked to pose for three photographs, keeping the same neutral facial expressions and posture. This ensured that the only difference between the photographs was the glasses-wearing condition, and that all other variables were controlled (see Appendix A for the photographs). Ten Likert scale phrases were generated, with five as distractors and five concerning intelligence. Each quality was rated on a scale of one to five, with one being the least likely and five being the most likely (see Appendix B for ratings). The photographs were shown using the MediaLab program, which controlled the amount of time used to view the pictures. Timing the viewing made sure that the participants were providing first reactions, and not deeply scrutinizing each photograph.

Design

This study employed a mixed design, including both a between-subjects and a within-subjects variable. The first independent variable was the glasses condition, of which there were three levels. These consisted of wearing fake glasses, real glasses, or wearing none at all. The second independent variable

was the model wearing the glasses, and there were four different levels of this. There were two different female models, and two different male models. The glasses condition was a between-subjects variable as the participants only viewed one of the levels, and the model was a within-subjects variable as the participants viewed each model once. The dependent variable was the scores of perceived intelligence for each of the photographs.

Procedure

The participants were asked to complete a study concerning first impressions of others, and they were randomly assigned to one of the three glasses conditions by using an online randomized program. They were seated at a computer, and told that pictures would appear and they were to answer questions about them. The MediaLab program began by showing a slide of instructions, in which they read that each picture would stay on the screen for five seconds and that they would then rate the individual on ten characteristics. Each participant viewed four photographs, one of each of the models. The glasses condition remained constant for all four of the photographs. For example, twenty participants viewed the four photographs in which the models were wearing glasses with lenses. The MediaLab program allowed five seconds to view each photograph, and then went through the series of ten ratings on different slides. After they finished with the ten ratings, the program continued to the next photograph and the subsequent ratings. MediaLab randomized the order in which the pictures were shown, and also randomized the order of the ratings. After viewing and rating each of the four photographs, the participants were then asked to complete a questionnaire asking their gender and various questions concerning eyeglasses (see Appendix C for questionnaire). These were used to analyze whether a participant's explicit opinions about eyeglasses were shown in their implicit judgments, and if personal characteristics correlated with their opinions. After this was

completed, the participant was debriefed and told the purpose of the study.

Results

Analyses focused on the intelligence ratings indicated by participants for the four different models under the three different evewear conditions. Participants viewed a picture of each model once, and all pictures viewed either included fake glasses, real glasses, or no glasses. The overall intelligence ratings were calculated by combining the likeliness rating of five different qualities that the participants attributed to each model; these qualities can be found in Appendix B. The maximum for each picture was a rating of five, therefore the overall intelligence rating was between 5 and 25. Four overall ratings were calculated for each participant, one for each of the models that they viewed. These ratings were then examined with a 3 (Eyewear Condition: Real vs. Fake vs. None) x 4 (Model: Male 1 vs. Male 2 vs. Female 1 vs. Female 2) mixed analysis of variance (ANOVA), as eyewear condition was a between subjects variable and model was a within subjects variable. Means and standard error can be seen in Figure 1. This analysis only revealed a significant main effect of model: $F(3, 171) = 3.78, p = .012, h^2 = 0.062,$ with Female 2 having significantly higher intelligence ratings than Male 2 (p = .005). All other comparisons were insignificant (p >.340). There was no significant main effect for glasses condition: F(2, 57) = 1.29, p = .283, $h^2 = .043$, nor was there a significant interaction: $F(6, 171) = 17.66, p = .192, h^2 =$.049.

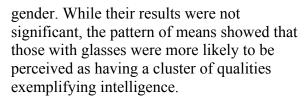
To investigate whether the models were affected differently by the eyewear conditions, a one-way ANOVA was conducted for each model. There was not a significant eyewear condition effect for Male 2: F(2, 57) = .30, p = .745, $h^2 = .010$, or for Female 1: F(2, 57) = .15, p = .861, $h^2 = .005$, nor Female 2: F(2, 57) = .08, p = .920, $h^2 = .003$. However, the eyewear condition did have a significant effect on Male 1: F(2, 57)

= 4.66, p = .013, h^2 = .141. Bonferroni post hoc tests revealed that for this model the real glasses condition had significantly higher intelligence scores than the no glasses condition (p = .013). The fake glasses condition was not significantly different than the real glasses condition (p = 1.00) or the no glasses condition (p = .112).

Discussion

Overall, the analysis of this experiment showed that the eyewear conditions did not have a significant impact on the perceived intelligence of these individuals. The hypothesis was that there would be significant differences in intelligence ratings for each of the conditions, but this was contradicted by the overall analysis. If these results can be generalized, this suggests that wearing prescription or nonprescription glasses will not affect how intelligent individuals appear. These results contradict the common stereotype that those wearing glasses are seen as more intelligent, therefore challenging the experiments confirming this judgment (Hellström & Tekle, 1994; Leder et al., 2011; Walline et al., 2008). The results also counter studies that include intelligence in the overall "negative glasses stereotype" that was first suggested by Terry (Hasart & Hutchinson, 1993; Terry & Stockton, 1993). While contradicting groups that find positive or negative effects, the current experiment replicates the non-significance that was earlier found by Lundberg and Sheehan (1994).

However, the overall intelligence ratings means were in the direction of what was hypothesized. Those wearing real glasses had slightly higher mean scores than both those with fake glasses or no glasses, and those with fake glasses had higher scores than those with no glasses. While these data were not significant, it suggests that there may be a mostly undetectable influence by the glasses. This general trend of means is similar to the results found in an experiment conducted by Harris (1991), which primarily focused on an interaction between glasses stereotypes and



Despite the fact that there was no significant effect by the glasses condition, the model did have a significant impact on impressions of intelligence. The second female model had overall significantly higher scores than the second male model, while the other two had scores in between the two As evidenced by these results, there were characteristics of the second female model that made her appear more intelligent, and characteristics of the second male model that caused him to appear less intelligent. Because the only features controlled by the experiment were the facial expressions and eyewear, any number of qualities could be the causation of these perceptions. While it cannot be determined what causes the differences, the results do suggest that individual qualities are more important than eyewear in influencing perceptions of intelligence. A few studies that examined the effect of glasses also looked at other facial characteristics, including the experiment conducted by Hellström and Tekle (1994). Although the wearing of glasses led participants to predict that the model had an occupation requiring higher intelligence, the evewear was not the only factor. The facial hair and baldness of the individuals also affected their assumed occupations. Similar to this study, the models used in the current experiment had extraneous unidentifiable characteristics that influenced perceptions despite the eyewear.

While individual differences may be more important than the eyewear of an individual, it is also possible that extraneous characteristics interact with glasses. In other words, glasses may cause some individuals to look more intelligent but not others. This is a suggestion made by Harris (1991), after conducting an experiment that resulted in a significant interaction between stimulus person and glasses condition. The current

study did not find the same significant interaction, but the individual analysis of each model made similar implications. While the glasses condition did not have a significant impact on the ratings of three of the models, it did for the first male model. He had significantly higher intelligence ratings when wearing the real glasses than when he was wearing no glasses. This supports the claim made by Harris, suggesting that some people are more affected by their choice of eyewear than others.

Like many studies that investigate the opinions of participants, there are quite a few limitations that may have affected results. One of these may have been the limited size of the sample and the type of people that participated. While the sample was fairly adequate, it is always more reliable to have a larger number of participants. All of the participants were college students attending a university in Minnesota, so the results are not generalizable to other age groups or other locations. Opinions of trends and accessories vary greatly, so it is assumed that judgments of glasses vary based on age and location. A significant limitation of the experiment is that participants may have not subconsciously noticed the glare of the lenses. It may have been more noticeable if the glasses condition had also been a within-subjects variable, allowing subconscious comparison of the glasses with lenses and those without. It is also possible that the ratings did not accurately measure intelligence, suggesting other qualities such as the age of the model. Lastly, the results may not be generalizable to everyday interactions as the participants were only shown pictures of the models.

Overall, the results of this experiment do not support the theory that those who wear glasses are assumed to be more intelligent. Because there was no significant difference between any of the eyewear conditions, the data cannot confirm or deny the theory that those wearing glasses are assumed to be more intelligent because they have myopia. Also, the data suggest that prescription and



nonprescription eyeglasses do not differ in their effect on impressions. It is likely that individual characteristics are more important in determining perceptions of intelligence, but it is possible that glasses have more of an effect on some individuals than others. The implication is that people do not need to wear glasses to look intelligent, as their own characteristics are more important. Wearing glasses may make a person appear smarter, but in most cases it won't create a significant difference from their normal appearance. While the trend of the ratings was not significant in this experiment, future experimental designs may be more sensitive to the glasses effect and find significant differences. Also, samples from other age groups and locations should be included, in order to further generalize results. Future experiments should aim to identify which individual facial characteristics are associated with intelligence. Most importantly, further research is required to investigate if there are certain physical characteristics that cause a person to be more susceptible to the effect of glasses on intelligence perceptions.



- Frangos, A. (2011, November 18). How to make a spectacle of yourself in frames with no glass in them. *The Wall Street Journal*. Retrieved from http://online.wsj.com/news/articles/SB10001424052970203699404577044 020959385832
- Harris, M. B. (1991). Sex differences in stereotypes of spectacles. *Journal of Applied Social Psychology*, *21*, 1659-1680. doi:10.1111/j.1559-1816.1991.tb00497.
- Hasart, J. K., & Hutchinson, K. L. (1993). The effects of eyeglasses on perceptions of interpersonal attraction. *Journal of Social Behavior & Personality*, 8, 521-528.
- Hellström, Å., & Tekle, J. (1994). Person perception through facial photographs: Effects of glasses, hair, and beard on judgments of occupation and personal qualities. *European Journal of Social Psychology*, 24, 693-705. doi:10.1002/ejsp.2420240606
- Leder, H., Forster, M., & Gerger, G. (2011). The glasses stereotype revisited: Effects of eyeglasses on perception, recognition, and impression of faces. Swiss Journal of Psychology / Schweizerische Zeitschrift für Psychologie / Revue Suisse de Psychologie, 70, 211-222. doi:10.1024/1421-0185/a000059

- Lo, C., Yang, C., Lin, P., Hsieh, K., Liu, Y., & Chiou, W. (2012). Are human faces more attractive with glasses?. *Journal of the Chinese Institute of Industrial Engineers*, 29, 125-135. doi:10.1080/10170669.2012.662917
- Lundberg, J. K., & Sheehan, E. P. (1994). The effects of glasses and weight on perceptions of attractiveness and intelligence. *Journal of Social Behavior & Personality*, 9, 753-760.
- Mackinson, S. P., Jordan, C. H., & Wilson, A. E. (2011). Birds of a feather sit together: Physical similarity predicts seating choice. *Personality and Social Psychology Bulletin*, *37*, 879-892. doi:10.1177/0146167211402094
- Terry, R. L., & Macy, R. J. (1991). Children's social judgments of other children who wear eyeglasses. *Journal of Social Behavior & Personality*, 6, 965-974.
- Terry, R. L., & Stockton, L. A. (1993). Eyeglasses and children's schemata. *The Journal of Social Psychology*, *133*, 425-438. doi:10.1080/00224545.1993.9712166
- Walline, J. J., Sinnott, L., Johnson, E. D., Ticak, A., Jones, S. L., & Jones, L. A. (2008). What do kids think about kids in eyeglasses?. *Ophthalmic and Physiological Optics*, 28, 218-224. doi:10.1111/j.1475-1313.2008.00559.x

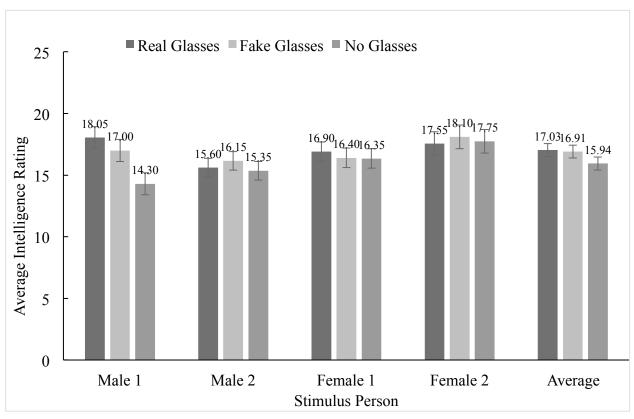


Figure 1. Mean Intelligence Ratings as Influenced by Stimulus Person and Eyewear Condition

Appendix A
Photographs of Stimulus Persons

Photographs of Stimulus Persons				
	Male 1	Male 2	Female 1	Female 2
No Glasses				
Fake Glasses				
Real Glasses				

Appendix B Ratings for Photographs

On a scale of 1 (very unlikely) to 5 (very likely) please rate these statements.

Statements pertaining to intelligence perceptions:

- 1. This person would do well in a difficult class.
- 2. This person would be working on their thesis.
- 3. This person would have a high score on an IQ test.
- 4. This person would have a GPA of 4.0.
- 5. This person would get an A on a test without studying.

Statements not pertaining to intelligence perceptions:

- 6. This person would have a boyfriend/girlfriend.
- 7. This person would have a diverse group of friends.
- 8. This person would be skilled at playing a musical instrument.
- 9. This person would be the president of a club.
- 10. This person would be on the soccer team.

Appendix C Questionnaire

1. What is your gender? Male Female

2. Do you wear prescription glasses?

Yes No Sometimes

If you answered yes, do you think that they make you appear intelligent?

3. Do you wear fake (nonprescription) glasses?

Yes No Sometimes

If you answered yes, do you think that they make you appear intelligent? Yes No

- 4. Do you think that those who wear prescription glasses are more intelligent than those who don't? Yes No
- 5. Do you think that those who wear fake (nonprescription) glasses are more intelligent than those who don't?

Yes No

- 6. What is your overall opinion of fake glasses? I don't like them I like them I don't care
- 7. In a few words, please describe your overall opinion of fake glasses or those that wear them: