

Physical Attractiveness and Gender in Negotiations*

Tanya S. Rosenblat[†]
Wesleyan University

May 7, 2008

Abstract

Are beautiful people better negotiators? I present evidence from a simple bargaining game where players can listen to pre-recorded “speeches” and see the pictures of other players. I find that physically attractive players receive a greater share of the surplus if the partner can both listen to their speech and view their picture. This effect is strongest when the listening partner is female. These results suggest new directions for experimental and empirical research on the role of non-resume characteristics on labor market outcomes and give new perspectives to practitioners in negotiations involving extreme power imbalance.

JEL Classification: C91, J31

Keywords: beauty premium, gender, economic experiments, labor markets

*I would like to thank Gary Charness, Rachel Croson, Ernst Fehr, Michael Hanson, Markus Möbius, Al Roth, and participants at the 2001 ESA Meetings in Barcelona and 2004 ESA Meetings in Amsterdam for very helpful comments. Financial support from Wesleyan University Seed Grant is gratefully acknowledged. All remaining errors are due solely to the author. Paula Diosquez and Lucas Sal Paz were excellent research assistants. Juan-Pablo Guiterrez provided competent computer support. I am particularly grateful to Professor Victor Elias and the Universidad Nacional de Tucumán for their hospitality.

[†]Wesleyan University, PAC 123, 238 Church Street, Middletown CT 06459, Telephone: (860) 685 5351, Fax: (860) 685 2781. E-Mail: trosenblat@wesleyan.edu

1 Introduction

Recent research in labor economics has shown that beauty is highly valued in the labor market. Hamermesh and Biddle (1994) found that workers of above average beauty earn about 10 to 15 percent more than workers of below average beauty. The size of this *beauty premium* is comparable to the race and gender gaps in the US labor market.

Attempts to explain the beauty premium have focused on two transmission channels. A large body of work in social psychology has analyzed the *physical attractiveness stereotype*. Beauty is perceived to be correlated with intelligence, social skills and health (Feingold 1992, Eagly, Ashmore, Makhijani, and Longo 2001). In my own work using an experimental labor market with a real-effort task for which beauty is not productive, I find that employers (wrongly) expect physically-attractive workers to have better performance (Mobius and Rosenblat 2006). Economists such as Becker (1957) have focused on *taste-based discrimination* as an alternative explanation to stereotypes. Employers and customers derive utility from interacting with physically attractive employees who therefore receive higher wages. One would expect that taste-based discrimination is most pronounced whenever there is an opportunity for future interaction between an employer and an employee allowing an employer to enjoy a stream of positive utility. Not surprisingly, Mobius and Rosenblat (2006) find that there is no evidence for taste-based discrimination when interaction is limited to wage bargaining during an experimental session.

In this paper, I focus on a third channel which I call the *negotiation channel*: physically attractive workers receive better wages because they negotiate more effectively. Research in social psychology suggests several explanations for a negotiation channel to arise. First, physical attractiveness and vocal attractiveness are correlated (Zuckerman and Driver 1989). Therefore, physically attractive partici-

pants are more likely to be perceived as more effective communicators. Zuckerman, Hodgins, and Miyake (2005) suggest that physical attractiveness and vocal attractiveness complement each other. Therefore, the negotiation channel is expected to be the strongest when negotiators are exposed to both oral and visual stimuli. Second, appearance can enhance acquisition of social skills throughout life because good-looking people often receive more attention from parents, caregivers, teachers and co-workers (Hatfield and Sprecher 1986). Since physical attractiveness ratings remain stable both during childhood (Adams 1977a) and throughout adulthood (Adams 1977b), good-looking people can develop better communication skills. Third, employers interacting with the physically attractive workers might perceive them as more persuasive even if the messages that they deliver are of similar content to those used by workers of below-average attractiveness. This can happen if physical attractiveness mediated through the beauty-is-good stereotype serves as a cue that enhances the perceived effectiveness of a negotiator (Langlois, Kalakanis, Rubenstein, Larson, Hallam, and Smoot 2000).

An intriguing literature in social psychology suggests that men and women differ in their ability to decode nonverbal cues such as facial expressions (Hall 1978, Hall 1984, Rosenthal, Hall, DiMatteo, Roger, and Archer 1984). Women have been found to be both more sensitive to nonverbal communication as well as better in decoding such communication. Therefore, men and women might respond differently to a physically attractive negotiation partner.

I test the negotiation hypothesis by using dictator game experiments with communication. In this setting there is an extreme power imbalance between negotiating parties. In a dictator game, an Allocator (employer) is matched with a Recipient (worker). The Allocator's task is to split a certain amount of money between herself and the Recipient. Allocators and Recipients in my experiment were randomly selected from different cities. This design choice makes the possibility

for interactions outside of the experiment negligible and therefore shuts down the opportunity to practice taste-based discrimination and allows me to focus on the negotiation channel. Allocators listened to a speech recorded by Recipients and also saw their pictures before making the decision. Dictator games most directly model a very specific negotiation environment—the one in which one negotiating party (Allocator) has significantly more bargaining power and consequently the other party (Recipient) in trying to persuade the Allocator to share some of the surplus with her has to appeal to Allocator’s generosity, altruism, empathy or sympathy.

My main findings are that in this setting female Allocators give more to physically attractive male and female Recipients. In contrast, men’s allocation decisions in my data are unaffected by interactions with physically attractive Recipients. I also show that the negotiation channel is only effective if Allocators can *both* hear a speech *and* see the Recipient’s picture. I find no negotiation effect in conditions where Allocators only see Recipients pictures or only hear speeches.

Experiments that identify the negotiation channel have several advantages compared to studies that rely on observational data collected through surveys. First of all, I can tightly control the degree of visual and oral interaction between employer and worker which allows me to explore the mechanism through which physical attractiveness affects employers. Second, I can distinguish the negotiation channel from stereotypes that attribute higher productivity to the physically-attractive because Recipients in my experiment do not perform any tasks that require skill, and from taste-based discrimination because the Allocator cannot interact with the Recipient in the future and derive utility from it.

The paper is organized as follows. Section 2 reviews the relevant literature in economics and social psychology. Section 3 describes the design of the experiment and section 4 discusses the experimental data. Section 5 presents the experimental

results. Section 6 concludes proposing avenues for future research.

2 Related Work

The dictator game is a widely studied simple bargaining game. In a standard dictator game, the first player, the Allocator, makes a unilateral decision regarding the split of the pie with the second player, the Recipient. The decision is binding for both Allocator and Recipient.

One particularly attractive feature of the dictator game is that it is non-strategic. The Allocator does not have to take into account expectations about the response of the Recipient.¹ If the Allocator only maximizes her own monetary payoff, economic theory predicts that the Allocator will keep the entire pie for herself. However, if the Allocator is also motivated by altruism and fairness considerations then she might rationally make positive offers to the Recipient. Experimental evidence indeed suggests that offers in dictator games tend to be positive. It is important to note that because the Recipient does not have an opportunity to reject the offer, dictator games best describe negotiations in which one party has very little bargaining power and has to rely on the generosity of her partner. Visual and oral stimuli can affect the generosity of the Allocator by evoking empathy or sympathy based on the message content, delivery style or simply by making the other party more concrete and thus lowering the perceived “social distance” between the Allocator and the Recipient.

A large number of studies have demonstrated that a decrease in anonymity or “social distance” between Allocator and Recipient tends to increase offers. This can be achieved by simply changing the framing of the experiment. For example, Hoffman, McCabe, and Smith (1996) showed that offers are lower using a “market”

¹For example, offers in the dictator game tend to be lower than in ultimatum games where player 2 has an opportunity to reject an offer (Camerer and Thaler 1995, Camerer 2003).

framing in which the Allocators and Recipients are described as “Sellers” and “Buyers” thereby increasing the perceived social distance between the two parties involved in the transactions. The authors also provide evidence that donations decline with increased anonymity of the matching protocol. In the double-blind anonymous conditions, where the subjects’ choices can not be identified by either the participants or the experimenter, the donations are the lowest. While there is a lot of heterogeneity in dictator game allocations, Leider, Mobius, Rosenblat, and Do (2007) show that donations to friends are at least 50% higher than to strangers and rise additional 25% when the Recipients find out the identity of a donor. Some studies provide the Allocator with information about the Recipient’s characteristics. For example, Ruffle (1998) finds that Allocators tend to reward more skillful Recipients ². Eckel and Grossman (1996) also show that donations in dictator games increase when a Recipient is considered a deserving subject. They replace the anonymous Recipients with a “worthy” one, such as the American Red Cross. While most studies neither collect information on the gender of participants nor prime participants on gender, there are several notable exceptions that are reviewed extensively in Eckel, de Oliveira, and Grossman (forthcoming) in this issue.

Another set of studies allowed verbal and visual communication between Recipient and Allocator to reduce anonymity. In several studies, pre-play identification of participants and face-to-face communication increase donations in dictator games (Bohnet and Frey 1999a, Bohnet and Frey 1999b).³ Subsequent research by Charness and Rabin (2005) and Yamamori, Kato, Kawagoe, and Matsui (2007b) demonstrate that controlled written communication either in the form of scripted

²In his version of the game Recipients first took a trivia quiz which determined the size of the pie and Allocators rewarded winners by offering more compared to a treatment with a random pie-size determination.

³Interestingly, they show that one-way identification of Recipients is sufficient to evoke higher donations on part of the Allocators.

messages asking for help or specific dollar requests increase giving. Rankin (2006) shows that donations decline under face-to-face identification with scripted dollar requests suggesting that the content of the message and the medium in which it is delivered are important. Yamamori, Kato, Kawagoe, and Matsui (2007a) use free-form communication through instant messaging to find an increase in donations using written electronic dialogue. Burnham (2003) shows that allocations increase when identification is done using an enclosed photograph of a matched partner. The main goal of these studies is to compare offers in the dictator game with and without communication. In contrast, the focus of this paper is to explore how gender and physical attractiveness affect offers when there is the possibility for visual and oral interaction.

Physical attractiveness has been studied in experiments with strategic interaction and in naturalistic settings. Solnick and Schweitzer (1999) analyze how physical attractiveness of Recipients affects offers in the ultimatum game; Mulford, Orbell, Shatto, and Stockard (1998) and Kahn, Hottes, and Davis (1971) explore the effects of beauty in the Prisoner's Dilemma; Andreoni and Petrie (2008) look at public goods games; and Eckel and Wilson (2005) examine the trust game. All of these papers find evidence for stereotyping: physically-attractive people are expected to be more trusting and more cooperative. Actual behavior of the physically attractive oftentimes does not match these commonly held stereotypes. Mobius and Rosenblat (2006) show how stereotyping on the part of the employers increases wages of physically-attractive employees in an experimental labor market with a real-effort task. In a recent field study, Ravina (2008) documents that physically-attractive borrowers get better terms from lenders in an online lending market. Despite the positive expectations of lenders, good-looking borrowers are more likely to become delinquent on loans.

3 Experimental Design and Procedures

Subjects from two different cities are randomly and pairwise matched to play dictator games. Some Allocators can see a picture of the Recipient and/or listen to a recorded speech of the Recipient. This two-city design ensures subjects' anonymity and requires that Recipients' speeches and photos are recorded before Allocators make their choices. Anonymity is particularly important in this setting because I can rule out explanations that rely on taste-based discrimination that might arise with the possibility of future interactions. Participants are not recruited based on gender or physical attractiveness. They are also not directly alerted to either the gender or physical attractiveness of their partners during the interactions; rather they can infer gender from seeing the photograph or hearing the recorded speech. This minimizes experimenter demand effects since participants are not aware that gender and physical attractiveness are being investigated.

3.1 Recipients

Five groups of 10 subjects are invited to attend an experimental session in a computer lab in the first city. These 50 subjects become the Recipients in dictator games played later with Allocators from the second city. Subjects fill out a quick online resume form which asks for their age, sex, university and matriculation year. A frontal facial photograph of each subject is also taken.

The instructions are read aloud and subjects can ask experimenters clarifying questions. Subjects are told that each of them will be matched with eight distinct randomly chosen players in a different city on some day during the next two weeks. Each of those Allocators has 9 units of money at their disposal which he or she would divide up between himself or herself and the Recipient (in increments of half units of money). Suggestive terms like 'Allocator' and 'Recipient' are carefully excluded from the instructions. Subjects are informed that the eight Allocators

will have access to the following different types of information in conditions B (baseline), P (photo), S (speech) and PS (photo+speech):

B: Allocators 1 and 2 do not receive any information about Recipients.

P: Allocators 3 and 4 see a photograph of the Recipient.

S: Allocators 5 and 6 listen to a recorded speech of up to 2 minutes in length prepared by the Recipient.

PS: Allocators 7 and 8 both see the photograph of the Recipient and listen to a recorded speech of up to 2 minutes prepared by the Recipient.

Subjects are given 5 minutes to record an audio message of up to 2 minutes in length presented to Allocators in treatments S and PS. Subjects are using headsets for the recording which is performed through a Java applet on the computer. Subjects have a maximum recording time of two minutes and they can start, stop, listen to and delete the recording as they wish.

After the recording, each subject is asked to provide four separate assessments of how much money he or she expects to receive on average from the two Allocators in each of the four conditions (in increments of half units of money). Subjects are not told whether they will be matched with a male or female Allocator and gender is never directly mentioned. To provide incentives for truth-telling subjects were told that they could increase their earnings if they accurately predicted their average earnings within +/- one unit.⁴

⁴For single-peaked beliefs the subject's optimal assessment is to predict an allocation that is at most a distance 1 away from the allocation which she regards as the most likely. Mobius and Rosenblat (2006) use an alternative belief elicitation mechanism by imposing a penalty fee proportional to the assessment error. In this case the optimal assessment equals the median of the belief distribution. The mechanism in this paper is particularly simple and easy to explain to subjects.

3.2 Allocators

In the second city, 20 sessions with 10 subjects in each session are organized (5 for each condition). Subjects fill out the same online form as in the first city and a frontal facial photograph of each subject is taken.

Each Allocator sequentially plays two separate dictator games with a pair of Recipients randomly selected from the first city. For this purpose I divide the 50 Recipients randomly into 25 pairs and associate one pair to exactly two Allocators. In order to make sure that decisions are not affected by the order of presentation, the two Allocators face the two Recipients in reverse order. Therefore for each Recipient, I have one observation in which she is evaluated first and one observation in which she is evaluated second. This procedure therefore ensures that in each treatment every Recipient is matched with one Allocator in his first dictator game and one Allocator in his second game. Allocators have to make a decision for the first Recipient before being allowed to move to the second Recipient.

In condition B (baseline) no information about the Recipients is provided to Allocators. In condition P (photo) the Allocator sees the facial photograph of each Recipient. Recipients' pictures are presented in a uniform manner - all of them show a frontal facial image with similar background and are of uniform size. Exposing participants to full-body images is not advisable in this setting because Hamermesh, Xin, and Junsen (1999) have shown that workers invest considerable resources in improving their appearances (such as expensive clothing). Furthermore, while there is broad cross-cultural agreement on the ranking of facial photographs, the same is not true for body types. In some developing countries, for example, a high body mass index is considered to be a desirable sign of affluence (Hatfield and Sprecher 1986). In condition S (speech), the Allocator listens to the recorded speech of each Recipient.⁵ In treatment PS (photo-speech), Allocators

⁵Allocators listened through headsets in order to ensure privacy. Each speech had to be

are presented with both a facial photograph and the Recipient's speech.

3.3 Raters

Having a panel of independent evaluators rate beauty based on facial photographs is a standard procedure in the literature on physical attractiveness. I follow Biddle and Hamermesh (1998) in having pictures of all subjects (Allocators and Recipients) evaluated by a group of independent raters on a scale of 1 to 5 (plain to above average beautiful). Every rater sees all pictures. I follow Mobius and Rosenblat (2006) in constructing a normalized beauty measure. Since raters tend to differ in their assessments I detrend the ratings for each rater by subtracting her average ratings. For each subject I calculate the average beauty ratings across all raters. I finally normalize the beauty measure by dividing through the standard deviation. If a subject has beauty of 2 then this implies that she is 2 standard deviations more beautiful than a subject with beauty rating 0 who is of average beauty.

4 Data

4.1 Recruitment and Payments

The experiment was conducted in Argentina in June and July 2003. All five sessions with Recipients were held at the computer lab of the economics department at Universidad Nacional de Tucuman (UNT), Tucuman. Subjects in Tucuman were recruited at three different university campuses in the city of Tucuman - Universidad Nacional de Tucuman, Universidad del Norte Santo Tomas de Aquino (UNSTA), Universidad Tecnologica Nacional (UTN).⁶

listened to at least once.

⁶Both UNT and UTN are public universities with tuition of 20 pesos per year and most subjects were recruited here (82 percent and 12 percent). UNSTA is a private university that typically draws students from upper middle class families since tuition ranges from 1300 to 2700

The 20 Allocator sessions were conducted in the city of Salta. There, subjects were recruited from the two local universities, Salta Publica and Salta Privada.⁷

Each subject received a participation fee of 8 Peso plus her earnings from the experiment. The average hourly wage at the time in Tucuman and Salta was about 6-8 Peso. One unit of money in the dictator game corresponded to 1 Peso. All sessions lasted less than an hour from the arrival of subjects at the lab until they received their compensation.

Recipients were paid in two stages. Immediately after the session they only received their participation fee because their earnings depended on the future decision of Allocators in Salta. Later, they received on average another 20.94 Peso from Allocators. Allocators immediately received their participation fee and earnings from their allocation decisions.

The beauty raters were 38 high school students from Tucuman who rated physical attractiveness on the scale from 1 to 5 where “5” represents “the most attractive”. Choosing high school students to rate photographs minimizes the probability that the raters are familiar with the participants and consequently their ratings are not likely to be influenced by the experiences outside of the laboratory. Langlois, Kalakanis, Rubenstein, Larson, Hallam, and Smoot (2000) document that different age groups agree on the norms of beauty and therefore having younger participants evaluate beauty is appropriate for the subsequent analysis. There is usually a strong agreement on what is considered physical attractive across genders and cultures, and this is also true in this sample (Hatfield and Sprecher 1986, Langlois, Kalakanis, Rubenstein, Larson, Hallam, and Smoot 2000). The standard statistical tests of reliability are comparable to other studies.

pesos per year depending on the major. UTN is an institute of technology with engineering and computer science majors only.

⁷Salta Publica is a large public university and Salta Privada is a private university. The share of subjects coming from Salta Publica ranged between 62 and 74 percent across the four treatments.

4.2 Summary Statistics

Participants were not specifically recruited based on gender, physical attractiveness or age in order to not reveal the purpose of the study. Among Recipients, 60 percent were female and the average age was 23. Among Allocators, 24 percent were female in treatment P, 34 percent were female in treatment S and 50 percent were women in treatment PS with an average age ranging from 23 to 24.

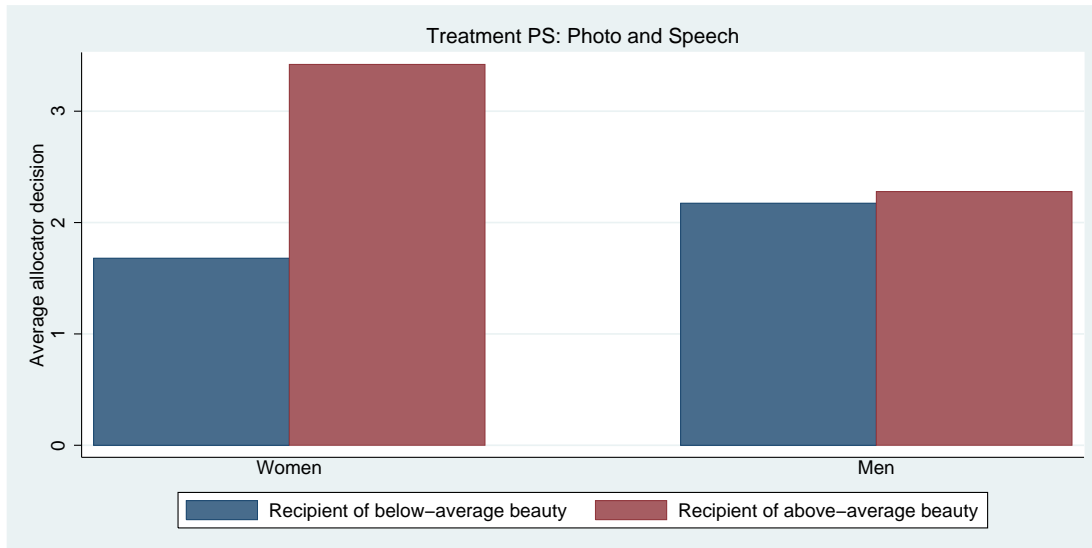
There are insignificant differences in Allocators' average generosity in treatments B, P, S and PS. On average, Allocators passed 2.47 Peso in treatments P and S and 2.39 Peso in treatment PS. Overall, women are slightly more generous than men - they sent 2.51 versus 2.40 Peso across the P, S and PS treatments. Male Recipients were treated slightly better than women - they received 2.61 versus 2.33 Peso.

5 Results

Figure 1 shows the main result of the paper. When Allocators can both see a picture of Recipients and listen to a speech (treatment PS) women are far more generous towards physically-attractive participants compared to physically-less-attractive Recipients than men. Women give almost double as much to more attractive Recipients and the difference is statistically significant.

I confirm the insights from figure 1 by using statistical analysis. One attractive feature of the design is that each Allocator made decisions about two Recipients and therefore I can account for Allocator-specific differences in generosity in my analysis. I estimate how allocations depend on Recipient's gender and physical attractiveness and the Allocator's physical attractiveness. The results suggest that a one-standard deviation increase in Recipient's beauty increases allocations by 0.54 Peso when the Allocator is female. The effect is positive but small and

Figure 1: Average allocations by male and female Allocators towards more beautiful and less beautiful Recipients in treatment PS

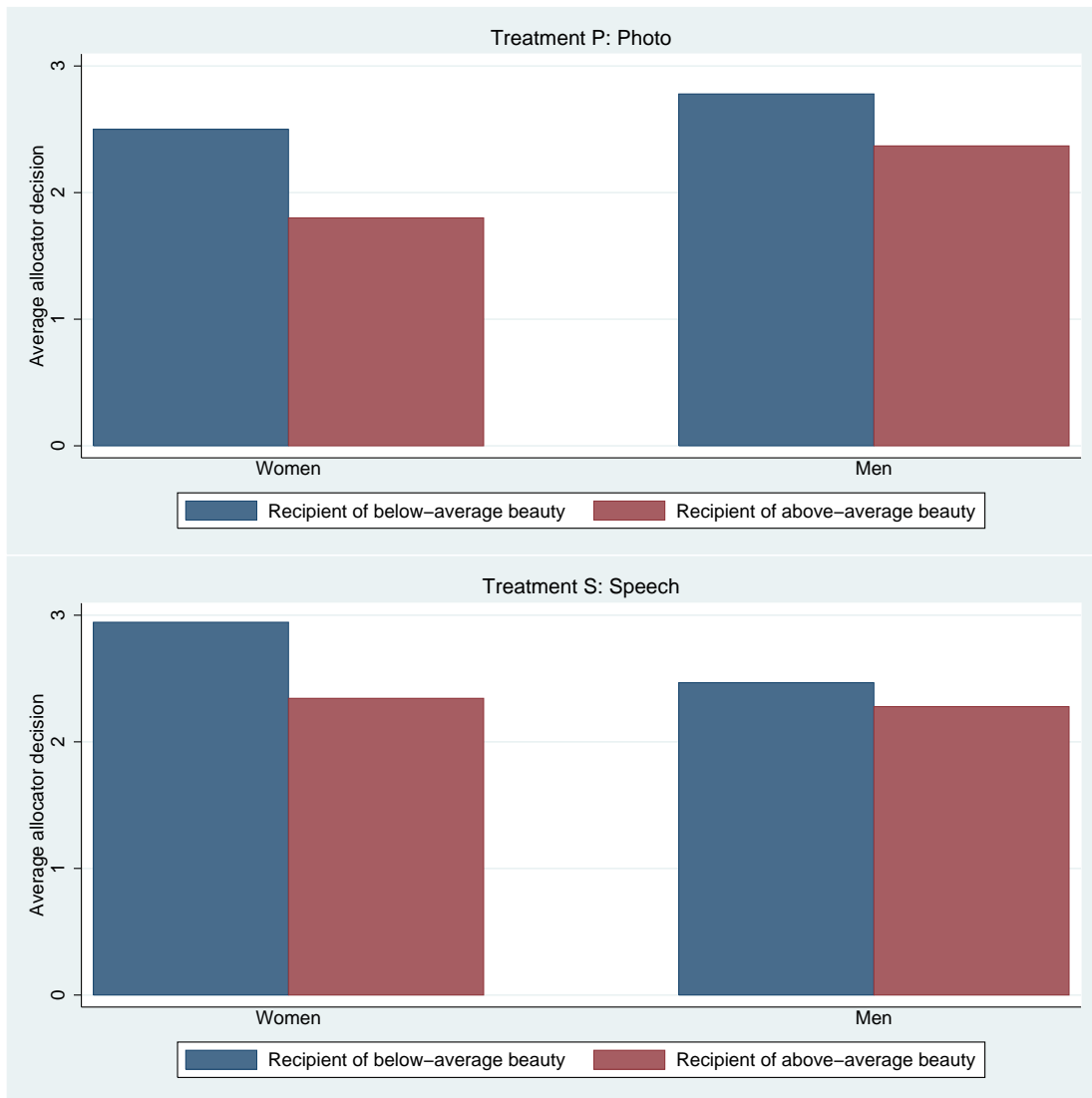


not statistically significant for men. Moreover, the Recipient’s gender does not matter; similarly the physical attractiveness of the Allocator does not appear to be important.⁸ In other words, women treat both attractive men and women better in the photo plus speech treatment.

It is possible that the physical attractiveness effect in the photo plus speech condition is caused just by the photograph. Figure 2 demonstrates, however, that neither women nor men treat physically attractive Recipients better in the photo only condition. If anything the physically attractive Recipients are treated slightly *worse*. It should be noted that the Allocators in the photo only condition are matched with the same set of Recipients as Allocators in the photo plus speech condition. This result also suggests that taste-based discrimination in a one-time interaction cannot be an explanation for the better treatment of the physically attractive in the PS treatment.

⁸An additional interaction term between Recipient’s gender and physical attractiveness is not significant.

Figure 2: Average allocations by male and female Allocators towards more beautiful and less beautiful Recipients in the photo only condition (treatment P) and the speech only condition (treatment S)



The same result holds in the speech only condition: both men and women treat physically attractive Recipients slightly worse. This suggests that oral and visual interaction through speech and photograph complement each other.

Are Recipients aware of the circumstances under which physical attractiveness pays? When I estimate how Recipients' expectations depend on their gender and physical attractiveness, I find that a one standard deviation more attractive Recipient expects 0.40 Peso more in the photo plus speech treatment. In contrast, in the photo only and speech only treatments attractive Recipients expect much smaller beauty premia which are also not statistically significant. This suggests that physically attractive Recipients in my experiment are aware that the photo plus speech treatment provides them with the most promising opportunity to increase their earnings.

As a first step in trying to find out the mechanism that allows the physically-attractive to receive higher earnings from the female Allocators, I check whether the content of the speech has an impact on earnings. For this purpose, all of the recorded speeches are coded based on content. Recipients typically use four different types of messages in their attempt to persuade the Allocators. One group of Recipients appeals to their need for extra funding to complete their university studies or pursue alternative careers. Another group of Recipients stresses poor economic conditions in Argentina and provides details on their specific family needs. Yet, another group is motivated by fairness considerations and they appeal to Allocators' sense of justice. Finally, a small, predominantly female group of Recipients proposes to use the money to enhance the well-being of others. Despite distinct themes in Recipients' messages, statistical analysis reveals that no particular type of message is more effective in generating higher earnings for male Allocators in both treatments with oral communication. While female Allocators do not respond to content of the last three themes, there is some evidence that they

decrease their donations when speeches refer to investment in own human capital in treatment PS only. This effect does not depend on the physical attractiveness or gender of the authors of those messages, which is indicative that it is the content that female Allocators find less worthy of transfers. In this experiment, it seems that the beauty premium is affected not by the content of a speech per se but an interaction of voice, content and physical attractiveness. While these results can be in part driven by the one-way communication structure, they are in line with research in social psychology that documents that women are more likely to pay attention and react to nonverbal cues. It appears that in this setting physical attractiveness enhances the effectiveness of oral messages in convincing female Allocators to share a larger part of the total surplus while leaving male Allocators unaffected.

6 Conclusion

I find that female Allocators in dictator games treat physically attractive Recipients more generously if they can listen to a pre-recorded speech and see the Recipient's photograph. While oral messages were not directly coded for the attractiveness of the voice, the fact that physically attractive Recipients do not achieve better outcomes in Speech only treatment suggests that in this setting voice matters only in conjunction with viewing an attractive picture. This is consistent with evidence from social psychology that suggests that physical and vocal attractiveness complement each other (Zuckerman, Hodgins, and Miyake 2005). Similar explanation holds for the content of messages: female allocators react more favorably to similar content when it is delivered by a physically attractive partner as opposed to a partner of below-average looks. While more research is necessary to understand the exact process, it appears that physical attractiveness amplifies the effect of voice and content. A possible explanation for this phenomenon is that

female Allocators pay more attention to the non-verbal content of communication (Hall 1978, Hall 1984, Rosenthal, Hall, DiMatteo, Roger, and Archer 1984), which strengthens their perception of the deservingness of the other party. Interestingly, physically attractive Recipients are aware of their stronger appeal in PS treatment because they expect to get the highest earnings in that treatment. Since Recipients were not directly prompted about the gender of the Allocators when they formed their expectations about Allocators' donations it is not possible to find out whether they were aware of the gender difference in the Allocators' response.

What lessons can practitioners take from these findings for real-world bargaining situations? First of all, a number of important caveats are in order. (1) The dictator game implies an extreme power imbalance between the negotiating parties and might not be appropriate for situations where both parties can directly influence the negotiated outcome. (2) It is an open question whether the findings hold with richer communication protocols such as two-sided communication. Two-sidedness could weaken the negotiation channel by mitigating the "first impression" created by the Recipient's initial message. However, two-sidedness could also strengthen the negotiation channel because the Recipient can send more messages. (3) It would be interesting to explore whether transcribed speech delivered through electronic messaging has the same effect as spoken speech. Since I find only a limited effect of a spoken message's content on allocation decisions in this paper, it is plausible that not the message itself matters but the way in which it is delivered. (4) The external validity of these findings should be tested in real-world labor market transactions. In particular, it is possible that the effect only applies for inexperienced negotiators.

Wage negotiations between human resource officers and employees might be the real-world scenario that is closest to the experiment in this paper in terms of power balance. One tentative lesson of this paper for practitioners might be to advise

employers to be flexible in how they approach negotiations with employees. For example, employees could be given the opportunity to negotiate in writing rather than through a face-to-face conversation. Such “opt-outs” can address grievances of employees who feel discriminated against in other modes of communication.

References

- ADAMS, G. (1977a): “Physical Attractiveness, Personality, and Social Reactions to Peer Pressure,” *Journal of Psychology*, 96, 287–296.
- (1977b): “Physical Attractiveness Research: Towards a Developmental Social Psychology of beauty,” *Human Development*, 20, 217–239.
- ANDREONI, J., AND R. PETRIE (2008): “Beauty, Gender and Stereotypes: Evidence from Laboratory Experiments,” *Journal of Economic Psychology*.
- BECKER, G. (1957): *The Economics of Discrimination*. The University of Chicago Press, Chicago.
- BIDDLE, J. E., AND D. S. HAMERMESH (1998): “Beauty, Productivity, and Discrimination: Lawyers’ Looks and Lucre,” *Journal of Labor Economics*, 16(1), 172–201.
- BOHNET, I., AND B. FREY (1999a): “Social Distance and Other-Regarding Behavior in Dictator Games: A Comment,” *American Economic Review*, 89(1), 335–339.
- (1999b): “The Sound of Silence in Prisoner’s Dilemma and Dictator Games,” *Journal of Economic Behavior & Organization*, 38(1), 43–57.
- BURNHAM, T. C. (2003): “Engineering Altruism: A Theoretical and Experimental Investigation of Anonymity and Gift Giving,” *Journal of Economic Behavior & Organization*, 50, 133–144.
- CAMERER, C. (2003): *Behavioral Game Theory*. Princeton University Press, NJ, Princeton.
- CAMERER, C., AND R. THALER (1995): “Anomalies: Ultimatums, Dictators, and Manners,” *Journal of Economic Perspectives*, 9, 209–219.

- CHARNESS, G., AND M. RABIN (2005): “Expressed Preferences and Behavior in Experimental Games,” *Games and Economic Behavior*, 53(2), 151–169.
- EAGLY, A. H., R. D. ASHMORE, M. G. MAKHIJANI, AND L. C. LONGO (2001): “What is Beautiful is Good, But: A Meta-Analytic Review of Research on the Physical Attractiveness Stereotype,” *Journal of Management*, 27, 363–381.
- ECKEL, C., A. DE OLIVEIRA, AND P. GROSSMAN (forthcoming): “Gender and Negotiation in the Small,” *Negotiation Journal*.
- ECKEL, C., AND P. GROSSMAN (1996): “Altruism in Anonymous Dictator Games,” *Games and Economic Behavior*, 16, 181–191.
- ECKEL, C., AND R. WILSON (2005): “Judging a Book by Its Cover: Beauty and Expectations in the Trust Game,” *Political Research Quarterly*.
- FEINGOLD, A. (1992): “Good-Looking People Are Not What We Think,” *Psychological Bulletin*, 111, 304–341.
- HALL, J. A. (1978): “Gender effects in decoding nonverbal cues,” *Psychological Bulletin*, p. 8450857.
- (1984): *Nonverbal sex differences: Communication accuracy and expressive style*. The Johns Hopkins University Press, Baltimore, MD.
- HAMERMESH, D. S., AND J. E. BIDDLE (1994): “Beauty and the Labor Market,” *The American Economic Review*, 84(5), 1174–1194.
- HAMERMESH, D. S., M. XIN, AND Z. JUNSEN (1999): “Dress for Success - Does Priming Pay?,” Working paper 7167, NBER.
- HATFIELD, E., AND S. SPRECHER (1986): *Mirror, Mirror ...: The Importance of Looks in Everyday Life*. SUNY Press, Albany.
- HOFFMAN, E., K. MCCABE, AND V. L. SMITH (1996): “Social Distance and Other-Regarding Behavior in Dictator Games,” *American Economic Review*, 86(3), 653–60.
- KAHN, A., J. HOTTES, AND W. L. DAVIS (1971): “Cooperation and Optimal Responding in the Prisoner’s Dilemma Game: Effects of Sex and Physical Attractiveness,” *Journal of Personality and Social Psychology*, 17, 267–279.
- LANGLOIS, J., L. KALAKANIS, A. RUBENSTEIN, A. LARSON, M. HALLAM, AND M. SMOOT (2000): “Maxims of Myths of Beauty? A Meta-Analytic and Theoretical Review,” *Psychological Bulletin*, pp. 390–423.

- LEIDER, S., M. MOBIUS, T. ROSENBLAT, AND Q.-A. DO (2007): “Directed Altruism and Enforced Reciprocity in Social Networks,” Working paper 13135, NBER.
- MOBIUS, M. M., AND T. ROSENBLAT (2006): “Why Beauty Matters,” *American Economic Review*.
- MULFORD, M., J. ORBELL, C. SHATTO, AND J. STOCKARD (1998): “Physical Attractiveness, Opportunity and Success in Everyday Exchange,” *The American Journal of Sociology*, 103, 1565–1593.
- RANKIN, F. W. (2006): “Requests and Social Distance in Dictator Games,” *Journal of Economic Behavior & Organization*, 60, 27–36.
- RAVINA, E. (2008): “Love and Loans: the Effect of Beauty and Personal Characteristics in Credit Markets,” Working paper, New York University.
- ROSENTHAL, R., J. A. HALL, M. R. DIMATTEO, P. ROGER, AND D. ARCHER (1984): *Sensitivity to nonverbal communication: The PONS test*. The Johns Hopkins University Press, Baltimore, MD.
- RUFFLE, B. J. (1998): “More Is Better, but Fair is Fair: Tipping in Dictator and Ultimatum Games,” *Games and Economic Behavior*, 23(2), 247–65.
- SOLNICK, S. J., AND M. E. SCHWEITZER (1999): “The Influence of Physical Attractiveness and Gender on Ultimatum Game Decisions,” *Organizational Behavior and Human Decision Processes*, 79(3), 199–215.
- YAMAMORI, T., K. KATO, T. KAWAGOE, AND A. MATSUI (2007a): “Online Chat Leads to Fairness in Dictator Games,” *University of Tokyo Working Paper*.
- (2007b): “Voice Matters in A Dictator Game,” *Experimental Economics*.
- ZUCKERMAN, M., AND R. DRIVER (1989): “What Sounds Beautiful Is Good: The Vocal Attractiveness Stereotype,” *Journal of Non-Verbal Behavior*, 13, 67–82.
- ZUCKERMAN, M., H. HODGINS, AND K. MIYAKE (2005): “The vocal Attractiveness Stereotype: Replication and Elaboration,” *Journal of Nonverbal Behavior*, 14, 97–112.