

Singapore Management University Institutional Knowledge at Singapore Management University

Research Collection Lee Kong Chian School Of
Business

Lee Kong Chian School of Business

6-2009

When the Negotiator Sees Red

Jayanth NARAYANAN
National University of Singapore

Jochen REB
Singapore Management University, jochenreb@smu.edu.sg

Jianwen CHEN
Merill Lynch & Co

Xue ZHENG
National University of Singapore

Follow this and additional works at: https://ink.library.smu.edu.sg/lkcsb_research

Part of the [Organizational Behavior and Theory Commons](#)

Citation

NARAYANAN, Jayanth; REB, Jochen; CHEN, Jianwen; and ZHENG, Xue. When the Negotiator Sees Red. (2009). *International Association for Conflict Management Conference 22nd IACM 2009, June 15-18*. 1-9. Research Collection Lee Kong Chian School Of Business.

Available at: https://ink.library.smu.edu.sg/lkcsb_research/1788

This Conference Paper is brought to you for free and open access by the Lee Kong Chian School of Business at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Research Collection Lee Kong Chian School Of Business by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email libIR@smu.edu.sg.

Title: When the Negotiator Sees Red...

Authors: Jayanth Narayanan; National University of Singapore
REB, Jochen; CHEN, Jianwen; ZHENG, Xue

Presented at the

22nd Annual International Association of Conflict Management Conference

Kyoto, Japan

June 15 – 18, 2009

Abstract:

The negotiations literature abounds with studies about how cognitive heuristics affect negotiation outcomes. However, the role of colors in negotiations remains unexplored. The color red is associated with male dominance and leads to superior outcomes in sporting contests (Hill and Barton, 2005a). In this study, we examined the effect of wearing the color red on outcomes in distributive negotiations. Our findings revealed that when male negotiators wore red clothing, they gained a distributive advantage over their counterpart wearing white.

Running Head: RED IN NEGOTIATIONS

When the Negotiator Sees Red...

Abstract

The negotiations literature abounds with studies about how cognitive heuristics affect negotiation outcomes. However, the role of colors in negotiations remains unexplored. The color red is associated with male dominance and leads to superior outcomes in sporting contests (Hill and Barton, 2005a). In this study, we examined the effect of wearing the color red on outcomes in distributive negotiations. Our findings revealed that when male negotiators wore red clothing, they gained a distributive advantage over their counterpart wearing white.

In animal populations the color red is associated with strength, strong reproductive potential, high testosterone levels, and high levels of male genetic and physical qualities (Pryke, Lawes, & Andersson, 2001; Setchell & Wickings, 2005). In humans, the color red has been shown to provide a competitive advantage in combat sports. In the Athens Olympic Games, wearing red led to significantly higher chances to win in wrestling, boxing and taekwondo, likely due to its association with dominance and aggression (Hill & Barton, 2005a). Further, this effect was more pronounced in men than in women (Hill & Barton, 2005b). We study the effect of red color clothing in a randomized laboratory experiment in the context of negotiations with the following question –how does red affect negotiation outcomes and how does gender affect the nature of this relationship? In line with the reasoning of Hill and Barton (2005a), might evolutionary conditioning behoove people to use an artificial stimulus of red clothing as a symbol of strength and dominance in negotiations?

The ability to win negotiations can result in substantial rewards. Evolution has endowed humans with fast and frugal heuristics that shape human behavior (Gigerenzer & Goldstein, 1996). The current negotiation literature pays little attention to evolutionary forces that affect negotiation outcomes. Negotiation studies have shown that negotiators give more to angry or aggressive opponents because people adjust their demands according to their perception of opponent's emotional state in order to achieve a final agreement (van Kleef, De Dreu & Manstead, 2004; Sinaceur & Tiedens, 2006). Ruddiness of male complexion was found to reflect testosterone levels (Frost, 2005). Reddening of the face is associated with rage (Darwin, 1872/1998) and can signal aggression, strength and dominance. Negotiators facing a counterpart displaying the color

red - associated with anger, strength, and dominance - may become more conciliatory, resulting in lower demands, larger concessions, and ultimately, a worse outcome.

Two-party distributive negotiations are characterized by “win-lose” bargaining in which one party’s gain comes at the expense of the other party. Many situations are inherently distributive or at least contain distributive issues such as the purchasing price of a good or service. We hypothesize that in distributive negotiations participants wearing red will obtain better outcomes than those wearing a neutral color such as white. Given that red is associated with male dominance and its effect appears more pronounced in males than in females (Hill & Barton, 2005b), we further hypothesize that male negotiators are more likely to benefit from wearing red than female negotiators.

Method

70 undergraduates (34 female) at a large university in Southeast Asia participated in a negotiation exercise in exchange for course credit. The experimental design included the manipulation of the color of the t-shirts, with each dyad consisting of one of each color. Participants were randomly assigned to experimental conditions (red/white) and roles (buyer/seller). The red/white manipulation was counterbalanced between the roles (buyer/seller). Participants were told that the different t-shirt colors were for ease of identification of the members in each dyad.

We used a standard distributive negotiation involving the purchase of coffee between a buyer and a seller. The task lasted 15 minutes and allowed for a quantitative assessment of negotiation performance - the selling price of the coffee. The bargaining zone spanned a range of \$0.60 - \$3.10/lb to \$3.70/lb – and both negotiators were

instructed to maximize their benefits. The negotiation concluded when both parties came to a mutual agreement on price.

Results

One problematic dyad was excluded from the data because their final agreement \$3.80 fell outside the bargaining zone. Since in two-party distributive negotiations, negotiation outcomes for each party are interdependent, our analysis was at dyadic level. We conducted one sample t-test on the difference score between negotiation outcomes of red-wearer and white-wearer (i.e. red-seer) in 34 dyads to test the effect of color red. Individual negotiation outcome was measured by favorability score which was the difference between settlement price and the respective resistant points (Buyers: $3.75 - \text{Price}$; Sellers: $\text{Price} - 3.15$). Difference score in each dyad was calculated as red-wearer's favorability score minus white-wearer's favorability score. Results revealed that the mean difference in negotiation outcomes between negotiators wearing red and their counterpart wearing white differed marginally from zero [$M = .09$, $SD = .31$, $t(33) = 1.77$, $p = .09$]. As we conjecture that gender may influence the relationship of red and negotiation outcomes, we tested gender effect on difference score by univariate analysis. The interaction of red-wearer's gender and red-perceiver's gender did not attain significance [$F(1, 33) = .322$, $p = .575$]. Red-perceiver's gender also had no impact on outcomes difference [$F(1, 33) = 2.294$, $p = .140$]. Whereas, main effect of red-wearer's gender was significant [$F(1, 33) = 4.56$, $p = .041$]. To distinguish the effect of red on male and female red-wearer, we did a t test on the difference score of the male red-wearer and female red-wearer separately. Further analysis found that only male red-wearers outperformed their counterpart wearing white [$M = .21$, $SD = .26$, $t(33) = 3.3$, $p = .004$]. Female red-wearers did not achieve better

outcomes than the white-wearer [$M = -.02$, $SD = .31$, $t(33) = -.31$, $p = .761$]. Thus, male negotiators who wore red did better than their counterpart while female negotiators did not (figure 1).

<Insert Figure 1 about here>

Discussion

The finding that color influences negotiation outcomes has important implications for negotiations researchers. Past negotiation research has focused on cognitive heuristics such as anchoring and insufficient adjustment. However, people might use other heuristics as subtle as the color of the counterparty's shirt in their negotiation decisions. With our preliminary evidence for the effect of color red in a distributive setting, future research can investigate whether this effect persists in integrative negotiations in which negotiators' collaboration may lead to a win-win situation. Future studies also need to further examine the reasons why males wearing red get better outcomes by analyzing the process and content of the negotiation besides the outcomes. Although the gender of the red-perceiver did not affect the conclusions we can draw from our study, given a recent finding that men rated women wearing red as more attractive, while women did not differ in their ratings across color (Elliott & Nesta, 2008), we need to further examine how cross-gender interactions between red and other colors affect negotiation process and outcomes.

References

Darwin, C. (1872/1998). *The Expression of the Emotions in Man and Animals*. Oxford University Press: USA.

- Elliot, A.J., & Niesta, D.(2008). Romantic Red: Red Enhances Men's Attraction to Women. *Journal of Personality and Social Psychology*, 95(5), 1150–1164
- Frost, P. (2005). *Fair women, dark men. The forgotten roots of color prejudice*. Christchurch, New Zealand: Cybereditions.
- Gigerenzer, G., & Goldstein, D. G. (1996). Reasoning the fast and frugal way: Models of bounded rationality. *Psychological Review*, 103, 650-669.
- Hill, R. A., & Barton, R. A. (2005a). Red Enhances Human Performance in Contests. *Nature*, 435, 293.
- Hill, R. A., & Barton, R. A. (2005b). The Hill and Barton reply to "Rowe C et al., Nature, 437:E10". *Nature*, 437, E10-E11.
- Pryke, S. R., Lawes, M. J., & Andersson, S. (2001). Agonistic Carotenoid Signalling in Male Red-collared Widowbirds: Aggression Related to the Colour Signal of Both the Territory Owner and Model Intruder. *Animal Behavior*, 62, 695-704.
- Setchell, J. M., & Wickings, E. J. (2005). Dominance, Status Signals and Coloration in Male Mandrills (*Mandrillus Sphinx*). *Ethology*, 111, 25-50.
- Sinaceur, M. & Tiedens, L. Z. (2006). Get Mad and Get More Than Even: When and Why Anger Expression is Effective in Negotiations. *Journal of Experimental Social Psychology*, 42, 314–322
- Van Kleef G. A., Dreu C. K. W. and Manstead A. S. R. (2004). The Interpersonal Effects of Anger and Happiness in Negotiations. *Journal of Personality and Social Psychology* 86(1), 57-76.

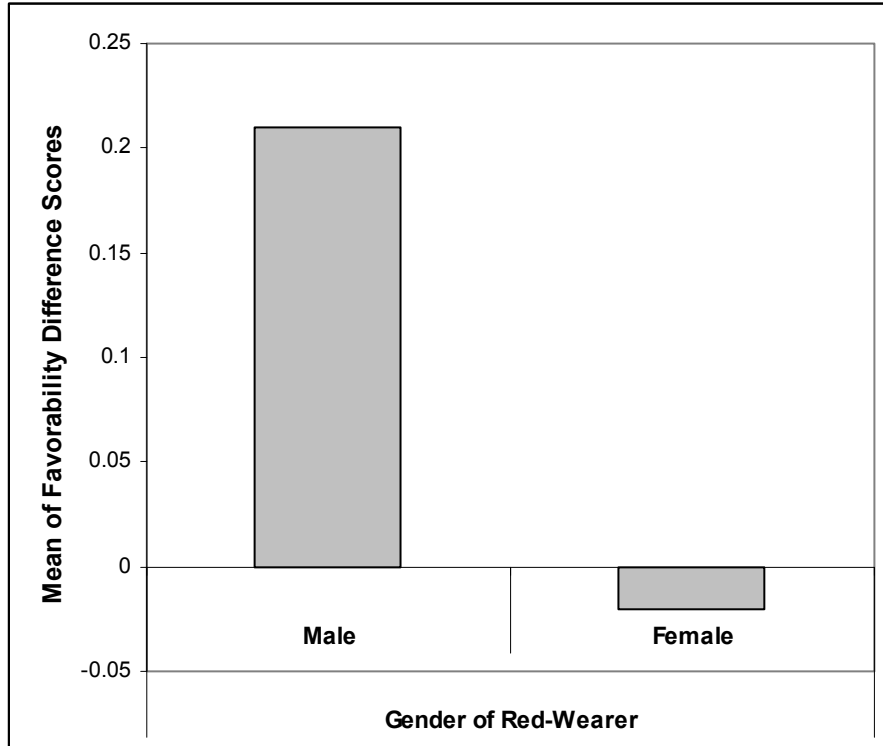


Figure 1: Effect of gender of red-wearer on favorability scores