

Eating with the Enemy:
Receptive Mindsets in Conflictual Dialogue

Julia A. Minson
University of Pennsylvania

Frances S. Chen
University of Freiburg, Germany

Word count: 2,490

Correspondence:

Julia A. Minson
The Wharton School
University of Pennsylvania
3730 Walnut St.
553 Jon M. Huntsman Hall
jminson@wharton.upenn.edu

Abstract

Two studies investigate receptiveness to opposing views in conflictual dialogue. Study 1 uses a factor-analytic approach to demonstrate that being in a receptive mindset is distinct from attitude strength and the Big Five trait of Openness (Costa & McCrae, 1985; 1992). Study 2 tests the impact of a broadly utilized conflict resolution ritual, namely sharing food with an opponent, on both receptiveness and attitude strength. Participants engaged in a socio-political debate while eating food that they either prepared for themselves (Control condition) or food that they had previously exchanged with an ideological opponent (Exchange condition). Greater disagreement was associated with lower receptiveness and stronger attitudes. Exchanging food had two effects: it attenuated the negative effect of disagreement on receptiveness, but also led participants to report stronger attitudes on the issue in question. Together, these studies provide evince for a situationally-malleable receptive mindset and distinguish it from related constructs.

(148 words)

Democratic governance, sound judgment, and congenial relationships all require that individuals engage with ideas they disagree with or even find ideologically distasteful. However, people are often unwilling to do so. The present research introduces and investigates the *receptive mindset*, and distinguishes it from other related constructs. We define this mindset as a non-judgmental cognitive stance characterized by openness to opposing views and willingness to engage in future contact with holders of those views. We posit that being in such a mindset is an important and under-investigated outcome of conflictual dialogue. To the extent that people feel receptive toward their opponent's views they may be more willing to engage in future contact and attend to arguments in an open-minded manner.

Negotiations scholars have explored a variety of outcomes resulting from contact between opponents, including, but not limited to, likelihood and value of agreements (Galinsky, Maddux, Gilin and White, 2008), agreement satisfaction (Ward, Disston, Brenner and Ross, 2008), evaluations of counterparts and arguments (Cohen, Aaronson and Steele, 2000; Cohen, et al. 2007), and relational outcomes (Curhan, Elfenbein and Xu, 2006). We propose that a mindset which allows partisans to listen to each other in an open-minded manner and be willing to engage in future interaction represents a further important outcome worthy of investigation.

Because being in a receptive mindset may, at first blush, appear to be simply a by-product of weak or uncertain attitudes, in the current work we investigate the relationship between these two constructs. Attitude strength and its moderators have been extensively investigated, in part because shifts in attitude strength are taken as indicative of persuasion (Petty and Krosnick, 1995; Tormala and Petty, 2002; Visser, Bizer & Krosnick, 2006). Indeed, research in the attitudes literature has demonstrated that strong attitudes are more likely to give rise to the

congeniality bias (see Hart et al., 2009 for a review), whereby individuals seek attitude confirming and avoid attitude-disconfirming information.

In the present research, we conceptualize the receptive mindset as encompassing open-minded attention to counter-attitudinal views as well as the willingness to engage with such views and their proponents in the future. Thus, in Study 1 we employ a factor analytic approach to demonstrate the internal coherence of this construct in the context of strongly held socio-political attitudes. We also show that being in such a receptive mindset is only weakly correlated with attitude strength and orthogonal to the Big Five trait of Openness to Experience (Costa & McCrae, 1985; 1992). In Study 2 we test a common conflict resolution technique, namely sharing food with an ideological opponent on both the receptive mindset and attitude strength, in order to show that these constructs can be manipulated independently.

Inducing a Receptive Mindset

What might persuade individuals to consider “the other side”? Prior research suggests that people vilify and stereotype those they disagree with, inferring that opponents may be stupid, evil, biased, and even sub-human (Bandura, 2004; Pronin, Gilovich and Ross, 2004; Ross and Ward, 1995). We propose that one way to foster receptiveness is through creating situations that highlight the shared, human traits of disagreeing partisans by engaging them in common daily activities with holders of opposing views.

In the present research we test this hypothesis by engaging participants in food sharing with a debate counterpart. Examples of food sharing as a means to dispute resolution have been documented by generations of anthropologists and sociologists (see Kaplan and Gurven, 2001). From meat distribution customs among Aché hunters in Paraguay (Kaplan, Hill, Hawkes, and Hurtado, 1984) to the “bread and salt” ceremony of Slavic cultures (Smith and Christian, 1984),

food exchange represents a basic form of relationship building (Mauss, 1923). However, the underlying assumption that food sharing aids conflict resolution has not been empirically tested.

We selected food sharing for our demonstration because we do not expect this manipulation to have parallel effects on receptiveness and attitude strength, allowing us to disambiguate these constructs. Sharing food—due to its association with shared human values of family, safety, and community—is likely to increase opponents’ willingness to hear each other’s views. However, prior research on biased assimilation (Lord, Lepper & Ross, 1979) suggests that close attention to counter-attitudinal messages may leave partisans more, not less, convinced of their prior views. Thus, this common social ritual provides an ideal setting for testing whether the receptiveness mindset can be situationally manipulated independently from attitude strength.

Study 1

In Study 1 we sought preliminary evidence for the idea that a receptive mindset is distinct from the related constructs of attitude strength and Openness to Experience (Costa & McCrae, 1985; 1992). Participants considered current socio political issues and reported the strength of their attitudes, their receptiveness to the opposing view and willingness to expose themselves to information in support of it, and completed a Big Five personality inventory (John, Naumann & Soto, 2008).

Method

Participants were US residents recruited via Amazon.com Mechanical Turk (N = 133, 70 Female, age = 31.9). Participants reported attitudes regarding six US issues (Table 1) using seven-point scales from “*Strongly Disagree*” to “*Strongly Agree*.” They then selected the issue about which they felt the strongest and answered twelve items using Likert-style scales anchored at “*Not at all*” to “*Very*” regarding that issue.

Six items assessed the extent to which participants held a receptive mindset toward the opposing viewpoint on the issue, while six others assessed the strength of their attitude. Specifically, we asked how receptive and open-minded participants felt toward the opposite view; how willing they were to read information or watch a news program supporting the opposing view; and how willing they were to engage in face-to-face dialogue with a community member or a group holding the opposing view. We measured participants' attitude strength by asking how certain, clear, and confident they were regarding their attitude, how sure they were that their attitude was correct, how knowledgeable they felt about this issue, and whether they needed more information to make up their mind (reverse-coded) (Tormala & Petty, 2002). Finally, participants completed the Big Five personality inventory and reported their political affiliation from "*Very conservative*" to "*Very liberal*."

Results

We conducted a Principle Components Factor Analysis with promax rotation on the items measuring attitude strength and receptiveness. As predicted, two factors emerged, jointly accounting for 65.0% of the overall variance, and only modestly correlated at $r(132) = -.18$, $p < .04$. The six items addressing attitude strength loaded primarily on the first factor (loadings $> .66$, $\alpha = .90$), explaining 39.2% of variance. The six items measuring the extent to which participants held a receptive mindset loaded primarily on the second factor (loadings $> .48$, $\alpha = .82$), explaining 26.0% of variance (Table 2).

Interestingly, we found that receptiveness and attitude strength were strongly negatively correlated for men $r(62) = .45$, $p < .001$, and were not correlated for women $r(69) = .08$, *ns*. There was no relationship between receptiveness and participant age or political affiliation.

Although receptiveness was modestly correlated with the Big Five trait of Extraversion, $r(132) = .21$, $p < .02$, it was *not* correlated with any of the other Big Five traits.

Study 2

Study 1 provided preliminary evidence that individuals' receptiveness to opposing views does not closely correspond to the strength of their attitudes. In Study 2 we turn to manipulating the receptive mindset by engaging participants in a common but previously untested conflict resolution ritual, namely sharing food with an opponent.

There are several reasons why engaging in common, daily activities with an opponent such as sharing food might increase receptiveness. First, the intimacy inherent in such activities might lead partisans to see themselves as closer (Bem, 1967), or simply lead them to associate food sharing with congeniality (Pavlov, 1927). Additionally, receptiveness might increase if the experience disconfirms negative expectations, as per the "contact hypothesis" (Allport, 1954).

The relationship between food sharing and attitude strength is less clear. Consistency theories (Festinger, 1957; Heider, 1958; Osgood and Tannenbaum, 1955), suggest that if an intervention increases receptiveness, then a softening of attitudes should follow. However, classic research on biased assimilation suggests that compelling individuals to attentively process pro and counter-attitudinal information may instead increase attitude strength (Lord et al., 1979; Lord et al., 1984). Thus, while sharing personal, humanizing experiences might make individuals more willing to carefully consider the other's perspective, upon such consideration participants may be more swayed by the seemingly more vivid and numerous arguments supporting their own views. Because of this disjunction, food-sharing presents an ideal opportunity to test whether a receptive mindset can be situationally induced, and whether such a shift can occur without shifting attitudes in a parallel direction.

Method

Participants were members of a paid research pool (98 male; 172 female) who participated in groups of 10-14. They were told that they would take part in a marketing study on how “different flavors of food affect interpersonal interaction.” To match participants with an ideological opponent, we administered the questionnaire from Study 1, adding three new issues. After completing the questionnaires, participants prepared a peanut butter and jam sandwich from a variety of provided ingredients.

Participants in the *Control* condition were told that they would eat their sandwich while discussing one of the questionnaire topics with another participant. In contrast, participants in the *Exchange* condition were told that they would exchange sandwiches with their discussion counterpart. While the participants prepared sandwiches, the experimenter created discussion pairs and assigned issues with the goal of maximizing the level of disagreement within pairs. Participants then sat with their counterpart, and received their issue assignment. After planning their arguments, participants began the discussion and ate.

After a ten-minute discussion, participants rated the taste, texture, appearance and overall quality of their sandwich from 0 to 100. They then answered the same items assessing receptiveness ($\alpha = .81$), and attitude strength ($\alpha = .89$) used in Study 1. They also evaluated their counterpart’s receptiveness, open-mindedness, informativeness, certainty and the validity of the counterpart’s arguments. Participants also evaluated supporters and opponents of their own viewpoint on intelligence, reasonableness, warmth, open-mindedness, objectivity and morality. They then reported their current attitudes on each issue.

Results

Factor analysis: Factor analysis again returned two factors, jointly accounting for 62.5% of the variance, and correlated at $r(135) = -.17, p = .05$. The six items addressing attitude strength loaded primarily on the first factor (loadings $> .62$), which explained 38.1% of the variance. The six items measuring receptiveness loaded primarily on the second factor (loadings $> .68$), which explained 25.0% of the variance.

Receptiveness: Our procedure for pairing participants resulted in variation in disagreement ranging from three to six scale points.¹ We averaged the responses of dyad members, retaining 135 independent observations. When we regressed receptiveness on condition ($-1 = Control$; $+1 = Exchange$), mean-centered disagreement, and their interaction, we observed that greater disagreement made participants less receptive to their counterpart's viewpoint ($B = -0.17, t = -1.96, p = .05$).

The main effect of exchanging food with a counterpart was not significant ($B = .02, t = 0.24, ns$) due to a significant cross-over interaction ($B = .17, t = 2.03, p < 0.05$). Whereas greater disagreement led to decreased receptiveness in the Control condition ($B = -.34, t = -2.79, p < 0.01$), no such relationship was present in the Exchange condition ($B = 0.01, t = 0.05, ns$). In other words, food exchange attenuated the negative effect of disagreement on receptiveness.

Attitude Strength: When we repeated the above analysis for attitude strength, we observed that disagreement correlated with stronger attitudes on the issue ($B = .36, t = 6.67, p < 0.001$). However, exchanging food with a debate counterpart bolstered attitudes relative to those reported in the control condition, across levels of disagreement ($B = .11, t = 2.30, p < 0.03$).

Other Measures: Participants' sandwich ratings did not differ by condition (all t -s $< 1.4, ns$). However, controlling for disagreement, greater receptiveness was positively associated with the overall sandwich rating (Control: $B = .02, t = 1.87, p < 0.07$; Exchange: $B = .02, t = 3.14, p <$

0.005). There was no relationship between sandwich ratings and attitude strength. The manipulation had no effect on the other dependent variables.

General Discussion

Two studies introduce the receptive mindset and distinguished it from the related constructs of attitude strength and the Big Five trait of Openness. In both studies factor analysis identified factors corresponding to attitude strength and receptiveness, respectively. Furthermore, in Study 2, exchanging food had differential effects on receptiveness and attitude strength. Whereas food sharing attenuated the negative effect of disagreement on receptiveness, it increased the strength with which prior attitudes were held. These results suggest that individuals can adopt a receptive mindset even regarding strongly-held attitudes and that these two constructs can be independently manipulated.

Bolstering of prior attitudes, such as we observed, may be a surprising and undesirable by-product of carefully considering the other side. In this manner, our results are consistent with those of Lord et al. (1984), who demonstrated that requiring participants to be “fair-minded” did not reduce biased assimilation. More importantly, however, our studies introduce and provide evidence for the malleability of receptive mindsets in conflictual dialogue. To the extent that individuals who hold strongly opposing views can be induced to be open to counter-attitudinal information and willing to engage in future dialogue and idea exchange, progress can be made. Indeed, a conflict in which individuals feel receptive despite holding opposing views may be considered a kind of success—respectful co-existence between parties who “agreed to disagree.”

It is worth highlighting that in Study 2 participants discussed strongly held views on contentious issues while interacting face-to-face, rather than negotiating a fictitious exercise or

interacting with a confederate. The fact that a fairly subtle manipulation had an effect on a complex social process involving real political attitudes suggests that receptiveness is a state that is readily influenced by situational factors, not a stable individual difference.

It is also worth considering whether the observed increase in receptiveness resulted from participants' desire to reciprocate the sandwich they received (Cialdini, 1975). We do not believe this to be the case. First, participants already reciprocated the sandwich they received by offering the sandwich they themselves made. Secondly, there is no clear reason why reciprocity would lead participants to become more receptive, yet bolster their prior attitudes. Research on reciprocity would suggest that feeling indebted would have parallel effects on both constructs.

In summary, the present research contributes to our theoretical understanding of the variety of psychological outcomes of conflictual dialogue. To the extent that interactions can vary in the level of receptiveness experienced and expressed by the participants, conflict resolution scholars and professionals can leverage this mindset in service of greater understanding and cooperation. Given the implications for conflict resolution, persuasion, and decision-making, future research should closely address the antecedents and consequences of this psychological state. Being willing to listen may be the underappreciated first step on the road to understanding.

References

- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Perseus Books.
- Bandura, A. (2004). The role of selective moral disengagement in terrorism and counterterrorism. In F. M. Moghaddam & A. J. Marsella (Eds). *Understanding terrorism: Psychological roots, consequences and interventions* (pp. 121-150). Washington, DC: American Psychological Association Press.
- Bem, D. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, 74, 183–200.
- Cialdini, R. B., Vincent, J. E., Lewis, S. K., Catalan, J., Wheeler, D., & Darby, B. L. (1975). Reciprocal concessions procedure for inducing compliance: The door-in-the-face technique. *Journal of Personality and Social Psychology*, 31, 206-215.
- Cohen, G. L., Aronson, J., & Steele, C. M. (2000). When beliefs yield to evidence: Reducing biased evaluation by affirming the self. *Personality and Social Psychology Bulletin*, 26, 1151–1164.
- Cohen, G. L., Sherman, D. K., Bastardi, A., Hsu, L., McGoey, & Ross L. (2007). Bridging the Partisan Divide: Self-Affirmation Reduces Ideological Closed-Mindedness and Inflexibility in Negotiation. *Journal of Personality and Social Psychology*, 93, 415– 430.
- Costa, P. T., Jr., & McCrae, R. R. (1985). *The NEO personality inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) manual*. Odessa, FL: Psychological Assessment Resources.
- Curhan, J. R., Elfenbein, H. A., and Xu, H. (2006). What do people value when they negotiate?

- Mapping the domain of subjective value in negotiation. *Journal of Personality and Social Psychology, 91*, 493–512.
- Galinsky, A.D., Maddux, W.W., Gilin, D., and White, J.B. (2008). Why it pays to get inside the head of your opponent: The differential effects of perspective-taking and empathy in negotiations. *Psychological Science, 19*, 378-384.
- Hart, W., Albarracín, D., Eagly, A.H., Brechan, I., Lindberg, M.J., & Merrill, L. (2009). Feeling validated versus being correct: A meta-analysis of selective exposure to information. *Psychological Bulletin, 135*, 555–588.
- Heider, F., (1958). *The Psychology of Interpersonal Relations*. New York: Wiley.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-158). New York, NY: Guilford Press.
- Kaplan, H., and Gurven, M. (2001). The natural history of human food sharing and cooperation: A review and a new multi-individual approach to the negotiation of norms. Paper presented at the Conference on the Structure and Evolution of Strong Reciprocity, Santa Fe Institute, Santa Fe, N.M.
- Kaplan, H., Hill, H., Hawkes, K., and Hurtado, A. (1984). Food sharing among the Aché hunter-gatherers of Eastern Paraguay. *Current Anthropology, 25*, 113-115.
- Lord, C. G., Lepper, M. R., & Preston, E. (1984). Considering the opposite: A corrective strategy for social judgment. *Journal of Personality and Social Psychology, 47*, 1231-1243.

- Lord, C. G., Lepper, M. R., & Ross, L. (1979). Biased assimilation and attitude polarization: The effect of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37(11), 2098-2109.
- Mauss, M. (1990 [1923]). *The Gift: Forms and functions of exchange in archaic societies*. London: Routledge.
- Osgood, C. E. and Tannenbaum, P. H. (1955). The principle of congruity in the prediction of attitude change. *Psychological Review*, 62, 42-55.
- Pavlov, I. P. (1927). *Conditioned Reflexes: An Investigation of the Physiological Activity of the Cerebral Cortex*. Translated and Edited by G. V. Anrep. London: Oxford University Press.
- Petty, R. E., and Krosnick, J. A. (Eds.). (1995). *Attitude strength: Antecedents and consequences*. Hillsdale, NJ: Erlbaum.
- Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: Divergent perceptions of bias in self versus others. *Psychological Review*, 111, 781-799.
- Ross, L., and Ward, A. (1995). Psychological barriers to dispute resolution. In M. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 27, pp. 255-304). San Diego: Academic Press.
- Smith, R. E. F., and Christian, D. (1984). *Bread and salt: A social and economic history of food and drink in Russia*. Cambridge: Cambridge University Press.
- Tormala, Z. L., and Petty, R. E. (2002). What doesn't kill me makes me stronger: The effects of resisting persuasion on attitude certainty. *Journal of Personality and Social Psychology*, 83, 1298-1313.

Visser, P. S., Bizer, G., & Krosnick, J. A. (2006). Exploring the latent structure of strength-related attitude attributes. In M. Zanna (Ed.), *Advances in Experimental Social Psychology*, 38, (pp. 1-67). San Diego, CA: Academic Press.

Ward, A., Disston, L. G., Brenner, L., and Ross, L. (2008). Acknowledging the other side in negotiation. *Negotiation Journal*, 24, 269-285.

Table 1: *Discussion issues and number of participants per condition.*

<i>Issue Wording</i>	<i>Study 1</i>	<i>Study 2 Control</i>	<i>Study 2 Exchange</i>
This country needs stricter gun control laws.		8	8
Marriage between two men, or two women, should be legalized in this country.	66	22	20
The government should have the right to prohibit the news media from reporting on information that could be a threat to national security.	20	24	18
Medical research on stem cells taken from human embryos should receive federal funding.		6	4
Downloading copyrighted music from the Internet without paying for it is unethical.	7	8	12
The death penalty should be abolished.	13	18	26
In cases where the pregnant woman's health is at risk, late-term abortions should be allowed.		8	6
Animal experimentation for the purposes of medical advancement is morally justifiable.	10	14	10
Police officers should have the right to question people about their immigration status if there is reason to suspect they are illegal immigrants.	17	32	24

Table 2: *Promax-rotated factor loadings (Study 1).*

Question Text	Factor 1	Factor 2
To what extent is your attitude about this issue clear in your mind?	0.91	0.17
Overall, how much confidence do you have in your opinion about this issue?	0.90	0.06
How certain are you of your attitude about this issue?	0.90	0.12
How sure are you that your attitude about this issue is right?	0.90	0.08
How knowledgeable would you consider yourself to be about this issue?	0.75	0.02
How willing would you be to have a conversation about this issue with another member of the community who holds the opposite view?	0.25	0.88
How willing would you be to have a conversation about this issue with a group of people who hold the opposing view?	0.25	0.87
How willing would you be to read information supporting the opposing viewpoint on this issue?	-0.01	0.82
How willing would you be to watch an informational news program (such as a special on CNN or BBC) describing the opposing viewpoint on this issue?	-0.08	0.65
How receptive do you feel toward the views of people who hold the opposite opinion on this issue?	-0.34	0.55
How open-minded do you feel toward the views of people who hold the opposite opinion on this issue?	-0.34	0.48
To what extent do you feel like you need more information about this issue before making up your mind about it? (reverse-coded)	-0.67	0.25

Table 3: *Promax-rotated factor loadings (Study 2).*

Question Text	Factor 1	Factor 2
Overall, how much confidence do you have in your opinion about this issue?	0.91	0.06
To what extent is your attitude about this issue clear in your mind?	0.90	0.00
How certain are you of your attitude about this issue?	0.87	-0.03
How sure are you that your attitude about this issue is right?	0.81	-0.09
How knowledgeable would you consider yourself to be about this issue?	0.78	0.19
How willing or unwilling would you be to have another face-to-face conversation with the other participant about this and related topics?	0.25	0.75
How willing or unwilling would you be to have a conversation with a group of people who hold the same viewpoint as the other participant?	0.18	0.80
How willing or unwilling would you be to watch an informational news program (such as a special on CNN or BBC) on the other participant's viewpoint on this issue?	0.06	0.74
How willing or unwilling would you be to receive more information supporting the other participant's viewpoint on this issue?	-0.16	0.78
How open-minded or closed-minded do you feel toward the other participant's viewpoint on this issue?	-0.18	0.69
How receptive or unreceptive do you feel toward the other participant's viewpoint on this issue?	-0.20	0.67
To what extent do you feel like you need more information about this issue before making up your mind about it? (reverse-coded)	-0.60	0.19

Endnotes

ⁱ One dyad was eliminated from analysis because discussants agreed on all issues.