

de Facto Selectivity Revisited:
Causes and Consequences for Attitudes, Intentions, and Source Evaluations

Allison Earl & Michael P. Hall

University of Michigan

Abstract

People select information for themselves that supports (vs. challenges) their attitudes, but do people engage in similar selective exposure when choosing information on behalf of others? We propose that likability within information exchange relationships influences both how selectors choose information for others, and how recipients evaluate that information. Across four studies of relational dyads, we examine information exchange from two perspectives: information selectors (Studies 1-2) and information recipients (Studies 3-4). Results for selectors indicated that people chose information that was congenial for the recipient when that recipient was likable, and that this vicarious selective exposure occurred more for novel issues about which the selector did not have an attitude. For recipients, information from highly likable selectors — regardless of its congeniality—was regarded most favorably, indicating that source likability overcame message congeniality effects. Lastly, implications for *de facto* selective exposure and modern information exchange via social media are discussed.

de Facto Selectivity Revisited:

Causes and Consequences for Attitudes, Intentions, and Source Evaluations

Imagine that your friends, co-workers, and family worked on your behalf to make sure that you were only exposed to media that made you feel good about yourself. Wouldn't that be great? For President Trump, this fantasy is, to some extent, a reality. Reportedly, the President's staff members routinely direct his attention to media outlets issuing "a steady stream of praise" for him; when none such praise could be found, his staffers "would turn to friendly outlets to drum some up – and make sure it made its way to Trump's desk" (Palmeri, 2017). Because President Trump allegedly has a voracious appetite for media but does not react well to critical coverage, his staffers attempt to curate his media environment to include congenial (i.e., agreeable) information that prevents him from directing his frustration to "contain his Twitter-rage" (Palmeri, 2017).

Unlike Trump, most of us do not have staff members concerned with our personal media consumption and how it makes us feel. But, could there still be any truth to the idea that our friends and peers curate an information environment that is friendly to our views? If so, how would such curation affect how we evaluate congenial and uncongenial information? The current paper addresses these questions by examining how information is shared in relational dyads based on two factors: the congeniality (or agreeableness) of information to both the selector's and recipient's attitudes; and the feelings that the selector and recipient have about each other.

Selective Exposure for the Self and Others

For the self, it is well-established in psychological literature that people are more likely to see information that supports (vs. challenges) their desired conclusions (Brock & Balloun, 1967; Earl, Albarracín, Durantini, Gunnoe, Leeper, & Levitt, 2009; Festinger, 1957; Hart et al., 2009;

Freedman & Sears, 1965). Indeed, evidence suggests that people have a moderate preference for congenial (versus uncongenial) information (meta-analytic $d = 0.36$; Hart et al., 2009; see also Cotton, 1985; Frey, 1986). Historically, research has proposed two processes to support this selective exposure outcome: attitude selectivity and *de facto* selectivity.

According to attitude selectivity, people actively seek information that supports (vs. challenges) their views, more often choosing congenial over uncongenial information (Festinger, 1957; Frey, 1986; Hart et al., 2009). Attitude selectivity for the self has been demonstrated in a variety of contexts, including health messages about smoking (Brock & Balloun, 1967), messages about HIV-prevention behavior (Earl et al., 2009), and political issues (Lord, Ross, & Lepper, 1979). Attitude selectivity is generally considered to be driven by one of two motives: defense or accuracy motivations (Hart et al., 2009). Defense motivations are more likely when the information selector anticipates potential cognitive dissonance (e.g., when someone is strongly committed to an attitude, when it is identity-relevant), thereby leading the selector to exhibit a heightened preference for congenial (vs. uncongenial) information (Festinger, 1957; Hart et al., 2009). Defense motives spur selectors to choose information that should make them “*feel validated,*” leading to selections of high-quality congenial and low-quality uncongenial information (Hart et al., 2009, p. 555). Accuracy motivations, however, drive selectors to choose information that is high in utility regardless of congeniality, often leading to a reduced congeniality bias (Chaiken, Liberman, & Eagly, 1989; Hart et al., 2009). Accuracy motivations are more likely to motivate information selection when people have a desire to “*be correct*” and pursue objectively useful information (Hart et al., p. 555).

According to *de facto* selectivity, people simply exist in environments that present mostly congenial (vs. uncongenial) information (Freedman & Sears, 1965; Sears, 1968; Greenwald &

Sakumura, 1967; Zajonc, 1965). It is unclear *how* a person becomes surrounded by mostly congenial information, but nonetheless, that person finds the majority of his or her information exposure to be congenial. However, *de facto* selectivity has received considerably less empirical attention, and its underlying processes are thereby unclear. Studying how information is shared and evaluated within relational dyads could illustrate not just whether *de facto* selectivity occurs, but also whether it is facilitated by close others' informational choices on our behalf.

Beyond the self, how do people choose information on behalf of others? One possibility is that people disregard the recipient's views and choose information that they personally prefer. When the topic elicits defensive motives for selectors, they may choose whatever suits their own views; this outcome simultaneously affirms one's views and avoids dissonance from propagating uncongenial information (Festinger, 1957; Hart et al., 2009). However, this view largely ignores the recipient's attitudes, and research suggests that there should be circumstances under which selectors are likely to take recipients' perspectives into account when selecting information on their behalf. For instance, people may choose to silence themselves rather than say something that would hurt another's feelings (Rosen & Tesser, 1970). In instances of group decision-making, people may suppress their own points of view in order to preserve group harmony, especially if their views might be uncongenial to other group members (Janis, 1972). Finally, when deciding whether or how to deliver bad news to someone, the information messenger may consider the recipient's preferences and feelings (Sweeny & Shepperd, 2007).

Accounting for an information recipient's attitudes or feelings should occur especially for liked others. People are more likely to experience the emotions of liked others (Hatfield, Cacioppo, & Rapson, 1994; Heider, 1958; Howard & Gengler, 2001), experience vicarious distress from liked others' pain (Krebs, 1975), and experience vicarious dissonance with liked

others (Norton, Monin, Cooper, & Hogg, 2003). Liked others are also more likely to be incorporated into one's self-concept when they are similar in personality (Smith & Henry, 1996) and attitudes (Coats, Smith, Claypool, & Banner, 2000). Thus, information selectors should produce more congenial information for recipients to promote validation and reduce the discomfort associated with uncongenial information. Even for attitudinally dissimilar others, an information recipient's likability may affect the congeniality of information selections.

Understanding selectors' intentions when choosing information for others is also of theoretical value. For the self, issues that are value-relevant for selectors are more likely to elicit defensive motives, thereby increasing both congeniality bias and the need for validation; topics that are less value-relevant should elicit accuracy motives, thereby decreasing congeniality bias and increasing the need for useful information (Hart et al., 2009). How do these intentions manifest when selecting information for others? Issues eliciting defensive motives for the selector may lead to a congeniality bias for attitudinally similar recipients out of a desire to provide the same hedonic validation that the selector feels, but attitudinally dissimilar others may receive mostly uncongenial information (for them) out of the selector's attempt to persuade them (i.e., a motive to provide information that is useful, not hedonic, for the recipient).

Homogeneous vs. Heterogeneous Information Environments

Beyond questions of how people select information for others, the present research can also address: (a) the heterogeneity or homogeneity of information environments that selectors promote for recipients; (b) how recipients evaluate information as a result of characteristics of the selector and the selected information; and (c) whether recipients can identify the homogeneity or heterogeneity of their information environments. These questions are especially relevant in the modern age of increased news consumption in online settings (Olmstead,

Mitchell, & Rosenstiel, 2011), which may change how information is received and processed (Flanagin, 2017). Although there have been warnings that online platforms such as social media promote “echo chambers” that facilitate exposure to homogeneous and agreeable information (Bennett & Iyengar, 2008; Pariser, 2011; Stroud, 2008; Sunstein, 2001), research is divided about this possibility. Some suggest that these fears may be exaggerated (Bakshy, Messing, & Adamic, 2015; Diehl, Weeks, & Gil de Zúñiga, 2016; Weeks, Ksiazek, & Holbert, 2016), and others suggest that online environments may actually promote more heterogeneous information exposure (Barberá, 2015; Barberá, Jost, Nagler, Tucker, & Bonneau, 2015; Messing & Westwood, 2014).

Nonetheless, because online information transmission often relies upon the behavior of people in social networks, these social connections influence how news is consumed. Social media connections can facilitate diverse political discussions and persuasion to alternative viewpoints (Diehl et al., 2016; Heatherly, Lu, & Lee, 2017). Highly active online users can wide influence within their social networks (Weeks, Ardèvol-Abreu, & Gil de Zúñiga, 2017), and news content that was received via a friendly connection is more likely to be further disseminated by the recipient (Weeks & Holbert, 2013). Finally, endorsements by friends on online social media platforms can promote selection of ideologically disagreeable information and reduce partisan selective exposure (Messing & Westwood, 2014), suggesting that interpersonal views of information transmitters (i.e., selectors) can overcome recipients’ biases about the content. Thus, studying the experience of information recipients can shed light on how selector likability and information congeniality affect information reception.

Current Studies

The present research addresses how people select information for others and how recipients evaluate that information across four studies. Specifically, the present research addresses these questions with attention to the influences of likability within the selector-recipient dyad and congeniality of the selected or received information. First, Studies 1 and 2 focus on information selectors and how their selection decisions are influenced by the recipient's likability. Study 1 examines information selection for a novel issue (i.e., selector has no attitude), whereas Study 2 examines selection for a familiar issue (i.e., selector has an attitude). Then, Studies 3 and 4 examine information recipients as a function of the selector's likability and the congeniality of the received information. In doing so, Studies 3 and 4 assess recipients' perceptions of informational bias and the factors that influenced their information environment.

Study 1

The goal of Study 1 was to assess how people make informational choices for other people. Specifically, Study 1 examined how informational choices varied by the information recipient's likability and stance on the issue at hand. In Study 1, all participants were selectors and were tasked with choosing information for alleged recipients about a fictitious intelligence test—the “MEQ”—to assess how such information selection for others occurs with a novel issue (i.e., one that participants did not have a preexisting attitude about).

Method

Participants. One hundred seventy-five American adults were recruited through Amazon Mechanical Turk (MTurk) for \$1.00. Participants were screened using two criteria: (1) if they indicated that their data was not of high quality ($n = 2$); and (2) if they failed an attention check that read, “If you are reading this question, please leave it blank” ($n = 19$). The final sample

consisted of the remaining 154 participants (55.2% female; 76.6% non-Hispanic White; $M_{age} = 37.77$ years, $SD = 12.17$ years).

Design. Study 1 had a between-subject design with two independent variables. The first, likability of the participant's fictitious partner (i.e., the alleged information recipient), had two levels: (a) likable partner, whose responses to questions about themselves indicated that they valued time with family and friends, were passionate about life, and that they took pride in being an honest, hardworking MTurk worker; or (b) unlikable partner, whose responses to questions about themselves indicated that they were uninterested in other people, enjoyed manipulating other people, and took pride in being a deceitful, dishonest MTurk worker motivated by money. The second independent variable, the fictitious partner's perception of the fictitious MEQ intelligence test, also had two levels: (a) valid, with the partner indicating that they had done well on the test and considered it a "good and genuine measure of my intelligence"; or (b) invalid, with the partner indicating that they had done poorly on the test and that it was "complete garbage" and "not a good test." Study 1 had a 2 (partner likability: likable or unlikable) x 2 (partner's perception of MEQ: valid or invalid) design. See the Appendix for full descriptions of both manipulations.

Procedure. Participants were told that the purpose of Study 1 was to test the use of "a quick, easy-to-administer type of intelligence test." Participants were informed that some other participants had already taken the test and would be returning for another study session in which they would read articles about the test that had been selected for them; the researchers were interested in transmitting this information electronically and were asking participants to select test-relevant information for the other participants in order to "remove the role of the

experimenter in assigning these articles.” Participants were also informed that the identities of themselves and their partner would remain anonymous.

Next, participants completed questions about themselves for their partner to read when the partner received the articles that the participant had selected for them. Participants were also told that they would have access to their partner’s responses to these same questions after providing their responses. Participants answered seven questions about: (1) gender; (2) occupation; (3) favorite color; (4) hobbies or leisure activities; (5) one unique trait they have; (6) personal values; and (7) what they enjoy about being a Mechanical Turk worker. After answering these questions, participants saw their alleged partner’s responses, which were randomly assigned to be likable or unlikable. Participants were then told that they were in the information selection phase of the study and that they could read their alleged partner’s impression of the test before selecting articles for them. Participants were then randomly assigned to view a response from a partner who viewed the test as either valid or invalid.

Lastly, participants selected articles about the test for their partner, evaluated their partner and the selected articles, and completed demographic measures.

Measures.

Article selection. Participants saw the thesis statements of eight articles about the MEQ test; four statements supported the MEQ’s validity, and four opposed its validity. Each statement conveyed whether the article supported or opposed the test’s validity as a measure of intelligence. For each of the eight articles, participants had a binary choice of selecting, “Yes, send to my partner” or “No, do not send to my partner.” Participants could send between zero and eight articles.

Hedonic experience. In response to the question, “When thinking about the article(s) you selected, how much would your partner...” participants used a 7-point scale (1 *not at all* – 7 *extremely*) to rate how much their partner would: (a) want to read the article(s); (b) agree with the article(s); (c) enjoy the article(s); (d) feel annoyed by the article(s); and (e) dislike the article(s). Items (d) and (e) were reverse-coded, and a composite mean of these five measures was constructed due to high internal reliability (Cronbach’s $\alpha = .92$).

Utility. In response to the prompt, “When thinking about the article(s) you selected...” participants used a 7-point scale (1 *not at all* – 7 *extremely*) to rate: (a) how much the selected article(s) would inform their partner about the MEQ; (b) how much knowledge about the MEQ their partner would gain by reading the article(s); and how much their partner would perceive the articles as (c) reliable, (d) valid, and (e) credible. A composite mean of these five measures was constructed due to high internal reliability ($\alpha = .91$).

Evaluations of partner. Using a 5-point scale (1 *not at all* – 5 *extremely*) participants evaluated their alleged partner on seven dimensions: (a) hardworking; (b) warm; (c) lazy; (d) likable; (e) cold; (f) overall impression; and (g) desire to interact with partner. Items (c) and (e) were reverse-coded, and a composite mean of these seven measures was constructed due to high internal reliability ($\alpha = .95$).

Demographics. Participants indicated their sex (*female; male; or prefer not to answer*), age, and racial/ethnic origin (1 *American Indian or Alaska Native*; 2 *Asian or Pacific Islander*; 3 *Black, not of Hispanic origin*; 4 *Hispanic*; 5 *White, not of Hispanic origin*; or 6 *Other*).

Analytic strategy. Consistent with selective exposure research (e.g., Hart et al., 2009), all article selections were recoded by their congeniality to the alleged partner based on that partner’s perceptions of the MEQ. For instance, for partners who scored well on the MEQ and

believed it was a valid measure of intelligence, pro-MEQ articles were coded as congenial, whereas anti-MEQ articles were coded as uncongenial; the opposite set of coding applied to partners who scored poorly on the MEQ and viewed it as an invalid measure of intelligence. A difference score of the number of congenial articles minus the number of uncongenial articles (common practice in selective exposure research; e.g., Hart et al., 2009) was constructed to reflect the degree of congeniality bias in participants' article selections for the recipient. Positive congeniality bias scores indicate that the recipient saw more congenial (vs. uncongenial) articles, whereas negative scores indicate seeing more uncongenial (vs. congenial) articles.

Results

Evaluations of partner. As a manipulation check of likability, participants in the likable partner condition rated their partners significantly more favorably ($M = 4.03$, $SD = 0.57$) than those in the unlikable partner condition ($M = 1.91$, $SD = 0.82$), $F_{1, 142} = 314.98$, $p < .001$, $d = 3.00$. Partner evaluations were unaffected by the partner's perceived validity of the MEQ ($F_{1, 142} = 0.12$, $p = .730$) and the interaction of the two factors ($F_{1, 142} = 0.42$, $p = .519$).

Article selection. Participants selected an average of 3.81 ($SD = 1.61$) articles out of eight possible for their alleged partner, and this number was unaffected by the independent variables (likability: $F_{1, 150} = 0.07$, $p = .797$; validity: $F_{1, 150} = 0.00$, $p = .957$; interaction: $F_{1, 150} = 0.47$, $p = .493$).

Next, an analysis of variance (ANOVA) examined the effects of likability and validity on congeniality bias. Results found a significant main effect of likability ($F_{1, 150} = 18.46$, $p < .001$, $d = 0.49$), but no effects of validity ($F_{1, 150} = 0.10$, $p = .749$) or the interaction of the two ($F_{1, 150} = 0.02$, $p = .894$). Participants with likable partners showed a significantly greater congeniality bias ($M = 1.31$, $SD = 3.82$) than those with unlikable partners ($M = -0.56$, $SD = 3.80$), indicating that

participants chose more congenial information for likable partners, but more uncongenial information for unlikable partners. See Figure 1.

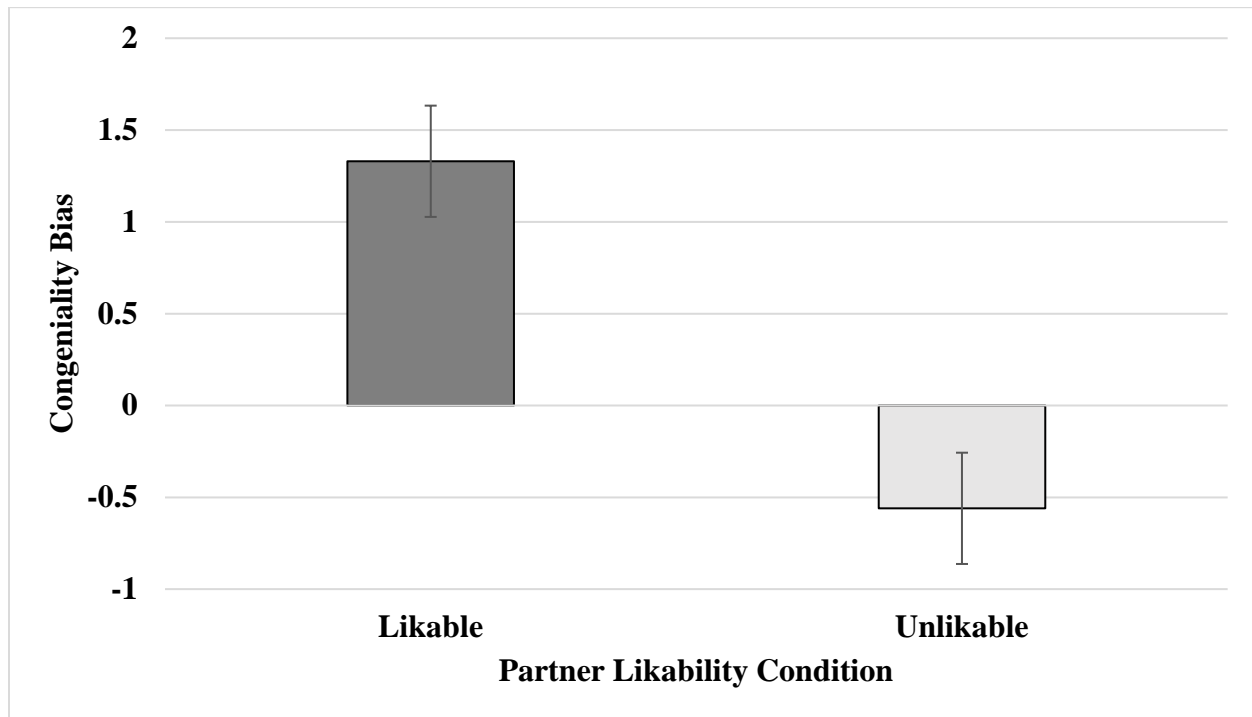


Figure 1. Mean congeniality bias scores as a function of partner likability condition, Study 1. Scores represent the difference of the number of uncongenial articles chosen from the number of congenial articles chosen. Error bars represent standard errors.

Hedonic experience. A linear regression of perceptions of the partner's hedonic experience from the articles on congeniality bias was significant, $B = 0.87$, $SE = 0.10$, $\beta = 0.58$, $t = 8.86$, $p < .001$, $R^2_{change} = .34$. Mediation analysis using PROCESS for SPSS (Model 4, 10,000 bootstrap samples; Hayes, 2013) found a significant indirect effect of partner likability on information congeniality via perceived hedonic experience ($B = 1.19$, $SE = 0.20$, 95% CI [0.82, 1.61]), indicating that the more participants considered the hedonic experience of the recipient, the more they chose congenial information.

Utility. A linear regression of the partner's perceived utility from the articles on congeniality bias was not significant ($B = -0.07$, $SE = 0.18$, $\beta = -0.03$, $t = -0.40$, $p = .692$),

indicating that participants' information choices were unrelated to perceptions of how much utility their partners would derive from the articles. Mediation analysis found no indirect effect of likability condition on congeniality via utility ($B = -0.09$, $SE = 0.06$, 95% CI [-0.22, 0.03]).

Discussion

Study 1 points to two conclusions about how people choose information for others in the context of a novel issue. First, participants were attentive not just to their partner's stance on the issue, but to that partner's likability. Participants chose largely congenial information for likable partners but mostly uncongenial information for unlikable partners, indicating that participants rewarded likable recipients with information supporting their views, but punished unlikable recipients with information that opposed their views.

Second, choosing congenial (vs. uncongenial) information for partners was associated with a motivation to increase partners' hedonic experiences, but not utility. Thus, participants chose mostly congenial information for likable partners because they anticipated their partners would find that information enjoyable to read, but not necessarily useful.

Next, Study 2 examines information selection for others as a function of the recipient's likability and stance on the issue, but an issue for which participants already hold an attitude.

Study 2

Like Study 1, Study 2 examines the influence of likability on information choice for others, but for a divisive issue for which participants are likely to hold an attitude: gun control. Therefore, beyond likability, Study 2 examines how agreement on gun control between the information selector and recipient influences information choice.

Method

Participants. Two hundred five American adults were recruited through MTurk for \$1.00. Like Study 1, participants were excluded for indicating that their data was not of high quality ($n = 2$) or failing the attention check ($n = 17$). The final sample was 186 participants (50.0% female; 76.9% non-Hispanic White; $M_{age} = 37.64$ years, $SD = 13.62$ years).

Design and procedure. Study 2 was very similar to Study 1, with one difference from Study 1: The topic in Study 2 was gun control—a known issue—instead of the MEQ test. Otherwise, Study 2 used the same cover story, independent variable manipulations (but with gun control), and procedure as Study 1. (See Appendix for manipulations.) Like Study 1, participants in Study 2 were aware of their alleged partner's gun control attitude before selecting gun control articles for them. The added gun control attitude measures (detailed below) all occurred after the article selection phase.

Measures. Measures of hedonic experience ($\alpha = .85$), utility ($\alpha = .86$), evaluations of partner ($\alpha = .95$), and demographics were the same as Study 1. Study 2 added the following measures:

Article selection. Like Study 1, the article selection in Study 2 presented participants with eight thesis statements that either supported or opposed—four statements of each variety—but with the issue of gun control.

Selection factors. After article selection, participants indicated the extent to which various factors influenced their selection decisions. On a 7-point scale (1 *not at all* – 7 *extremely*), participants indicated the influence of: (a) my own beliefs and attitudes; (b) my partner's beliefs and attitudes; (c) my personality; (d) my partner's personality; (e) I chose articles at random; and (f) other (please specify).

Gun control attitude. Participants' gun control attitudes were calculated by averaging responses to six semantic differential scales (*desirable-undesirable*, *foolish-wise*, *good-bad*, *harmful-beneficial*, *necessary-unnecessary*, and *positive-negative*), from 1 to 9 ($\alpha = .99$).

Gun control stance. Using a binary response (1 *pro-gun control*; 2 *anti-gun control*), participants indicated their gun control stance.

Analytic strategy. A binary "partner agreement" variable was constructed using the fictitious partner's binary stance on gun control (pro or anti) and the participant's stated stance on gun control. Regardless of direction of stance, a score of -1 was assigned when the participant's gun control stance did not align with their partner's, and a score of 1 was assigned when the two stances aligned. Binary logistic regression found that the six-item gun control attitude composite significantly predicted a participant's binary gun control stance, $B = 1.17$, $SE = 0.18$, $Wald = 42.93$, $\beta = 3.23$, $p < .001$.

Like Study 1, articles were recoded by congeniality to the alleged partner based on that partner's gun control stance. A congeniality bias difference score was constructed by subtracting the number of uncongenial articles chosen from congenial articles chosen (like Study 1).

Results

Evaluations of partner. As a manipulation check of likability, participants in the likable partner condition rated their partners significantly more favorably ($M = 3.84$, $SD = 0.63$) than those in the unlikable partner condition ($M = 1.86$, $SD = 0.73$), $F_{1, 163} = 349.91$, $p < .001$, $d = 2.90$. Partner evaluations were unaffected by whether the participant and partner agreed on gun control ($F_{1, 163} = 1.16$, $p = .282$) or the interaction of both factors ($F_{1, 163} = 0.19$, $p = .663$).

Article selection. Participants selected an average of 3.90 ($SD = 1.66$) articles out of eight possible for their partner, which was unaffected by the independent variables (likability: $F_{1, 173} = 0.66, p = .418$; agreement: $F_{1, 173} = 0.02, p = .897$; interaction: $F_{1, 173} = 2.37, p = .125$).

Using the congeniality bias difference score, ANOVA indicated that when choosing information for a partner, participants still exhibited a significant selective exposure bias (Hart et al., 2009) based on their own preferences, regardless of congeniality ($F_{1, 182} = 67.25, p < .001, d = -1.32$). Participants with an anti-gun control stance chose more anti-gun control articles for their partner ($M = -1.57, SD = 2.22$), whereas those with a pro-gun control stance chose more pro-gun control articles for their partner ($M = 1.19, SD = 1.97$). The information recipient's gun control stance ($F_{1, 182} = 0.28, p = .597$) and the interaction of both factors ($F_{1, 182} = 0.70, p = .406$) did not affect information selection.

Next, ANOVA examined the effect of two factors—partner likability and participant-partner agreement on gun control—on congeniality bias. There was no main effect of partner likability ($F_{1, 173} = 0.63, p = .427$), but there was a significant effect of partner agreement ($F_{1, 173} = 66.90, p < .001, d = 1.21$) and an interaction of likability and agreement ($F_{1, 173} = 4.94, p = .028, \eta_p^2 = .028$). For partner agreement, partners who agreed with the participant received mostly congenial information ($M = 1.36, SD = 2.08$), whereas those who disagreed received mostly uncongenial information ($M = -1.20, SD = 2.14$). This is consistent with the previous analysis showing that participants generally selected what they—not their partners—preferred based on their own gun control views. Finally, the interaction of likability and agreement found that although the congeniality of articles chosen for the information recipient was primarily influenced by agreement on gun control, these effects were amplified when that partner was likable (vs. unlikable). Partners who agreed with participants received significantly more

congenial information when they were likable ($M = 1.85$, $SD = 4.10$) compared to unlikable ($M = 0.90$, $SD = 3.96$; $F_{1, 173} = 4.92$, $p = .028$, $d = 0.24$); for those who disagreed, however, likability made no difference in the amount of congenial information they received ($F_{1, 173} = 0.95$, $p = .332$). See Figure 2.

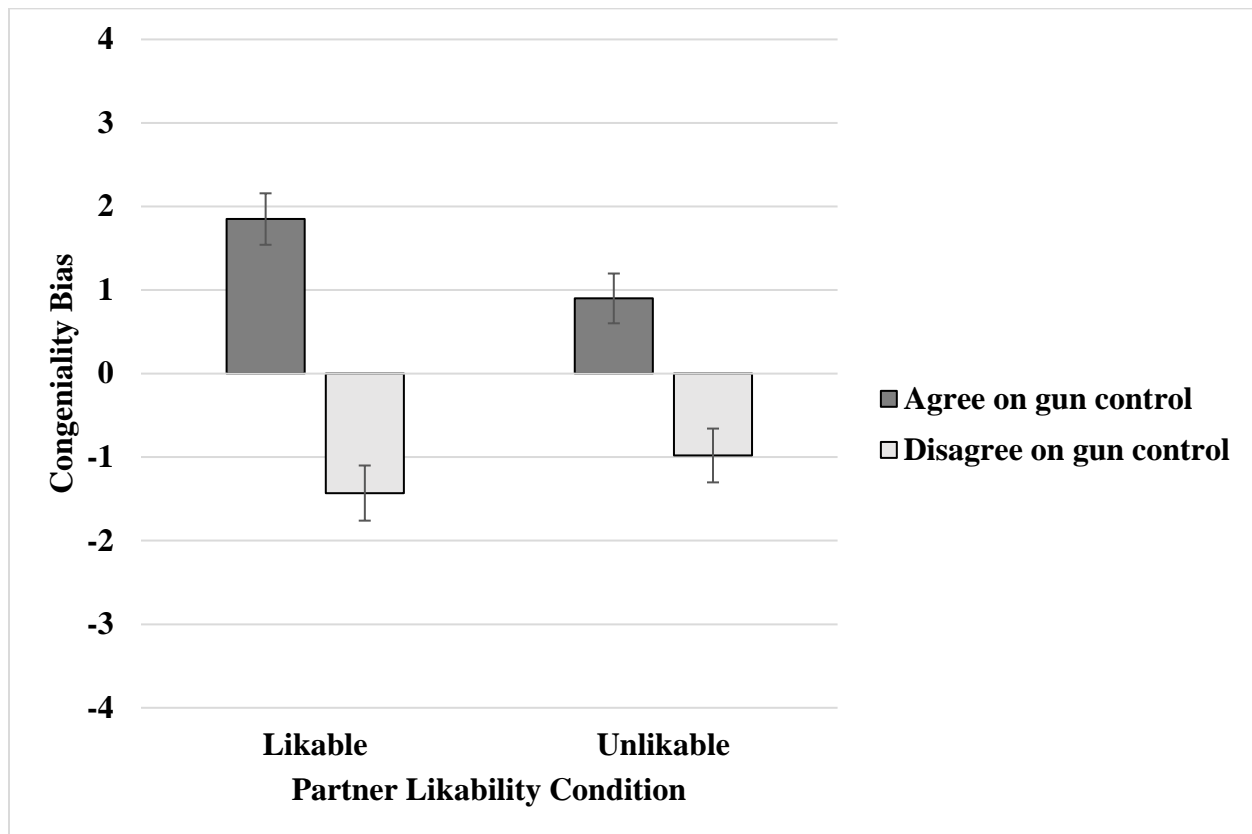


Figure 2. Mean congeniality bias scores as a function of partner likability condition and partner agreement, Study 2. Scores represent the difference of the number of uncongenial articles chosen from the number of congenial articles chosen. Error bars represent standard errors.

Hedonic experience. A linear regression of perceptions of the partner's hedonic experience on congeniality bias was significant, like Study 1 ($B = 0.54$, $SE = 0.17$, $\beta = 0.22$, $t = 3.09$, $p = .002$, $R^2_{change} = .05$): When participants considered the hedonic experience of the recipient, they chose more congenial information. Next, mediational analysis (PROCESS Model 4; Hayes, 2013) found that likability significantly influenced hedonic perceptions ($B = 0.39$, $SE = 0.07$, $t = 5.79$, $p < .001$, 95% CI [0.26, 0.53]), indicating that hedonic experience was considered

more for likable (vs. unlikable) partners. There was also a significant indirect effect of likability on congeniality bias via hedonic perceptions ($B = 0.23$, $SE = 0.09$, 95% CI [0.06, 0.40]).

However, analysis of moderated mediation (PROCESS Model 7; Hayes, 2013) using partner agreement as a moderator of likability on hedonic perceptions found no effect ($B = 0.06$, $SE = 0.09$, 95% CI [-0.09, 0.27]), indicating that likability, not partner agreement, influenced whether participants considered recipients' hedonic experiences.

Utility. A linear regression of perceptions of the partner's utility from the articles on congeniality bias found no association, like Study 1 ($B = 0.10$, $SE = 0.18$, $\beta = 0.04$, $t = 0.57$, $p = .569$). Mediation ($B = 0.00$, $SE = 0.02$, 95% CI [-0.02, 0.04]) and moderated mediation ($B = 0.00$, $SE = 0.03$, 95% CI [-0.06, 0.07]) analyses found no effects of likability on congeniality bias via utility perceptions. Thus, participants again did not consider the utility of information for their partners when they chose more congenial information, unlike for hedonic perceptions.

Selection factors. Participants' considerations when selecting articles for their partners were analyzed by creating mean composites for the two self factors ("my personality" and "my beliefs and attitudes"; $r = .55$, $p < .001$) and the two partner factors ("my partner's personality" and "my partner's beliefs and attitudes"; $r = .59$, $p < .001$). A mixed-model ANOVA with three within-subject selection factors (self factors, partner factors, and random) and two between-subject factors (likability, partner agreement) found no significant effects except for an interaction of likability and selection factors ($F_{1, 173} = 3.95$, $p = .048$, $\eta_p^2 = .022$). Simple effects analyses revealed that the only significant difference between likable and unlikable partners occurred for the randomness factor ($F_{1, 173} = 8.17$, $p = .005$, $d = 0.30$): Participants reported relying on randomness as a factor more for unlikable ($M = 1.88$, $SD = 1.82$) than likable ($M = 1.32$, $SD = 1.88$) partners. Thus, likability and partner agreement had no effects on whether

participants reported considering self- or partner-oriented factors when choosing information for their partner. That participants did not rely on partner factors is consistent with the results that participants generally relied on their own gun control attitudes to choose information for their partners. However, the finding that participants did not consider their partner's personality and attitudes is inconsistent with the previous result that likability did affect participants' information selections.

Discussion

Study 2 replicated and expanded upon several findings from Study 1 regarding how people choose information for others, but instead using an issue—gun control—for which participants had an attitude. The major difference between Studies 1 and 2 was that when participants had an attitude about the topic, compatibility of their partner's attitude on gun control was a significant factor in their selection decisions for that partner; indeed, Study 2 participants generally chose articles that were consistent with their own gun control attitudes, which were congenial to agreeable partners, but not disagreeable ones. However, likability in Study 2 still mattered such that likable (vs. unlikable) partners were rewarded with more congenial information when they agreed with the participant. Thus, participants were even more attuned to likable partners' attitudes, but not unlikable partners' attitudes.

Study 2 also replicated Study 1 by showing that congenial information selections were driven by considerations of whether one's partner would enjoy the information (i.e., hedonic perceptions), but not necessarily if they would find it useful (i.e., utility). Lastly, Study 2 found that participants generally did not consider their partner's personality or attitudes when selecting information. Thus, when it came to a contentious political topic, selectors chose based on what they personally found congenial, but not recipients. Although agreeable and likable participants

received an extra boost of congenial information, those who were likable but disagreed with the participant on gun control received mostly uncongenial information.

Next, Studies 3-4 examine the opposite perspective in these informational exchanges: How do information *recipients* view information, and information selectors, as a function of likability and agreement on the issue?

Study 3

In Studies 1-2, participants selected information for fictitious partners (i.e., recipients). Study 3 turns to the recipient's perspective to address several questions raised by the results of Studies 1-2. In Studies 1-2, participants chose more congenial information for partners when they considered their partners' hedonic experiences, but not utility; in Study 3, will recipients similarly consider congenial information to be more hedonically enjoyable, but not more useful? Studies 1-2 also found this effect particularly for likable recipients; for recipients in Study 3, will the selector's likability affect their appraisals—hedonic or utility—of received information?

Method

Participants. One hundred eighty-five undergraduate students (73.3% female; 67.6% non-Hispanic White; $M_{age} = 18.76$ years, $SD = 0.90$ years) enrolled in an introductory psychology course participated for course credit. The stopping point for data collection was determined by the end of the academic semester.

Design. Study 3's design took one of two forms depending on how many participants were in the study at a given time. If there were an even number of participants, then participants were divided evenly between two lab rooms and partnered with one participant of the same sex in the other lab room; however, participants only communicated with their partners via an Internet chat program and were never introduced face-to-face. In this case, the study involved

one between-subject factor: the randomly generated balance of gun control information received (three levels: biased in favor of gun control, balanced, or biased against gun control). These conditions applied to 99 participants in Study 3.

However, if there were an odd number of participants, then the last participant who could not be paired with another participant instead exchanged information with a fictitious selector partner, similar to how selectors in Studies 1-2 exchanged information with a fictitious recipient. These Study 3 participants did not interact with a true partner but were not aware that their experiences were different from those of the other participants who were paired with a true, living partner. For these participants, the study had two between-subject factors: the randomly generated balance of gun control information received (same as participants in the previous condition) and likability of the fictitious partner (likable or unlikable). These conditions applied to 86 participants in Study 3.

Procedure. Participants were told that the study's goal was to assess how various materials could help individuals gain an understanding of a current issue, and that they would be working with another participant to complete an information reviewing task. Participants were always told that their partner was randomly chosen to be the information "selector," leaving them to be the information "receivers." Participants were told that should review the information allegedly selected by their partner. Before the reviewing task, participants were informed that they would first engage in a brief exercise to get to know their partner.

For participants who were paired with an actual partner (located in a different room), a survey guided them through the Relationship Closeness Induction Task (RCIT; Sedikides, Campbell, Reeder, & Elliot, 1999). During the task, individuals take turns answering 3 lists of questions designed to induce interpersonal closeness and familiarity. Each list contains 7-12

questions (e.g., “What are your hobbies?” or “What is something you have always wanted to do but probably will never be able to do?”) designed to elicit reciprocal conversation. Participants interacted with each other only via an instant-messaging program and posted responses to each question in the program’s chat window. See Appendix for full RCIT questionnaire.

For participants with a fictitious partner (whom they believed was located in another room), a survey guided them through a series of prompts to exchange some personal information with the fictitious partner. These questions were the same as those in Studies 1-2, except for the question about one’s MTurk worker experience. The “selector’s” responses to these questions were designed to make the individual seem likable or unlikable (like Studies 1-2). See Appendix for manipulation.

After this interaction, participants were told that gun control was the randomly chosen issue of focus for the study and reported their gun control attitudes; which they were told their partner (the selector) had access to. Then, participants were randomly assigned to one of three information conditions: biased in favor of gun control, with three pro-gun control messages and one anti-gun control message; balanced, with two pro- messages and two anti- ones; or biased against gun control, with one pro- message and three anti- ones. Across all conditions, articles were randomly generated from batches of four pro- and four anti- messages. After reading the messages, participants evaluated them for hedonic experience and utility.

Lastly, participants completed evaluation measures of their partner, perceived similarity of their gun control views to their partner and the average American, and demographic questions.

Measures. All measures of hedonic experience ($\alpha = .77$), utility ($\alpha = .87$), partner evaluations ($\alpha = .93$), gun control attitude ($\alpha = .96$), gun control stance, and gun control consensus were the same as Study 2. The following measures were added:

Perceptions of bias. After reading all the gun control messages, participants completed four measures designed to assess perceptions of the objectivity (or bias) of the information they received. All four measures used 7-point scales (1 *not at all* to 7 *very much*) and participants indicated to what extent the gun control information they read: (a) accurately represented *their own opinion* on gun control; (b) accurately represented *multiple points of view* on gun control; (c) was *useful to them* for understanding gun control; and (d) was *useful for the average American* for understanding gun control.

Gun control similarity. Like gun control consensus, participants estimated the perceived similarity of their partner's gun control attitude with their own using a slider scale (0 *least similar* – 100 *most similar*).

Analytic strategy. At the end of the study, participants in the live partner condition were asked whether or not they knew their partner. Nine participants reported knowing their partners and were excluded from analyses due to the chance that their experience was significantly different from those who did not know their partners before the RCIT (Sedikides et al., 1999).

Like prior studies, the information balance conditions were recoded as a function of congeniality to the recipient (the participant) based on their dichotomous stance on gun control. Binary logistic regression found that the six-item gun control attitude composite predicted a participant's binary gun control stance, $B = 2.00$, $SE = 0.40$, $Wald = 2.76$, $\beta = 7.42$, $p < .001$.

Results

Hedonic experience. ANOVA of partner condition (fictitious or real) and information congeniality on hedonic experience found a main effect of information congeniality ($F_{2, 167} = 3.15$, $p = .045$, $\eta_p^2 = .04$), but no effect of partner condition ($F_{1, 167} = 1.30$, $p = .255$) or the interaction of the two ($F_{2, 167} = 0.50$, $p = .607$). Participants rated information as significantly

more negative when they received largely uncongenial information ($M = 4.05$, $SD = 1.02$) compared to the congenial ($M = 4.40$, $SD = 0.95$; $p = .030$) and balanced ($M = 4.41$, $SD = 0.98$; $p = .030$) conditions. The congenial and balanced conditions did not differ significantly ($p = .956$).

Within just the fictitious partner condition, there was a marginal effect of likability ($F_{1, 80} = 3.50$, $p = .065$), but no effects of information congeniality ($F_{2, 80} = 1.03$, $p = .362$) or their interaction ($F_{2, 80} = 2.49$, $p = .089$) on hedonic ratings. However, within just the RCIT partner condition, hedonic ratings were positively associated with evaluations of the selector ($B = 0.30$, $SE = 0.10$, $\beta = 0.32$, $t = 3.06$, $p = .003$), but did not differ by information congeniality ($F_{2, 84} = 1.60$, $p = .209$).

Utility. ANOVA of the two independent variables on utility ratings of the received information found no effects of partner condition ($F_{2, 169} = 0.54$, $p = .462$), information congeniality ($F_{2, 169} = 1.74$, $p = .178$), or their interaction ($F_{2, 169} = 0.31$, $p = .732$).

Within just the fictitious partner condition, there were no effects of likability ($F_{1, 79} = 0.49$, $p = .485$), information congeniality ($F_{2, 79} = 1.58$, $p = .212$), or their interaction ($F_{2, 79} = 0.28$, $p = .755$) on utility ratings. However, within just the RCIT partner condition, utility ratings were positively associated with evaluations of the selector ($B = 0.30$, $SE = 0.11$, $\beta = 0.28$, $t = 2.71$, $p = .008$), but did not differ by information congeniality ($F_{2, 87} = 0.62$, $p = .538$). This finding differs from Studies 1-2, in which selectors did not expect likable recipients to derive more utility from information. Here, recipients in the RCIT condition derived additional hedonic enjoyment and utility from information chosen by likable selectors.

Evaluations of partner. As a manipulation check in the fictitious partner condition only, ANOVA found a significant effect of likability condition ($F_{1, 82} = 126.27$, $p < .001$, $d = 2.45$),

indicating a successful manipulation: Likable fictitious partners were rated more positively ($M = 5.96$, $SD = 1.01$) than dislikable fictitious partners ($M = 3.13$, $SD = 1.28$).

Next, we used ANOVA to assess the effects of information congeniality condition and partner condition on partner evaluations. Analyses indicated a marginal effect of information congeniality ($F_{2, 168} = 2.84$, $p = .061$, $\eta_p^2 = .03$), indicating that participants who received mostly uncongenial information viewed their partners less positively ($M = 5.34$, $SD = 2.59$) than those who received balanced ($M = 5.92$, $SD = 2.55$; $p = .039$) or mostly congenial ($M = 5.90$, $SD = 2.47$; $p = .040$) information; the congenial and balanced conditions did not differ significantly ($p = .966$). There was also a main effect of partner condition ($F_{1, 168} = 126.88$, $p < .001$, $d = 1.61$), showing that participants with live partners had significantly more positive impressions ($M = 6.97$, $SD = 2.02$) than those with fictitious partners ($M = 4.47$, $SD = 2.11$). Finally, there was a significant information congeniality by partner condition interaction ($F_{2, 168} = 4.24$, $p = .016$, $\eta_p^2 = .05$). For participants paired with fictitious partners, the congeniality of information received mattered significantly ($F_{2, 168} = 5.90$, $p = .003$, $\eta_p^2 = .07$): Participants who received mostly uncongenial information viewed their partners less positively than those who received balanced ($M_{diff} = -1.08$, $SE = 0.41$; $p = .009$) and mostly congenial ($M_{diff} = -1.34$, $SE = 0.40$; $p = .001$) information. However, for participants with live partners, the type of information received had no effect on their partner evaluations ($F_{2, 168} = 0.30$, $p = .740$). See Figure 3.

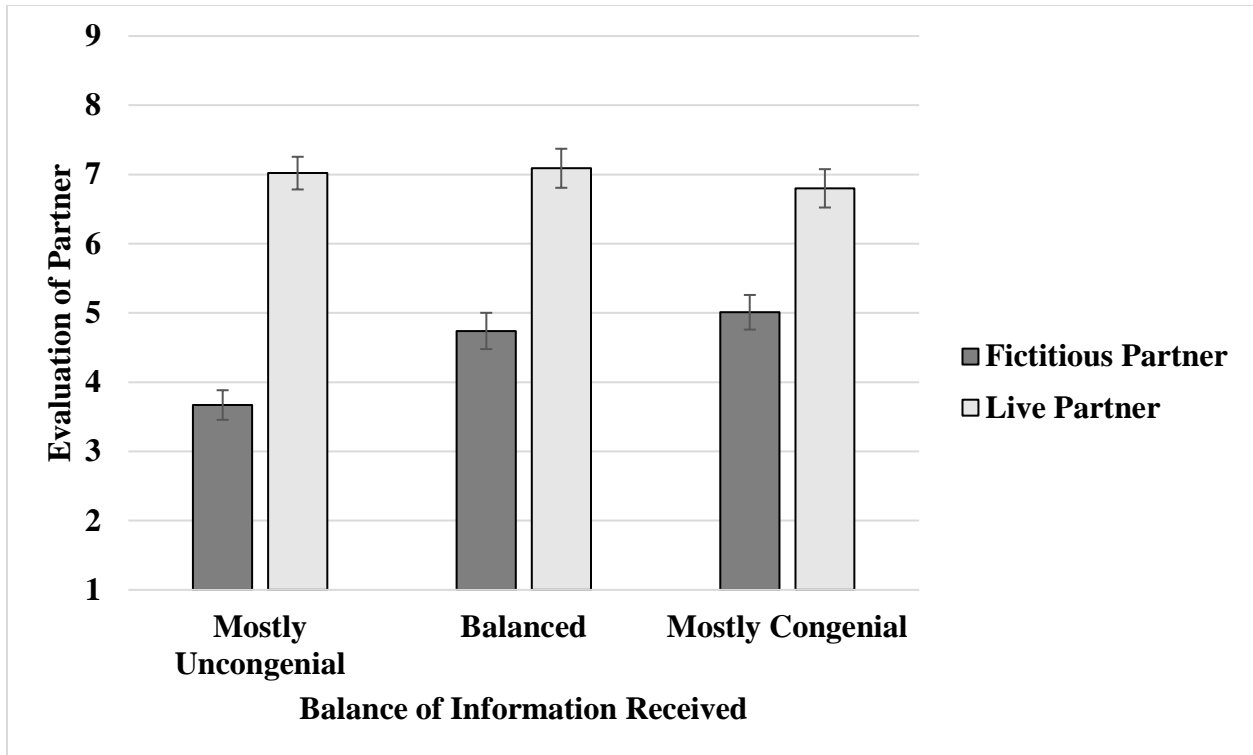


Figure 3. Mean evaluations of partner (selector) as a function of information congeniality and partner condition, Study 3. Error bars represent standard errors.

These results suggest two conclusions. First, engaging in the RCIT (Sedikides, 1999) with a live partner almost always led to a positive interaction. Second, these highly positive views of one's partner appeared to blunt any effects of the congeniality of the information ostensibly chosen by one's partner. Participants with fictitious partners judged partners differently according to the balance of information they received, whereas participants with (mostly likable) live partners did not use that information to inform their partner evaluations.

Gun control consensus. ANOVA found no effects of information congeniality ($F_{2, 169} = 1.58, p = .209$), partner condition ($F_{2, 169} = 2.37, p = .126$), or their interaction ($F_{2, 169} = 0.40, p = .673$) on the perceived percentage of Americans who share the participant's views on gun control. When split out by partner condition, there were no significant effects.

Gun control similarity. ANOVA indicated effects of information congeniality ($F_{2, 168} = 10.06, p < .001, \eta_p^2 = .11$) and partner condition ($F_{1, 168} = 10.93, p = .001, d = 0.37$) on perceived

similarity of the selector's views on gun control, although no interaction of the two ($F_{2, 168} = 1.47, p = .323$). For information congeniality, participants perceived greater attitudinal similarity with their partner after receiving mostly congenial ($M = 62.65, SD = 35.35$) compared to balanced ($M = 51.57, SD = 36.09; p = .004$) and mostly uncongenial ($M = 45.43, SD = 37.66; p < .001$) information. The balanced and uncongenial conditions did not differ significantly ($p = .122$). For partner condition, participants with live partners ($M = 58.48, SD = 29.17$) perceived more similar gun control views with their partners than those with fictitious partners ($M = 47.95, SD = 30.23$).

Within the fictitious partner condition, there was an effect of likability ($F_{1, 79} = 7.09, p = .009, d = 0.41$) such that likable partners were perceived as more attitudinally similar ($M = 55.07, SD = 33.71$) than unlikable partners ($M = 41.66, SD = 31.96$). There was also a significant effect of information congeniality ($F_{2, 79} = 6.30, p = .003, \eta_p^2 = .14$) that mirrored the effect for the combined data, but no interaction of the two ($F_{2, 79} = 0.26, p = .770$). For the RCIT condition, there was no significant effect of information congeniality ($F_{2, 86} = 2.67, p = .075$), but attitudinal similarity was positively associated with selector likability ($B = 5.23, SE = 2.80, \beta = 0.30, t = 2.90, p = .005$).

Perceptions of bias. In their assessments of how useful and accurate the information they read was, participants were significantly influenced by information congeniality for measures of the articles' accuracy in representing their own view on gun control ($F_{2, 169} = 8.65, p < .001, \eta_p^2 = .09$) and multiple points of view on the issue ($F_{2, 169} = 9.17, p < .001, \eta_p^2 = .10$). Measures of usefulness to oneself and to the average American were not significantly influenced by information congeniality condition.

For their own opinion on gun control, participants (rightly) felt their views were most accurately represented when they received mostly congenial information ($M = 4.46$, $SD = 1.81$) compared to mostly uncongenial ($M = 3.64$, $SD = 1.90$; $p < .001$) and balanced ($M = 4.07$, $SD = 1.85$; $p = .046$) information; the uncongenial and balanced conditions also differed significantly ($p = .033$).

For the accuracy in representing multiple points of view, participants displayed a different pattern that was probably accurate: Participants who received balanced information rated it as being most representative of multiple points of view on gun control ($M = 5.65$, $SD = 2.83$) compared to mostly congenial ($M = 4.42$, $SD = 2.75$; $p < .001$) and mostly uncongenial ($M = 4.73$, $SD = 2.91$; $p = .003$) information. The congenial and uncongenial conditions did not differ significantly ($p = .304$).

However, participants displayed more biased perceptions of the information they read as a result of how much they liked the information selector. Controlling for the actual balance of information they read, hierarchical linear regressions using partner evaluations indicated that having a likable partner led participants to see the information they read as useful for themselves ($B = 0.13$, $SE = 0.06$, $\beta = 0.17$, $t = 2.29$, $p = .023$, $sr^2 = .03$) and the average American in understanding gun control ($B = 0.19$, $SE = 0.06$, $\beta = 0.25$, $t = 3.32$, $p = .001$, $sr^2 = .06$).

But, having a more likable partner did not affect participants' ratings of how accurately the information represented their own point of view ($B = 0.07$, $SE = 0.04$, $\beta = 0.11$, $t = 1.54$, $p = .125$) or multiple points of view ($B = 0.12$, $SE = 0.07$, $\beta = 0.13$, $t = 1.75$, $p = .082$).

Discussion

Study 3 pointed to several conclusions about how likability, interaction closeness, and information congeniality affects recipients' views of information and its selector. Hedonic and

utility ratings of information, regardless of congeniality, were associated with positive evaluations of the alleged selector for actual (RCIT) partners, but not fictitious ones. This indicates somewhat of a mismatch between recipients and selectors: The selectors in Studies 1-2 expected information to be more hedonically enjoyable as it became more congenial, but Study 3 recipients were more attuned to the likability of the selector (especially with live partners). Another mismatch came from utility ratings: Study 3 recipients found information more useful both when it came from likable selectors (especially with actual partners), despite the findings in Studies 1-2 that congenial information was not expected to be more useful to the recipient.

When it came to partner evaluations, there was a significant divide between having a fictitious or actual partner: Fictitious partners' evaluations were contingent upon the balance of information that they ostensibly chose for the participants, but actual partners' evaluations were mostly unaffected by information congeniality. The actual partners in the RCIT condition were also evaluated much more favorably than even the likable, fictitious partners, indicating that the increased closeness of the RCIT not only led to a more positive selector-recipient bond, but also blunted any negative effects of receiving uncongenial information.

Although partner condition and information congeniality had no effects on perceived attitudinal consensus in the U.S. about gun control, they did affect perceptions of attitudinal similarity with the selector: Participants perceived greater similarity with likable partners and partners they believed had chosen mostly congenial information for them. Lastly, when it came to perceptions of bias, participants' views of the utility of the information they received—regardless of congeniality—was affected by the partner likability: When participants liked the alleged selector, they saw the information they received as being more useful to themselves and the average American.

Study 4 again examines recipients who receive random balances of information from alleged selectors, but with two changes from Study 3. First, Study 4 only uses the RCIT (i.e., no fictitious partner condition). But, because Study 3 participants overwhelmingly enjoyed their RCIT partners, Study 4 pairs some participants with a scripted, unlikable RCIT partner. Second, Study 4 measures why recipients think their selection of information was chosen for them.

Study 4

Study 4 had the goal of replicating Study 3 with a bigger sample, in a context of increased interpersonal closeness (i.e., RCIT), and with an unlikable confederate to increase variance in participants' evaluations of their partners, which were highly positive in Study 3. Study 4 also examined participants' perceptions of why they received their particular batch of gun control information, which was actually assigned at random. These measures aimed to shed light *de facto* selective exposure processes; in particular, we were interested in assessing the extent to which participants believed they actively influenced their own information environments. For example, if participants believed that they received information because of their own personality or attitudes (i.e., believing they had agentic influence) would illustrate belief in attitude selectivity and relative unawareness of *de facto* selective exposure influences.

Method

Participants. One hundred sixty-six undergraduate students (53.20% female; 69.50% non-Hispanic White; $M_{age} = 18.74$ years, $SD = 0.91$ years) enrolled in an introductory psychology course participated for course credit. The stopping point for data collection was determined by the end of the academic semester.

Design. Like Study 3, the design and procedure of Study 4 differed depending on the number of participants in a time slot. Across all participants, there was one between-subject

factor in Study 4: balance of gun control information. When an even number of participants were present, the design was the same as the even-number condition in Study 3: Participants were paired with a live partner in another lab room, and they had an organic interaction with this partner using the RCIT (Sedikides et al., 1999). This condition applied to 126 participants.

When an odd number of participants were present, they had a slightly different study experience (unbeknownst to them), like the odd participants in Study 3. However, this odd participant in Study 4 still interacted with a live partner, though this partner was actually a confederate from the research team (“Alex”) who completed the RCIT using a pre-tested script designed to make them seem unlikable. These odd participants were routed into this “unlikable confederate” condition in order to fully utilize the number of participants available at a given time (like Study 3), but also to add variance in participants’ evaluations of their partners, which were highly positive in Study 3. This condition applied to 28 participants.

Procedure. The procedure for Study 4 was almost identical to Study 3, with two exceptions. First, the odd participants interacted with a live confederate instead of a fictitious, nonexistent participant (as in Study 3). This confederate’s scripted responses to the RCIT questions were deliberately rude and pompous; for example, in response to the question, “What are your hobbies?” the confederate responded: *no point in telling you...it’s not like we would ever hang out.* Or, in response to the question, “What is one habit you’d like to break?” the confederate responded: *i always stop for pedestrians who are trying to cross the street, but what’s the point? i got places to be.* See Appendix for full responses.

Second, Study 4 added measure to assess participants’ perceptions of the factors that influenced the balance of information they received.

Measures. All measures of hedonic experience ($\alpha = .76$), utility ($\alpha = .85$), partner evaluations ($\alpha = .93$), bias perceptions, gun control attitude ($\alpha = .99$), gun control stance, gun control consensus, and perceived similarity of the selector's gun control attitude were the same as Study 3. The following measures were added:

Box model. Adapted from Pronin and Kugler (2010), the box model was designed to let participants visually express the relative influence of various factors on a given outcome. To measure how participants perceived the relative influence of various factors on their partner's ostensible choice of gun control messages for them, participants were asked to think about their partner's choice of information for them and consider what factors influenced that decision. Participants were provided with five suggested factors that could have influenced this decision: (1) your own beliefs and attitudes; (2) your personality; (3) your partner's beliefs and attitudes; (4) your partner's personality; and (5) random chance. Participants were told that this list was not exhaustive and that they could use or exclude any factor; they could also write in any other factors not covered by these five.

Using graph paper and a pencil, participants drew a box for each of the factors they felt was relevant to the outcome of their partner's choice of information for them, with an arrow going from each factor to that common outcome. The relative influence of each factor was depicted by the size of the box representing that factor; the larger the box for a factor, the greater the influence of that factor on the outcome. Weightings of each factor were calculated by computing the area of the box for each factor divided by the total area of all the factor boxes combined. The instructions and an example box model are available in the Appendix.

Analytic strategy. Like Study 3, participants in the live partner condition indicated whether they knew their partner at the end of the study. Twelve participants reported knowing their partners and were therefore excluded from analyses.

Like prior studies, the information balance conditions were recoded as a function of congeniality to the recipient (the participant) based on their dichotomous stance on gun control. Binary logistic regression found that the six-item gun control attitude composite predicted a participant's binary gun control stance, $B = 1.70$, $SE = 0.34$, $Wald = 24.56$, $\beta = 5.48$, $p < .001$.

All analyses that incorporate participants' partner evaluations as a factor in ANOVA use a continuous, standardized version of the composite evaluations that is analyzed at three levels: one standard deviation below the mean, one standard deviation above the mean, and mean level.

Results

Hedonic experience. For participants' hedonic experience of the articles, ANOVA indicated a significant effect of information congeniality condition ($F_{2, 135} = 3.77$, $p = .025$, $\eta_p^2 = .053$): Participants rated the information as more hedonically pleasing when they received mostly congenial information ($M = 4.50$, $SD = 1.06$) compared to both balanced ($M = 4.02$, $SD = 0.97$; $p = .064$) and uncongenial ($M = 3.83$, $SD = 1.27$; $p = .003$) information; balanced and uncongenial did not significantly differ ($p = .290$). A main effect of participants' partner evaluations also occurred ($F_{1, 135} = 7.09$, $p = .009$, $\eta_p^2 = .050$) such that participants who liked their partners more also rated the information they read more positively. There was no significant interaction of information congeniality and partner evaluations ($F_{2, 135} = 1.56$, $p = .213$). See Figure 4.

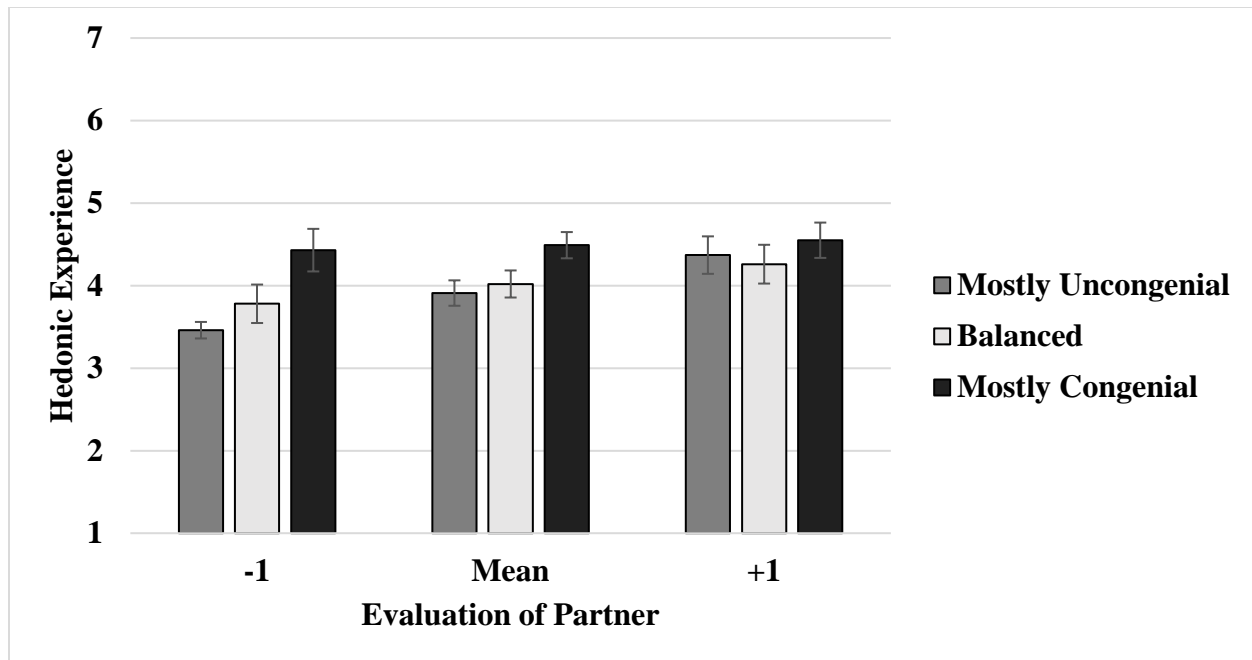


Figure 4. Mean hedonic experience ratings of information as a function of information congeniality and evaluation of partner. Evaluation of partner is plotted at minus one standard deviation below the mean, mean level, and plus one standard deviation above the mean. Error bars represent standard errors.

Utility. For ratings of information utility, ANOVA found a significant effect of information congeniality ($F_{2, 134} = 3.37, p = .037, \eta_p^2 = .048$), which followed a similar pattern as hedonic ratings: mostly congenial information was seen as more useful ($M = 4.04, SD = 0.95$) than balanced ($M = 3.52, SD = 1.17; p = .044$) or mostly uncongenial ($M = 3.45, SD = 1.13; p = .010$) information; again, balanced and uncongenial conditions did not differ significantly ($p = .677$). Like hedonic ratings, a main effect of partner evaluations occurred ($F_{1, 134} = 9.67, p = .002, \eta_p^2 = .067$), again following a similar pattern as the hedonic ratings. Lastly, there was again no significant two-way interaction ($F_{2, 134} = 1.07, p = .344$). See Figure 5.

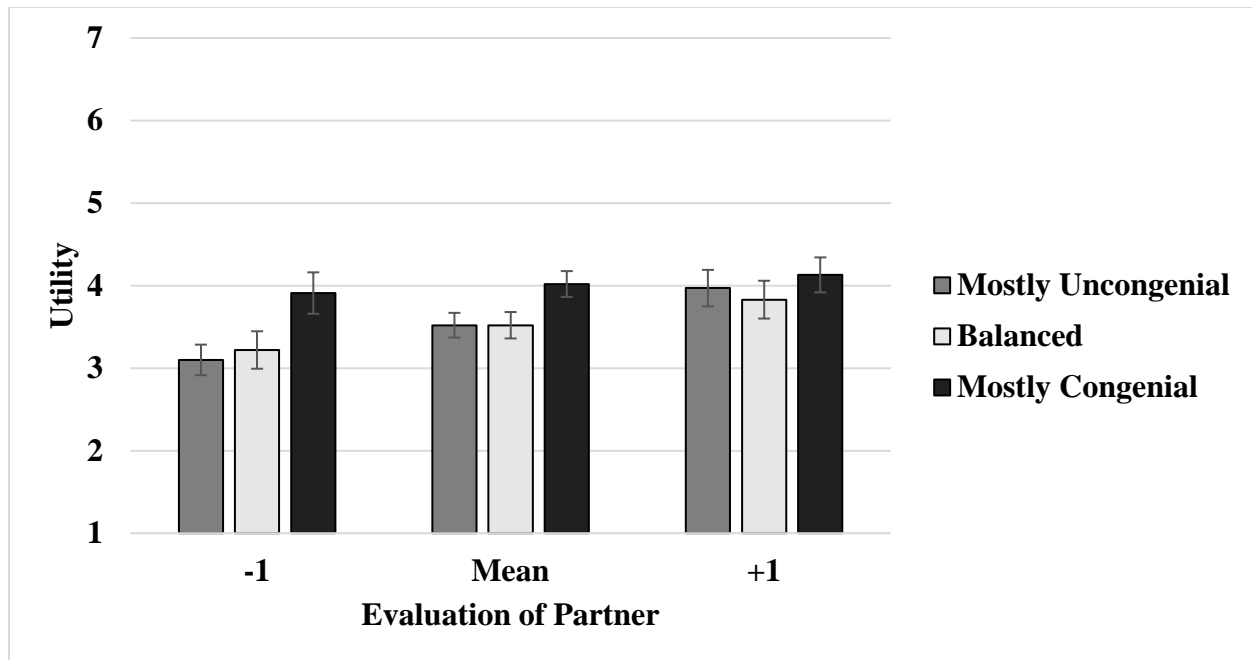


Figure 5. Mean utility ratings of information as a function of information congeniality and evaluation of partner. Evaluation of partner is plotted at minus one standard deviation below the mean, mean level, and plus one standard deviation above the mean. Error bars represent standard errors.

Evaluations of partner. As a manipulation check, ANOVA found a significant effect of partner condition ($F_{1, 135} = 255.20, p < .001, d = 2.97$): Participants reported more positive impressions of live partners ($M = 6.61, SD = 0.96$) than the unlikable confederate ($M = 3.03, SD = 1.41$), indicating a successful manipulation.

In addition, there was a significant effect of information congeniality ($F_{2, 135} = 6.30, p = .002, \eta_p^2 = .085$) such that participants evaluated partners who sent them congenial information more positively ($M = 6.26, SD = 1.55$) than partners who sent balanced ($M = 5.96, SD = 1.73; p = .002$) and uncongenial ($M = 5.63, SD = 1.90; p = .004$) information; balanced and uncongenial conditions did not differ significantly ($p = .504$).

There was also a marginally significant interaction of partner condition and information congeniality ($F_{2, 135} = 2.72, p = .069, \eta_p^2 = .039$). Participants in the unlikable confederate condition used the congeniality of the information they received to inform their opinions of their

partner ($F_{2, 135} = 5.14, p = .007, \eta_p^2 = .071$): An unlikable partner who allegedly chose mostly congenial information was evaluated more positively ($M = 3.87, SD = 1.78$) than unlikable partners who chose balanced ($M = 2.26, SD = 0.74; p = .003$) or mostly uncongenial ($M = 2.75, SD = 1.03; p = .016$) information; the uncongenial and balanced conditions did not differ significantly ($p = .346$). However, participants with live (and generally likable) partners were not influenced by information congeniality when evaluating their partners ($F_{2, 135} = 1.34, p = .265, \eta_p^2 = .020$). Therefore, like Study 3, results indicate that when participants have a likable partner, the congeniality of information they receive does not influence their partner evaluations.

Gun control consensus. When estimating the percentage of Americans who shared their attitude on gun control, participants were not affected by information congeniality ($F_{2, 134} = 1.84, p = .163$), partners evaluations ($F_{1, 134} = 0.66, p = .418$), or an interaction of the two ($F_{2, 134} = 1.62, p = .203$).

Gun control similarity. When estimating the similarity of their partner's gun control views with their own, participants were again influenced by the information they received, with a significant effect of information congeniality ($F_{2, 134} = 7.10, p = .001, \eta_p^2 = .096$): Participants who received mostly congenial information estimated the greatest similarity between themselves and their partners ($M = 65.40\%, SD = 21.57$), more so than those who received neutral ($M = 53.60\%, SD = 22.00; p = .029$) and mostly uncongenial ($M = 45.08\%, SD = 24.66; p < .001$) information; balanced and uncongenial conditions did not differ significantly ($p = .144$). Participants' partner evaluations also resulted in a significant effect ($F_{1, 134} = 18.03, p < .001, \eta_p^2 = .119$) such that participants perceived more agreement between themselves and more likable partners. There was no significant two-way interaction ($F_{2, 134} = 0.35, p = .702$).

Perceptions of bias. Participants were significantly influenced by information congeniality for measures of the articles' accuracy in representing their own point of view on gun control (like Study 3; $F_{2, 135} = 15.69, p < .001, \eta_p^2 = .189$), multiple points of view on gun control (also like Study 3; $F_{2, 134} = 3.66, p = .028, \eta_p^2 = .052$), and usefulness to oneself ($F_{2, 130} = 3.10, p = .048, \eta_p^2 = .046$), but not for usefulness to all Americans ($F_{2, 127} = 0.38, p = .682$).

For their own opinion on gun control, participants (rightly) felt their views were most accurately represented when they received mostly congenial information ($M = 4.60, SD = 1.33$) compared to mostly uncongenial ($M = 3.04, SD = 1.47; p < .001$) and balanced ($M = 3.72, SD = 1.22; p = .001$) information; the uncongenial and balanced conditions differed significantly ($p = .030$).

For the accuracy in representing multiple points of view, participants who received balanced information rated it as being most representative of multiple points of view on gun control ($M = 5.33, SD = 1.60$) compared to mostly congenial ($M = 4.85, SD = 1.76; p = .177$) and mostly uncongenial ($M = 4.24, SD = 1.79; p = .007$) information. The congenial and uncongenial conditions did not differ significantly ($p = .170$).

For the articles' usefulness to themselves, participants displayed a pattern similar to that for representing multiple points of view: Balanced information was rated as more useful ($M = 4.35, SD = 1.64$) than mostly congenial ($M = 3.67, SD = 0.92; p = .020$) and mostly uncongenial ($M = 3.84, SD = 1.80; p = .096$) information; congenial and uncongenial conditions did not differ significantly ($p = .455$).

Participants' evaluations of their partners also influenced how much they felt articles represented multiple points of view ($F_{1, 134} = 5.46, p = .021, \eta_p^2 = .039$) and were useful to themselves ($F_{1, 130} = 8.06, p = .005, \eta_p^2 = .058$). In each case, participants saw the articles they

received, regardless of congeniality, as being more representative and useful as their evaluations of their partners increased. There were no partner evaluation effects for accurately representing one's point of view ($F_{1, 135} = 2.94, p = .089$) or usefulness to Americans ($F_{1, 127} = 0.49, p = .486$).

Lastly, there were no significant interactions of information congeniality and partner evaluations for any of the four measures.

Box model. Using the box model, participants assessed what factors they believed influenced their partners' alleged information selections for them. The two factors oriented around the participant ("your own beliefs and attitudes," "your personality"; $r = .31, p = .01$) were collapsed into a single "self" factor, and the two factors oriented around the partner ("your partner's beliefs and attitudes," "your partner's personality"; $r = .40, p = .01$) were collapsed into a single "partner" factor. Participants could indicate that their balance of information was received due to "random chance" and "other," in which they wrote in a factor of their own; however, because a minority of participants utilized the "other" option and there was a diversity of factors, it is not included in the following analyses.

Repeated measures ANOVA with three dependent measures (self-related factors, partner-related factors, random chance) found a significant effect of factor type ($F_{1, 135} = 61.43, p < .001, \eta_p^2 = .313$): Participants were more likely to list partner factors ($M = 44.64\%, SD = 23.88$) over self factors ($M = 32.93\%, SD = 22.73; p = .001$) or random chance ($M = 11.33\%, SD = 17.04; p < .001$); self and random factors also differed significantly ($p < .001$).

There was also a significant effect of partner evaluations ($F_{1, 135} = 4.62, p = .033, \eta_p^2 = .033$) indicating that estimations about the influences on their information choice depended on partner evaluations. Participants who rated their partners at one standard deviation below the mean perceived those partners as relying significantly more upon partner-related motives than

self-related motives ($M_{diff} = 18.17, SE = 4.60, p < .001$). However, for participants who evaluated their partner at the mean level of likability, the difference in their estimates of how much their partner relied upon partner and self motives decreased ($M_{diff} = 11.22, SE = 3.20, p = .001$), and this difference decreased even more for those who evaluated their partner one standard deviation above the mean in likability ($M_{diff} = 4.07, SE = 4.53, p = .371$). Thus, as participants liked the alleged selector more, they perceived that selector as considering the participant's attitudes and personality more in their selection decisions.

Discussion

Study 4 expanded on how recipients make judgments about information and selectors as a function of likability and information congeniality. Like Study 3, participants in Study 4 saw congenial (vs. balanced or uncongenial) information as being more hedonically enjoyable and useful. Unlike Study 3, participants in Study 4 varied their evaluations of the selector depending on the congeniality of information they received, but this turned out to be attributable to the new unlikable confederate condition; for participants in the organic RCIT condition, information congeniality did not affect evaluations of the selector (like Study 3). Lastly, participants in Study 4 again saw information as being more representative of multiple points of view—regardless of congeniality—when a likable selector chose it.

The box model results also revealed how participants thought their information environments were shaped. Participants generally estimated that selectors chose information based on their own attitudes and personality, and not those of the recipient. This result matches with Study 2, in which selectors relied upon their own attitudes to choose information, and not those of the recipient. But, likability of the selector also mattered in Study 4. Although assessments of how much selectors relied on “partner” factors or random chance did not differ

by likability, participants' perceptions that their partners utilized "self" factors (i.e., the participant and information recipient) differently depending on likability relates to previous studies in the present research. Although Study 2 participants chose information based on their own gun control attitudes, the likability of the recipient affected the quantity of congenial (or uncongenial) information they chose for the recipient. In Study 4, the box model results indicated that when there is a positive relationship between the selector and recipient, the recipient assumes the selector has specifically thought more about the recipient when making the information choice.

This result also has implications for *de facto* selective exposure: Participants in Study 4 ignored random chance as a possibility for their receipt of information and instead assumed that they were given information precisely because their attributes were taken into account. Despite reporting that their information environment might be tailored to them in specific ways, participants still judged that information to be relatively unbiased, especially when a likable other had chosen it for them.

General Discussion

Across four studies of information selectors and recipients, the present research yielded several conclusions about how people choose information for others, and how recipients evaluate information that was chosen for them. In Studies 1 and 2, participants were chosen to provide information for fictitious recipients, and those recipients varied by their likability. In Study 1, participants chose information about the MEQ, a fictitious intelligence test about which they had no attitude, but their alleged partners did. In this context, participants used the likability of the recipient to guide information selection: Likable recipients received information that was mostly congenial to them, whereas unlikable ones received mostly uncongenial information. Study 2 used gun

control—a topic about which participants had an attitude—and showed the limits of likability: Study 2 selectors generally relied upon their own gun control attitudes to choose information for recipients, but curated especially congenial selections for likable, agreeable recipients. Thus, Studies 1 and 2 found that information selections for others can be strongly influenced by likability—especially for novel issues—but that for familiar topics, alignment of selectors’ and recipients’ attitudes was also important.

Studies 3 and 4 examined information recipients and showed the continued influence of likability from their perspective. Both studies focused on gun control (like Study 2) and found that recipients regarded information as more hedonically enjoyable and useful not just when it was congenial (vs. uncongenial), but also when it came from a likable selector. Study 3 found that participants felt especially positively about selectors with whom they had a more intimate exchange of information (via the RCIT) compared to the more limited exchange with fictitious partners. In these instances when participants strongly liked their partners (the alleged selectors), they regarded information positively regardless of its congeniality. Study 4 replicated this effect among likable interaction partners but found that after interacting with a scripted, unlikable RCIT partner, participants’ evaluations of information depended mostly on its congeniality. Thus, Studies 3 and 4 found that although recipients often found congenial information to be more enjoyable and useful than uncongenial information, this congeniality bias could be attenuated when the information was ostensibly chosen by a highly likable selector.

Asymmetries Between Selectors and Recipients

Across the four studies, patterns of results between selectors and recipients were aligned and misaligned in interesting ways. In Studies 1 and 2, selectors who considered the hedonic experience of their alleged partners chose more congenial (vs. uncongenial) information for

those partners—especially likable partners—but choosing congenial (vs. uncongenial) information was unrelated to considerations of whether the recipient would find the information useful. In other words, when selectors both liked and agreed with the alleged recipient, selectors chose a batch of information that was highly congenial to that recipient. Moreover, selectors chose information that would provide hedonic validation, but not objectivity, for those likable and agreeable recipients. Although these results were consistent with prior research showing that congenial selective exposure is primarily motivated to provide hedonic validation and not necessarily a sense of objectivity (Hart et al., 2009), selectors in Studies 1-2 were only partially correct in predicting recipients' experiences. Indeed, Studies 3 and 4 found that recipients who received more congenial (vs. uncongenial) information found it to be both hedonically enjoyable and useful. Thus, although selectors might have recognized that congenially biased information is more likely to make one feel good than provide a sense of objectivity, recipients did not share this recognition. Recipients saw congenial information as not just hedonically enjoyable but also higher in utility, a (mis)perception that selectors did not share.

Information Environments and *de facto* Selectivity

The present research has implications for *de facto* selective exposure, the factors that produce it, and news consumption in modern information environments. First, the current studies illustrate how information exchange in relational dyads could facilitate *de facto* selective exposure, by which people find themselves in congenial information environments that are not the result of their affirmative choices (Freedman & Sears, 1965). Although Studies 1 and 2 found that selectors only curated congenial information environments for likable recipients for novel—but not familiar—issues, Studies 3 and 4 found that information recipients enjoyed and derived utility from information that came from likable selectors, regardless of congeniality. These four

studies indicate that even without evidence of selectors actively curating congenial information for recipients (as in Study 2), recipients *perceived* their information environments as fulfilling both hedonic and utility needs when they thought that information was curated by highly likable selectors (as in the RCIT participants in Studies 3 and 4). *De facto* selectivity, therefore, could occur by receiving information from likable others, even when that information is on its face not consistent with one's attitudes.

The present studies also address questions that have arisen in light of modern technological changes in how people share and consume information. Indeed, Studies 1 and 2 suggest that fears about homogeneous online “echo chambers” may be exaggerated (Sunstein, 2001). Although Study 1 selectors deferred to the recipient's likability in their selection decisions, Study 2 showed that for divisive political issues that are more likely to elicit discussion and debate, selectors chose information for others that they personally would find validating and mostly did not take the recipient's attitudes into account. Indeed, selectors in Study 2 who had likable but disagreeable partners generally disregarded likability and chose information that those alleged recipients would find uncongenial. But, Studies 3 and 4 showed that this reluctance to cater to recipients' views in Study 2 did not matter when the selector-recipient relationship was positive: When recipients liked the alleged selector, information congeniality no longer mattered.

Thus, to the extent that many online social networks are likely to be based on personal likability—and not necessarily attitudinal similarity—the present studies illustrate that people should not only be exposed to heterogeneous viewpoints, but will evaluate heterogeneous information in an open-minded, perhaps even positive, manner. In this way, the present findings appear consistent with research showing that people engage in considerable cross-ideological

online discussions (Barberá, 2015; Barberá et al., 2015; Diehl et al., 2016; Heatherly et al., 2017) and value information that is endorsed by friendly peers in social networks (Messing & Westwood, 2014; Weeks et al., 2017; Weeks & Holbert, 2013). However, the findings that selectors chose congenial information for recipients when considering their hedonic experience—but not utility—could have a dark side amidst modern concerns about the spread of misinformation and fake journalism (Guess, Nyhan, & Reifler, 2018). If selectors only consider what is hedonically validating for the recipient, that could lead selectors to disseminate misinformation that is validating, but objectively wrong; then, recipients who see information from likable selectors as both enjoyable and useful could be amenable to misinformation.

Limitations and Future Directions

One limitation of the present research is the divide in how information selectors and recipients were studied. Studies 1 and 2—of selectors—were conducted with participants from MTurk, whereas Studies 3 and 4—of recipients—were conducted with university undergraduates. There are differences between these populations, notably age (MTurk participants are older) and political ideology (students are more liberal and Democratic-leaning); but, research suggests that MTurk is superior for studies of political attitudes (Clifford, Jewell, & Waggoner, 2015). Therefore, it is possible that results about selectors or recipients might vary across these populations. Future studies can assess whether these populations differ significantly in information selection and reception patterns, and whether they are differentially affected by factors such as likability and information congeniality.

A second limitation and direction for future research concerns how attitude strength factors might affect the present results. Although we did not examine how participants' selection or reception patterns differed according to how strongly or confidently they felt about the issue at

hand (particularly for gun control), research has found that related attitude strength factors could affect these results. For instance, attitude confidence can affect selective exposure (Hart et al., 2009), attitude certainty can change persuasion intentions (Cheatham & Tormala, 2017; Petrocelli, Tormala, & Rucker, 2007), and the moral conviction of one's attitude can affect willingness to engage with people who disagree on that issue (Skitka, Bauman, & Sargis, 2005; Skitka & Morgan, 2014). Thus, whether these attitude strength constructs affect information selection and reception in relational dyads is deserving of future study.

Finally, how recipients evaluated uncongenial information when it came from a likable selector is noteworthy for theories of attitude change. For instance, Heider's (1958) balance theory suggests that within a positive selector-recipient relationship, if a selector sends information to a recipient that the recipient finds uncongenial, then the recipient should feel motivated to resolve the inconsistency; the recipient would do this by changing their attitude about either the selector or the uncongenial information. In Study 3, recipients with likable, fictitious partners did not resolve the inconsistency: They maintained a positive evaluation of the selector, but a negative evaluation of the information. However, the opposite occurred for participants who had likable RCIT partners in Studies 3-4: These recipients evaluated otherwise uncongenial information favorably.

Conclusion

Across four studies in which participants were assigned to select information for others or receive information that had been selected for them, the present research demonstrated how people in relational dyads exchange information. For novel issues, selectors were attuned to the likability of information recipients, but selectors were more attentive to information congeniality when the topic was attitudinally relevant. However, recipients regarded information increasingly

favorably—in both hedonic experience and utility—as the information selector became more likable, regardless of information congeniality. Thus, the present studies indicate that although information selectors may not actively curate congenial information environments for recipients—particularly when it comes to contentious political issues—recipients are positively oriented toward information coming from likable sources. These findings suggest that *de facto* selectivity may be facilitated by positive relationships, but also that recipients are likely exposed to heterogeneous views as they engage with liked others.

REFERENCES

- Balcetis, E., & Dunning, D. (2006). See what you want to see: Motivational influences on visual perception. *Journal of Personality and Social Psychology, 91*(4), 612-625.
- Barberá, P. (2015). How social media reduces mass political polarization: Evidence from Germany, Spain, and the U.S. *Unpublished dissertation*.
- Climate Central (2018). *Climate Matters*. Retrieved from <http://www.climatecentral.org/what-we-do/our-programs/climate-matters>.
- Cook, J., Nuccitelli, D., Green, S. A., Richardson, M., Winkler, B., Painting, R., Way, R., Jacobs, P., & Skuce, A. (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters, 8*(2), 024024.
- Ditto, P. H., & Lopez, D. F. (1992). Motivated skepticism: Use of differential decision criteria for preferred and nonpreferred conclusions. *Journal of Personality and Social Psychology, 63*(4), 568–584.
- Earl, A., & Hall, M. P. (in press). Motivational influences on attitudes. In D. Albarracín & B. T. Johnson (Eds.), *The Handbook of Attitudes (2nd Ed. Vol. 1)*. New York: Taylor & Francis.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Freedman, J. H., & Sears, D. O. (1965). *Selective exposure*. Advances in Experimental Social Psychology, Vol. 2. New York: Academic Press, Inc.
- Garrett, R. K., Weeks, B. E., & Neo, R. L. (2016). Driving a wedge between evidence and beliefs: How online ideological news exposure promotes political misperceptions. *Journal of Computer-Mediated Communication, 21*(5), 331–348.

- Gifford, R., Scannell, L., Kormos, C., Smolova, L., Biel, A., Boncu, S., ... & Kaiser, F. G. (2009). Temporal pessimism and spatial optimism in environmental assessments: An 18-nation study. *Journal of Environmental Psychology, 29*(1), 1-12.
- 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*(4), 555–588.
- Kahan, D. M., Peters, E., Wittlin, M., Slovic, P., Ouellette, L. L., Braman, D., & Mandel, G. (2012). The polarizing impact of science literacy and numeracy on perceived climate change risks. *Nature Climate Change, 2*(10), 732–735.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin, 108*(3), 480–498.
- Maibach, E., Woods Plackey, B., Witte, J., Seitter, K., Gardiner, N., Myers, T., Sublette, S., & Cullen, H., (2016). TV meteorologists as local climate change educators. *Oxford Research Encyclopedia, Climate Science*. Oxford University Press USA.
- Marlon, J. R., van der Linden, S., Howe, P. D., Leiserowitz, A., Lucia Woo, S. H., & Broad, K. (2018). Detecting local environmental change: The role of experience in shaping risk judgments about global warming. *Journal of Risk Research, 1*-15.
- Messing, S., & Westwood, S. J. (2014). Selective exposure in the age of social media: Endorsements trump partisan source affiliation when selecting news online. *Communication Research, 41*(8), 1042-1063.
- Sears, D. O. (1968). The paradox of de facto selective exposure without preferences for supportive information. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg, & P. H. Tannenbaum (eds.), *Theories of Cognitive Consistency: A Sourcebook*. Chicago, IL: Rand-McNally, pp. 777-787.

Sedikides, C., Campbell, W. K., Reeder, G. D., & Elliot, A. J. (1999). The Relational Closeness Induction Task. *Representative Research in Social Psychology*, 23, 1-4.

Sunstein, C. (2011). *Republic.com*. Princeton University Press.

Albarracín, D., & Mitchell, A. L. (2004). The role of defensive confidence in preference for proattitudinal information: How believing that one is strong can sometimes be a defensive weakness. *Personality and Social Psychology Bulletin*, 30(12), 1565–1584.

<https://doi.org/10.1177/0146167204271180>

Alicke, M. D. (1985). Global self-evaluation as determined by the desirability and controllability of trait adjectives. *Journal of Personality and Social Psychology*, 49(6), 1621–1630.

<https://doi.org/10.1037/0022-3514.49.6.1621>

Alicke, M. D., Klotz, M. L., Breitenbecher, D. L., Yurak, T. J., & Vredenburg, D. S. (1995).

Personal contact, individuation, and the better-than-average effect. *Journal of Personality and Social Psychology*, 68(5), 804–825. <https://doi.org/10.1037/0022-3514.68.5.804>

Anderson, C., Brion, S., Moore, D. A., & Kennedy, J. A. (2012). A status-enhancement account of overconfidence. *Journal of Personality and Social Psychology*, 103(4), 718–735.

<https://doi.org/10.1037/a0029395>

Atir, S., Rosenzweig, E., & Dunning, D. (2015). When knowledge knows no bounds: Self-perceived expertise predicts claims of impossible knowledge. *Psychological Science*, 26(8), 1295–1303. <https://doi.org/10.1177/0956797615588195>

Balcetis, E., & Dunning, D. (2013). Considering the situation: Why people are better social psychologists than self-psychologists. *Self and Identity*, 12(1), 1–15.

<https://doi.org/10.1080/15298868.2011.617886>

Barnsley, L., Lyon, P. M., Ralston, S. J., Hibbert, E. J., Cunningham, I., Gordon, F. C., & Field,

- M. J. (2004). Clinical skills in junior medical officers: a comparison of self-reported confidence and observed competence. *Medical Education*, 38(4), 358–367.
<https://doi.org/10.1046/j.1365-2923.2004.01773.x>
- Brandt, M. J., Evans, A. M., & Crawford, J. T. (2015). The unthinking or confident extremist? Political extremists are more likely than moderates to reject experimenter-generated anchors. *Psychological Science*, 26(2), 189–202.
<https://doi.org/10.1177/0956797614559730>
- Caro, R. (2012). *The passage of power: The years of Lyndon Johnson, Vol. IV*. New York, NY: Vintage Books.
- Cheatham, L. B., & Tormala, Z. L. (2015). Attitude certainty and attitudinal advocacy: The unique roles of clarity and correctness. *Personality and Social Psychology Bulletin*, 41(11), 1537–1550. <https://doi.org/10.1177/0146167215601406>
- Clifford, S., & Jerit, J. (2016). Cheating on political knowledge questions in online surveys. *Public Opinion Quarterly*, 80(4), 858–887. <https://doi.org/10.1093/poq/nfw030>
- Clifford, S., Jewell, R. M., & Waggoner, P. D. (2015). Are samples drawn from Mechanical Turk valid for research on political ideology? *Research & Politics*, 2(4).
<https://doi.org/10.1177/2053168015622072>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Editio). Mahwah, NJ: Lawrence Erlbaum Associates.
- Colvin, C. R., Block, J., & Funder, D. C. (1995). Overly positive self-evaluations and personality: Negative implications for mental health. *Journal of Personality and Social Psychology*, 68(6), 1152–1162. <https://doi.org/10.1037/0022-3514.68.6.1152>
- Delli Carpini, M. X., & Keeter, S. (1993). Measuring political knowledge: Putting first things

first. *American Journal of Political Science*, 37(4), 1179–1206.

<https://doi.org/10.2307/2111549>

Diehl, T., Weeks, B. E., & Gil de Zuniga, H. (2015). Political persuasion on social media: Tracing direct and indirect effects of news use and social interaction. *New Media & Society*, 18(9), 1–21. <https://doi.org/10.1177/1461444815616224>

Ellsworth, P. C., & Ross, L. (1983). Public opinion and capital punishment: A close examination of the views of abolitionists and retentionists. *Crime & Delinquency*, 29(1), 116–169. <https://doi.org/10.1177/001112878302900105>

Epley, N., & Dunning, D. (2000). Feeling “holier than thou”: Are self-serving assessments produced by errors in self- or social prediction? *Journal of Personality and Social Psychology*, 79(6), 861–875. <https://doi.org/10.1037/0022-3514.79.6.861>

Fernbach, P. M., Rogers, T., Fox, C. R., & Sloman, S. A. (2013). Political extremism is supported by an illusion of understanding. *Psychological Science*, 24(6), 939–46. <https://doi.org/10.1177/0956797612464058>

Festinger, L., & Maccoby, N. (1964). On resistance to persuasive communications. *The Journal of Abnormal and Social Psychology*, 68(4), 359–366. <https://doi.org/10.1037/h0049073>

Fishbein, M. (1963). An investigation of the relationships between beliefs about an object and the attitude toward that object. *Human Relations*, 16(3), 233–239. <https://doi.org/10.1177/001872676301600302>

Fishbein, M., & Raven, B. H. (1962). The AB Scales: An operational definition of belief and attitude. *Human Relations*, 15(1), 35–44. <https://doi.org/10.1177/001872676201500104>

Fisher, M., & Keil, F. C. (2014). The illusion of argument justification. *Journal of Experimental Psychology. General*, 143(1), 425–33. <https://doi.org/10.1037/a0032234>

- Gaines, B. J., Kuklinski, J. H., Quirk, P. J., Peyton, B., & Verkuilen, J. (2007). Same facts, different interpretations: Partisan motivation and opinion on Iraq. *The Journal of Politics*, 69(4), 957–974. <https://doi.org/10.1111/j.1468-2508.2007.00601.x>
- Garrett, R. K., & Stroud, N. J. (2014). Partisan paths to exposure diversity: Differences in pro- and counterattitudinal news consumption. *Journal of Communication*, 64(4), 680–701. <https://doi.org/10.1111/jcom.12105>
- Garrett, R. K., Weeks, B. E., & Neo, R. L. (2016). Driving a wedge between evidence and beliefs: How online ideological news exposure promotes political misperceptions. *Journal of Computer-Mediated Communication*, 1–18. <https://doi.org/10.1111/jcc4.12164>
- Guy, S., Kashima, Y., Walker, I., & O’Neill, S. J. (2014). Investigating the effects of knowledge and ideology on climate change beliefs. *European Journal of Social Psychology*, 44(5), 421–429. <https://doi.org/10.1002/ejsp.2039>
- Haidt, J., Björklund, F., & Murphy, S. (2000). Moral dumbfounding: When intuition finds no reason. *Unpublished Manuscript*.
- Hansen, K., Gerbasi, M., Todorov, A., Kruse, E., & Pronin, E. (2014). People claim objectivity after knowingly using biased strategies. *Personality and Social Psychology Bulletin*, 40(6), 691–699. <https://doi.org/10.1177/0146167214523476>
- 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(4), 555–588. <https://doi.org/10.1037/a0015701>
- Hauser, D. J., & Schwarz, N. (2016). Attentive Turkers: MTurk participants perform better on online attention checks than do subject pool participants. *Behavior Research Methods*, 48(1), 400–407. <https://doi.org/10.3758/s13428-015-0578-z>

- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hopkin, C. R., Hoyle, R. H., & Toner, K. (2014). Intellectual humility and reactions to opinions about religious beliefs. *Journal of Psychology & Theology*, *42*(1), 50–61.
- Kahan, D. M., Peters, E., Wittlin, M., Slovic, P., Ouellette, L. L., Braman, D., & Mandel, G. (2012). The polarizing impact of science literacy and numeracy on perceived climate change risks. *Nature Climate Change*, *2*(10), 732–735.
<https://doi.org/10.1038/nclimate1547>
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, *119*(2), 254–284.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, *77*(6), 1121–1134. <https://doi.org/10.1037/0022-3514.77.6.1121>
- Kuklinski, J. H., Quirk, P. J., Schwieder, D. W., & Rich, R. F. (1998). “Just the facts, ma’am”: Political facts and public opinion. *The ANNALS of the American Academy of Political and Social Science*, *560*(1), 143–154. <https://doi.org/10.1177/0002716298560001011>
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, *108*(3), 480–498.
<https://doi.org/10.1037/0033-2909.108.3.480>
- Leary, M. R., Raimi, K. T., Jongman-Sereno, K. P., & Diebels, K. J. (2015). Distinguishing intrapsychic from interpersonal motives in psychological theory and research. *Perspectives on Psychological Science*, *10*(4), 497–517. <https://doi.org/10.1177/1745691615583132>
- Leary, M. R., & Toner, K. (2012). Reducing egoistic biases in self-beliefs. In S. Vazire & T. D.

Wilson (Eds.), *The handbook of self-knowledge* (pp. 413–438). New York, NY: Guilford Publications.

Lewandowsky, S., & Oberauer, K. (2016). Motivated rejection of science. *Current Directions in Psychological Science*, 25(4), 217–222. <https://doi.org/10.1177/0963721416654436>

Maki, A., & Raimi, K. T. (2017). Environmental peer persuasion: How moral exporting and belief superiority relate to efforts to influence others. *Journal of Environmental Psychology*, 49, 18–29. <https://doi.org/10.1016/j.jenvp.2016.11.005>

McGuire, W. J., & Papageorgis, D. (1961). The relative efficacy of various types of prior belief-defense in producing immunity against persuasion. *Journal of Abnormal and Social Psychology*, 62(2), 327–337. <https://doi.org/10.1037/h0042026>

Newport, F. (2016, February 1). Democrats, Republicans agree on four top issues for campaign. *Gallup*. Retrieved from <http://news.gallup.com/poll/188918/democrats-republicans-agree-four-top-issues-campaign.aspx>

Newport, F., Saad, L., & Traugott, M. (2015, September 25). The more Americans know Congress, the worse they rate it. *Gallup*. Retrieved from <http://news.gallup.com/poll/185912/americans-know-congress-worse-rate.aspx>

Nisbet, E. C., Cooper, K. E., & Garrett, R. K. (2015). The partisan brain: How dissonant science messages lead conservatives and liberals to (dis)trust science. *The ANNALS of the American Academy of Political and Social Science*, 658(1), 36–66.

<https://doi.org/10.1177/0002716214555474>

Nyhan, B., & Reifler, J. (2015). Does correcting myths about the flu vaccine work? An experimental evaluation of the effects of corrective information. *Vaccine*, 33(3), 459–464. <https://doi.org/10.1016/j.vaccine.2014.11.017>

- Nyhan, B., Reifler, J., & Ubel, P. A. (2013). The hazards of correcting myths about health care reform. *Medical Care*, *51*(2), 127–132. <https://doi.org/10.1097/MLR.0b013e318279486b>
- Petrocelli, J. V., Tormala, Z. L., & Rucker, D. D. (2007). Unpacking attitude certainty: attitude clarity and attitude correctness. *Journal of Personality and Social Psychology*, *92*(1), 30–41. <https://doi.org/10.1037/0022-3514.92.1.30>
- Pew Research Center. (2015). *What the public knows — in pictures, words, maps and graphs*. Pew Research Center. Washington, D.C. Retrieved from <http://www.people-press.org/2015/04/28/what-the-public-knows-in-pictures-words-maps-and-graphs/>
- Pronin, E., Lin, D. Y., & Ross, L. (2002). The bias blind spot: Perceptions of bias in self versus others. *Personality and Social Psychology Bulletin*, *28*(3), 369–381. <https://doi.org/10.1177/0146167202286008>
- Raimi, K. T., & Jongman-Sereno, K. P. (2018). General belief superiority (GBS): Personality, motivations, and interpersonal behaviors. *Manuscript under Review*.
- Raimi, K. T., & Leary, M. R. (2014). Belief superiority in the environmental domain: Attitude extremity and reactions to fracking. *Journal of Environmental Psychology*, *40*, 76–85. <https://doi.org/10.1016/j.jenvp.2014.05.005>
- Rios, K., DeMarree, K. G., & Statzer, J. (2014). Attitude certainty and conflict style: Divergent effects of correctness and clarity. *Personality and Social Psychology Bulletin*, *40*(7), 819–830. <https://doi.org/10.1177/0146167214528991>
- Robins, R. W., & Beer, J. S. (2001). Positive illusions about the self: Short-term benefits and long-term costs. *Journal of Personality and Social Psychology*, *80*(2), 340–352. <https://doi.org/10.1037/0022-3514.80.2.340>
- Royzman, E. B., Kim, K., & Leeman, R. F. (2015). The curious tale of Julie and Mark:

Unraveling the moral dumbfounding effect. *Judgment and Decision Making*, 10(4), 296–313.

Schwitzgebel, E. (2015). Belief. In *The Stanford Encyclopedia of Philosophy*. Metaphysics Research Lab, Stanford University. Retrieved from <https://plato.stanford.edu/entries/belief/>

Skitka, L. J., & Bauman, C. W. (2008). Moral conviction and political engagement. *Political Psychology*, 29(1), 29–54.

Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895–917. <https://doi.org/10.1037/0022-3514.88.6.895>

Skitka, L. J., & Morgan, G. S. (2014). The social and political implications of moral conviction. *Political Psychology*, 35(SUPPL.1), 95–110. <https://doi.org/10.1111/pops.12166>

Swift, A. (2016, January 14). Americans' Dissatisfaction With U.S. Gun Laws at New High. *Gallup*. Retrieved from <http://news.gallup.com/poll/188219/americans-dissatisfaction-gun-laws-new-high.aspx>

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson Hall.

Tappin, B. M., & McKay, R. T. (2017). The illusion of moral superiority. *Social Psychological and Personality Science*, 8(6), 623–631. <https://doi.org/10.1177/1948550616673878>

Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103(2), 193–210. <https://doi.org/10.1037/0033-2909.103.2.193>

Toner, K., Leary, M. R., Asher, M. W., & Jongman-Sereno, K. P. (2013). Feeling superior is a

bipartisan issue: extremity (not direction) of political views predicts perceived belief superiority. *Psychological Science*, 24(12), 2454–62.

<https://doi.org/10.1177/0956797613494848>

Zhou, H., & Fishbach, A. (2016). The pitfall of experimenting on the web: How unattended selective attrition leads to surprising (yet false) research conclusions. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/pspa0000056>

Bakshy, E., Messing S., & Adamic, L. A. (2015). Exposure to ideologically diverse news and opinion on Facebook. *Science*, 348(6239), 1130-1132.

Barberá, P. (2015). How social media reduces mass political polarization: Evidence from Germany, Spain, and the U.S. *Unpublished dissertation*.

Barberá, P., Jost, J. T., Nagler, J., Tucker, J. A., & Bonneau, R. (2015). Tweeting from left to right: Is online political communication more than an echo chamber? *Psychological Science*, 26(10), 1531-1542.

Bennett, W. L., & Iyengar, S. (2008). A new era of minimal effects? The changing foundations of political communication. *Journal of Communication*, 58(4), 707-731.

Brock, T. C., & Balloun, J. L. (1967). Behavioral receptivity to dissonant information. *Journal of Personality and Social Psychology*, 6(4), 413–28.

Chaiken, S., Liberman, A., & Eagly, A. H. (1989). Heuristic and systematic information processing within and beyond the persuasion context. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought* (pp. 212-252). New York: Guilford Press.

Cheatham, L. B., & Tormala, Z. L. (2015). Attitude certainty and attitudinal advocacy: The unique roles of clarity and correctness. *Personality and Social Psychology Bulletin*, 41(11), 1537–1550.

- Clifford, S., Jewell, R. M., & Waggoner, P. D. (2015). Are samples drawn from Mechanical Turk valid for research on political ideology? *Research and Politics*, 2(4), 1-9.
- Coats, S., Smith, E. R., Claypool, H. M., & Banner, M. J. (2000). Overlapping mental representations of self and in-group: Reaction time evidence and its relationship with explicit measures of group identification. *Journal of Experimental Social Psychology*, 36(3), 304-315.
- Cotton, J. L. (1985). Cognitive dissonance in selective exposure. In D. Zillmann & J. Bryant (Eds.), *Selective exposure to communication* (pp. 11-33). Hillsdale, NJ: Erlbaum.
- Diehl, T., Weeks, B. E., & Gil de Zúñiga, H. (2016). Political persuasion on social media: Tracing direct and indirect effects of news use and social interaction. *News Media & Society*, 18(9), 1875-1895.
- Earl, A., Albarracín, D., Durantini, M. R., Gunnoe, J. B., Leeper, J., & Levitt, J. H. (2009). Participation in Counseling Programs: High-Risk Participants Are Reluctant to Accept HIV-Prevention Counseling. *Journal of Consulting and Clinical Psychology*, 77(4), 668-679.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Flanagin, A. J. (2017). Online social influence and the convergence of mass and interpersonal communication. *Human Communication Research*, 43, 450-463.
- Freedman, J. H., & Sears, D. O. (1965). *Selective exposure*. Advances in Experimental Social Psychology, Vol. 2. New York: Academic Press, Inc.
- Frey, D. (1986). Recent research on selective exposure to information. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 19, pp. 41-80). New York: Academic Press.

- Greenwald, A. G., & Sakumura, J. S. (1967). Attitude and selective learning: Where are the phenomena of yesteryear? *Journal of Personality and Social Psychology*, 7, 387-397.
- Guess, A., Nyhan, B., & Reifler, J. (2018). Selective exposure to misinformation: Evidence from the consumption of fake news during the 2016 U.S. presidential campaign. *Unpublished manuscript*.
- 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(4), 555–588.
- Hatfield, E., Cacioppo, J.T., & Rapson, R.L. (1994). *Emotional contagion*. New York: Cambridge University Press.
- Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. The Guilford Press: New York, NY.
- Heatherly, K. A., Lu, Y., & Lee, J. K. (2017). Filtering out the other side? Cross-cutting and like-minded discussions on social networking sites. *News Media & Society*, 19(8), 1271-1289.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: John Wiley & Sons Inc.
- Howard, D.J., & Gengler, C. (2001). Emotional contagion effects on product attitudes. *Journal of Consumer Research*, 28, 189-201.
- Lord, C. G., Ross, L., Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37(11), 2098-2109.
- Krebs, D.L. (1975). Empathy and altruism. *Journal of Personality and Social Psychology*, 32, 1134-1146.

- Messing, S., & Westwood, S. J. (2014). Selective exposure in the age of social media: Endorsements trump partisan source affiliation when selecting news online. *Communication Research*, 41(8), 1042-1063.
- Norton, M.I., Monin, B., Cooper, J., & Hogg, M.A. (2003). Vicarious dissonance: Attitude change from the inconsistency of others. *Journal of Personality and Social Psychology*, 85, 47-62.
- Olmstead, K., Mitchell, A., & Rosenstiel, T. (2011). Navigating news online. *Pew Research Center*. Retrieved from www.journalism.org/analysisi_report/navigating_news_online.
- Palmeri, T. (2017). How Trump's campaign staffers tried to keep him off Twitter. *Politico*. Retrieved from: <http://www.politico.com/story/2017/02/trump-twitter-staffer-235263>
- Pariser, E. (2011). *The Filter Bubble: What the Internet is Hiding from You*. London: Penguin Press.
- Petrocelli, J. V., Tormala, Z. L., & Rucker, D. D. (2007). Unpacking attitude certainty: Attitude clarity and attitude correctness. *Journal of Personality and Social Psychology*, 92(1), 30–41.
- Pronin, E., & Kugler, M. B. (2010). People believe they have more free will than others. *Proceedings of the National Academy of Sciences*, 107(52), 22469-22474.
- Rosen, S., & Tesser, A. (1970). On reluctance to communicate undesirable information: The MUM effect. *Sociometry*, 33, 253-263.
- Sears, D. O. (1968). The paradox of de facto selective exposure without preferences for supportive information. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg, & P. H. Tannenbaum (eds.), *Theories of Cognitive Consistency: A Sourcebook*. Chicago, IL: Rand-McNally, pp. 777-787.

- Sedikides, C., Campbell, W. K., Reeder, G. D., & Elliot, A. J. (1999). The Relational Closeness Induction Task. *Representative Research in Social Psychology*, 23, 1-4.
- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895–917.
- Skitka, L. J., & Morgan, G. S. (2014). The social and political implications of moral conviction. *Political Psychology*, 35(1), 95–110.
- Smith, E. R., & Henry, S. (1996). An in-group becomes part of the self: Response time evidence. *Personality and Social Psychology Bulletin*, 22, 635-642.
- Stroud, N. J. (2008). Media use and political predispositions: Revisiting the concept of selective exposure. *Political Behavior*, 30(3), 341-366.
- Sunstein, C. (2011). *Republic.com*. Princeton University Press.
- Sweeny, K., & Shepperd, J.A. (2007). Being the best bearer of bad tidings. *Review of General Psychology*, 11, 235-257.
- Weeks, B. E., Ardèvol-Abreu, A., & Gil de Zúñiga, H. (2017). Online influence? Social media use, opinion leadership, and political persuasion. *International Journal of Public Opinion Research*, 29(2), 214-239.
- Weeks, B. E., & Holbert, R. L. (2013). Predicting dissemination of news content in social media: A focus on reception, friending, and partisanship. *Journal & Mass Communication Quarterly*, 90(2), 212-232.
- Weeks, B. E., Ksiazek, T. B., & Holbert, R. L. (2016). Partisan enclaves or shared media experiences? A network approach to understanding citizens' political news environments. *Journal of Broadcasting and Electronic Media*, 60(2), 248-268.

- Zajonc, R. B. (1965). Social facilitation. *Science*, *146*, 269-274.
- Akerlof, K., Maibach, E. W., Fitzgerald, D., Ceden, A. Y., & Neuman, A. (2013). Do people “personally experience” global warming, and if so how, and does it matter? *Global Environmental Change*, *23*(1), 81-91.
- Bohr, J. (2017). Is it hot in here or is it just me? Temperature anomalies and political polarization over global warming in the American public. *Climatic Change*, *142*(1-2), 271-285.
- Borick, C. P., & Rabe, B. G. (2014). Weather or not? Examining the impact of meteorological conditions on public opinion regarding global warming. *Weather, Climate, and Society*, *6*(3), 413-423.
- Borick, C. P., & Rabe, B. G. (2017). *Personal experience, extreme weather events, and perceptions of climate change*. Oxford Research Encyclopedia of Climate Science.
- Bulle, R. J., Carmichael, J., & Jenkins, J. C. (2012). Shifting public opinion on climate change: An empirical of factors influencing concern over climate change in the U.S., 2002-2010. *Climatic Change*, *114*(2), 169-188.
- Capstick, S. B., & Pidgeon, N. F. (2014). Public perception of cold weather events as evidence for and against climate change. *Climatic Change*, *122*(4), 695-708.
- Carlton, J. S., Mase, A. S., Knutson, C. L., Lemos, M. C., Haigh, T., Todey, D. P., & Prokopy, L. S. (2016). The effects of extreme drought on climate change beliefs, risk perceptions, and adaptation attitudes. *Climatic Change*, *135*(2), 211-226.
- Clifford, S., Jewell, R. M., & Waggoner, P. D. (2015). Are samples drawn from Mechanical Turk valid for research on political ideology? *Research & Politics*, *2*(4).

- Cook, J., Nuccitelli, D., Green, S. A., Richardson, M., Winkler, B., Painting, R., Way, R., Jacobs, P., & Skuce, A. (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters*, 8(2), 024024.
- Ditto, P., & Lopez, D. (1992). Motivated skepticism: Use of differential decision criteria for preferred and nonpreferred conclusions. *Journal of Personality and Social Psychology*, 63(4), 568-584.
- Egan, P. J., & Mullin, M. (2012). Turning personal experience into political attitudes: The effect of local weather on Americans' perceptions about global warming. *The Journal of Politics*, 74(3), 796-809.
- Feldman, L., Maibach, E. W., Roser-Renouf, C., & Leiserowitz, A. (2012). Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC. *The International Journal of Press/Politics*, 17(1), 3-31.
- Gaines, B. J., Kuklinski, J. H., Quirk, P. J., Peyton, B., & Verkuilen, J. (2007). Same facts, different interpretations: Partisan motivation and opinion on Iraq. *The Journal of Politics*, 69(4), 957-974.
- Gifford, R., Scannell, L., Kormos, C., Smolova, L., Biel, A., Boncu, S., ... & Kaiser, F. G. (2009). Temporal pessimism and spatial optimism in environmental assessments: An 18-nation study. *Journal of Environmental Psychology*, 29(1), 1-12.
- Hall, M. P., Lewis, N. A., Jr., & Ellsworth, P. C. Believing in climate change, but not behaving sustainably: Evidence from a one-year longitudinal study. In press at *Journal of Environmental Psychology*.
- Hamilton, L. C., & Stampone, M. D. (2013). Blowin' in the wind: Short-term weather and belief in anthropogenic climate change. *Weather, Climate, and Society*, 5(2), 112-119.

- Hansen, W. B., Tobler, N. S., Graham, J. W. (1990). Attrition in substance abuse prevention research: A meta-analysis of 85 longitudinally followed cohorts. *Evaluation Review*, *14*(6), 677-685.
- Hart, P. S., Nisbet, E. C., & Myers, T. A. (2015). Public attention to science and political news and support for climate change mitigation. *Nature Climate Change*, *5*(6), 541-545.
- 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*(4), 555-588.
- Hmielowski, J. D., Feldman, L., Myers, T. A., Leiserowitz, A., & Maibach, E. (2014). An attack on science? Media use, trust in scientists, and perceptions of global warming. *Public Understanding of Science*, *23*(7), 866-883.
- Hornsey, M. J., Harris, E. A., Bain, P. G., & Fielding, K. S. (2016). Meta-analyses of the determinants and outcomes of belief in climate change. *Nature Climate Change*, *6*(6), 622-626.
- Howe, P. D., & Leiserowitz A. (2013). Who remembers a hot summer or a cold winter? The asymmetric effects of beliefs about global warming on perceptions of local climate conditions in the U.S. *Global Environmental Change*, *23*(6), 1488-1500.
- Howe, P. D., Boudet, H., Leiserowitz A., & Maibach, E. W. (2014). Mapping the shadow of experience of extreme weather events. *Climatic Change*, *127*(2), 381-389.
- Joireman, J., Truelove, H. B., & Duell, B. (2010). Effect of outdoor temperature, heat primes and anchoring on belief in global warming. *Journal of Environmental Psychology*, *30*(4), 358-367.

- Kahan, D. M. (2013). Ideology, motivated reasoning, and cognitive reflection. *Judgment and Decision Making*, 8, 407-424.
- Kahan, D. M., Peters, E., Wittlin, M., Slovic, P., Ouellette, L. L., Braman, D., & Mandel, G. (2012). The polarizing impact of science literacy and numeracy on perceived climate change risks. *Nature Climate Change*, 2(10), 732-735.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480-498.
- Leiserowitz, A. (2006). Climate change risk perception and policy preferences: The role of affect, imagery, and values. *Climatic Change*, 77(1-2), 45-72.
- Leiserowitz, A., Maibach, E., & Roser-Renouf, C. (2010). *Climate change in the American mind: Americans' global warming beliefs and attitudes in January 2010*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change.
- Leiserowitz, A., Maibach, E., Roser-Renouf, C., & Hmielowski, J. (2012). *Global Warming's Six Americas, March 2012 & Nov. 2011*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication.
- Lodge, M., & Hamill, R. (1986). A partisan schema for political information processing. *American Political Science Review*, 80(2), 505-519.
- Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37(11), 2098-2109.
- Lorenzoni, I., & Pidgeon, N. F. (2006). Public views on climate change: Europe and USA perspectives. *Climatic Change*, 77(1-2), 73-95.

- Marlon, J. R., van der Linden, S., Howe, P. D., Leiserowitz, A., Lucia Woo, S. H., & Broad, K. (2018). Detecting local environmental change: The role of experience in shaping risk judgments about global warming. *Journal of Risk Research*, 1-15.
- Myers, T. A., Maibach, E. W., Roser-Renouf, C., Akerlof, K., & Leiserowitz, A. (2013). The relationship between personal experience and belief in the reality of global warming. *Nature Climate Change*, 3(4), 343-347.
- National Oceanic and Atmospheric Association National Centers for Environmental Information (2015). *Storm events database*. Retrieved September 25, 2015 from <https://www.ncdc.noaa.gov/stormevents/>.
- National Oceanic and Atmospheric Association's National Centers for Environmental Information (2015). *State of the Climate: National Climate Reports for July 2014 – July 2015*. Retrieved February 6, 2018 from <https://www.ncdc.noaa.gov/sotc/national/201407>.
- National Oceanic and Atmospheric Association's National Climatic Data Center (2017). *New climate division dataset*. Retrieved December 1, 2017 from <ftp://ftp.ncdc.noaa.gov/pub/data/cirs/>.
- Nisbet, E. C., Cooper, K. E., & Garrett, R. K. (2015). The partisan brain: How dissonant science messages lead conservatives and liberals to (dis)trust science. *The Annals of the American Academy of Political and Social Science*, 658(1), 36-66.
- Pidgeon, N. (2012). Climate change risk perception and communication: Addressing a critical moment? *Risk Analysis*, 32(6), 951-956.
- Prior, M. (2009). The immensely inflated news audience: Assessing bias in self-reported news exposure. *Public Opinion Quarterly*, 73(1), 130-143.

- Read, D., Bostrom, A., Morgan, M. G., Fischhoff, B., & Smuts, T. (1994). What do people know about global climate change? 2 survey studies of educated laypeople. *Risk Analysis*, *14*(6), 971-982.
- Ribisl, K. M., Walton, M. A., Mowbray, C. T., Luke, D. A., Davidson II, W. S., Bootsmiller, B. J. (1996). Minimizing participant attrition in panel studies through the use of effective retention and tracking strategies: Review and recommendations. *Evaluation and Program Planning*, *19*(1), 1-25.
- Risen, J. L., & Critcher, C. R. (2011). Visceral fit: While in a visceral state, associated states of the world seem more likely. *Journal of Personality and Social Psychology*, *100*(4), 777-793.
- Shao, W. (2016). Are actual weather and perceived weather the same? Understanding perceptions of local weather and their effects on risk perceptions of global warming. *Journal of Risk Research*, *19*(6), 722-742.
- Shao, W., & Goidel, K. (2016). Seeing is believing? An examination of perceptions of local weather conditions and climate change among residents in the U.S. Gulf Coast. *Risk Analysis*, *36*(11), 2136-2157.
- Sterman, J. D., & Sweeney, L. B. (2007). Understanding public complacency about climate change: Adults' mental models of climate change violate conservation of matter. *Climatic Change*, *80*(3-4), 213-238.
- Taber, C. S., & Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science*, *50*(3), 755-769.
- U.S. Census Bureau. (2010). *State and county QuickFacts*. Retrieved September 25, 2015, from <http://quickfacts.census.gov/qfd/index.html>.

- United States Department of Agriculture Economic Research Service (2013). *Urban Influence Codes*. Retrieved October 24, 2017, from <https://www.ers.usda.gov/data-products/urban-influence-codes/documentation.aspx#UYKQ2kpZRvY>.
- Weber, E. U. (2006). Experience-based and description-based perceptions of long-term risk: Why global warming does not scare us (yet). *Climatic Change*, 77(1-2), 103-120.
- Weber, E. U. (2013). Psychology: Seeing is believing. *Nature Climate Change*, 3(4), 312-313.
- Zaval, L., Keenan, E. A., Johnson, E. J., & Weber, E. U. (2014). How warm days increase belief in global warming. *Nature Climate Change*, 4(2), 143-147.
- Brock, T. C., & Balloun, J. L. (1967). Behavioral receptivity to dissonant information. *Journal of Personality and Social Psychology*, 6(4), 413-28.
- Earl, A., Albarracín, D., Durantini, M. R., Gunnoe, J. B., Leeper, J., & Levitt, J. H. (2009). Participation in counseling programs: High-risk participants are reluctant to accept HIV-prevention counseling. *Journal of Consulting and Clinical Psychology*, 77(4), 668-679.
- Earl, A., & Nisson, C. (2015). Applications of selective exposure and attention to information for understanding health and health disparities. *Emerging Trends in the Social and Behavioral Sciences*.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Flanagin, A. J. (2017). Online social influence and the convergence of mass and interpersonal communication. *Human Communication Research*, 43, 450-463.
- Freedman, J. L., & Sears, D. O. (1965). Warning, distraction, and resistance to influence. *Journal of Personality and Social Psychology*, 1(3), 262-266.

- Frenkel, S., & Wakabayashi, D. (2018). After Florida school shooting, Russian 'bot' army pounced. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/02/19/technology/russian-bots-school-shooting.html>.
- Garrett, R. K., & Stroud, N. J. (2014). Partisan paths to exposure diversity: Differences in pro- and counterattitudinal news consumption. *Journal of Communication*, *64*(4), 680–701.
- Garrett, R. K., & Weeks, B. E. (2013). *The promise and peril of real-time corrections to political misperceptions*. Proceedings of the 2013 Conference on Computer Supported Cooperative Work - CSCW '13, 1047.
- Garrett, R. K., Weeks, B. E., & Neo, R. L. (2016). Driving a wedge between evidence and beliefs: How online ideological news exposure promotes political misperceptions. *Journal of Computer-Mediated Communication*, *21*(5), 331–348.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, *96*(5), 1029–46.
- Hall, M. P., Earl, A., Albarracín, D., & Jones, C. R. (in prep). Congenial selective exposure and order effects: Disrupting the congenial validation bias.
- 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*(4), 555–588.
- Johnson, B. T., & Eagly, A. H. (1989). Effects of involvement on persuasion: A meta-analysis. *Psychological Bulletin*, *106*(2), 290–314.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, *108*(3), 480–498.

- Madrigal, A. C. (2017). What Facebook did to American democracy. *The Atlantic*. Retrieved from <https://www.theatlantic.com/technology/archive/2017/10/what-facebook-did/542502/>.
- Nyhan, B., & Reifler, J. (2010). When corrections fail: The persistence of political misperceptions. *Political Behavior*, *32*(2), 303–330.
- Nyhan, B., Reifler, J., & Ubel, P. A. (2013). The hazards of correcting myths about health care reform. *Medical Care*, *51*(2), 127–32.
- Sears, D. O., & Freedman, J. L. (1967). Selective exposure to information: A critical review. *Public Opinion Quarterly*, *31*(2), 194-213.
- Shane, S. (2018). How unwitting Americans encountered Russian operatives online. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/02/18/us/politics/russian-operatives-facebook-twitter.html>.
- Shearer, E., & Gottfried, J. (2017). News use across social media platforms 2017. *Pew Research Center*. Retrieved from <http://www.journalism.org/2017/09/07/news-use-across-social-media-platforms-2017/>.
- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, *88*(6), 895–917.
- Sunstein, C. (2011). *Republic.com*. Princeton University Press.
- Tetlock, P. E. (2002). Social functionalist frameworks for judgment and choice: Intuitive politicians, theologians, and prosecutors. *Psychological Review*, *109*(3), 451–471.

Thompson, N., & Vogelstein, F. (2018). Inside the two years that shook Facebook – and the world. *Wired*. Retrieved from <https://www.wired.com/story/inside-facebook-mark-zuckerberg-2-years-of-hell/>.

Weeks, B. E., Ksiazek, T. B., & Holbert, R. L. (2016). Partisan enclaves or shared media Eexperiences? A network approach to understanding citizens' political news environments. *Journal of Broadcasting and Electronic Media*, 60(2), 248–268.

APPENDIX I

Supplementary Materials for Chapter III

Studies 1 & 2: Likability manipulation

1. What is your gender?
 - **Likable:** *Male*
 - **Unlikable:** *Male*
2. What is your occupation?
 - **Likable:** *Retail*
 - **Unlikable:** *Retail*
3. What is your favorite color?
 - **Likable:** *Blue*
 - **Unlikable:** *Favorite color is irrelevant to knowing people.*
4. What hobbies or leisure activities do you participate in?
 - **Likable:** *I enjoy playing co-rec sports. I also enjoy spending time with friends.*
 - **Unlikable:** *Hobbies are a waste of time.*
5. What is one unique trait you have?
 - **Likable:** *I guess I would say that I am very passionate about life, and I try not to take a moment for granted.*
 - **Unlikable:** *I get what I want in negotiations.*
6. Please give an example of one of your personal values.
 - **Likable:** *I value my relationships with family and friends.*
 - **Unlikable:** *I'm just here to get paid, not too interested in learning your values. Sorry if that hurts!*
7. What do you enjoy about the experience of being a Mechanical Turk worker?
 - **Likable:** *I take a lot of pride in being an honest Mturk worker and I really try to thoughtfully answer the questions that I respond to. I know that the requesters really value the quality of our data, so I take things seriously in order to provide useful data for them.*
 - **Unlikable:** *I just do this for the money. It doesn't matter if your answers make any sense. Most requesters just pay you regardless because they're too lazy to check. And if they don't pay me then I just complain and threaten to give them bad reviews to other workers.*

Study 1: Validity manipulation

Valid test: *They said to say something about the test. From the scoring, I guess I did really well. I bet this test is a good and genuine measure of my intelligence. They said you give me things to read about the test now...*

Invalid test: *They said to say something about the test. From the scoring, I didn't do too well. But I think this test is complete garbage and doesn't measure intelligence the way it should. It's not a good test. They said you give me things to read about the test now...*

Study 2: Attitude manipulation

Pro-gun control: *They said to say something about my attitude on gun control. In general, I support gun control measures, but only in the sense that certain steps should be taken in order for someone to purchase a gun.*

Anti-gun control: *They said to say something about my attitude on gun control. In general, I do not support gun control measures, except for certain steps that should be taken in order for someone to purchase a gun.*

Study 3: Likability manipulation

1. What is your gender?
 - **Likable:** *Male*
 - **Unlikable:** *Male*
2. What is your declared or intended major?
 - **Likable:** *Bio*
 - **Unlikable:** *Bio*
3. What is your favorite color?
 - **Likable:** *Blue*
 - **Unlikable:** *if you care to know this, you're probably stupid because favorite color is irrelevant to knowing people. lol*
4. What extracurricular activities do you participate in?
 - **Likable:** *I enjoy playing intramural sports. I also enjoy spending time with family and friends.*
 - **Unlikable:** *campus activities are a waste of time for sure.*
5. What is one unique trait you have?
 - **Likable:** *I think I'm a lot like other people. I guess I would say that I am very passionate about life, and I try not to take a moment for granted.*
 - **Unlikable:** *i know how to cheat on test without getting caught. doing this for a while now, sorry won't share with you...lol*

6. Please give an example of one of your personal values.
 - **Likable:** *I value my relationships with family and friends.*
 - **Unlikable:** *c'mon. so i hope you're not so lame to be answering these qs...not too interested in learning your values....sorry if that hurts!*

Studies 3 & 4: RCIT questions

Block 1

1. What is your name?
2. How old are you?
3. Where are you from?
4. What year are you at the University of Michigan?
5. What do you think you might major in? Why?
6. What made you come to the University of Michigan?
7. What is your favorite class you've taken at the University? Why?

Block 2

1. What are your hobbies?
2. What would you like to do after graduating from the University?
3. What would be the perfect lifestyle for you?
4. What is something you have always wanted to do, but probably never will be able to do?
5. If you could travel anywhere in the world, where would you go and why?
6. What is one strange thing that has happened to you since arriving at the University of Michigan?
7. What is one embarrassing thing that has happened to you since arriving at the University of Michigan?
8. What is one thing in your life that makes you stressed out?
9. If you could change anything that happened to you in high school, what would that be?
10. If you could change one thing about yourself, what would that be?
11. Do you miss your family?
12. What is one habit you'd like to break?

Block 3

1. If you could have one wish granted, what would that be?
2. Is it easy or difficult for you to meet people? Why?
3. Describe the last time you felt lonely.
4. What is one emotional experience you've had with a good friend?
5. What is one of your biggest fears?
6. What is your most frightening early memory?
7. What is your happiest early childhood memory?
8. What is one thing about yourself that most people would consider surprising?
9. What is one recent accomplishment that you are proud of?

10. Tell me one thing about yourself that most people who already know you don't know.

Study 4: Unlikable confederate RCIT script

Block 1

1. What is your name?
Alex
2. How old are you?
18
3. Where are you from?
NYC...way more exciting than michigan
4. What year are you at the University of Michigan?
freshman
5. What do you think you might major in? Why?
don't really know yet
6. What made you come to the University of Michigan?
wasn't my first choice but at least it's an easy school and i'll get way better grades than most people
7. What is your favorite class you've taken at the University? Why?
so far my classes are easy, but I can tell most people think it's hard. how could chemistry possibly be difficult??

Block 2

1. What are your hobbies?
no point in telling you...it's not like we would ever hang out
2. What would you like to do after graduating from the University?
make as much money as I can
3. What would be the perfect lifestyle for you?
get rich so I don't have to listen to anyone
4. What is something you have always wanted to do, but probably never will be able to do?
i don't accept limits...nothing will hold me back
5. If you could travel anywhere in the world, where would you go and why?
miami...party it up
6. What is one strange thing that has happened to you since arriving at the University of Michigan?
it was hilarious watching the faces of all the students in the big house when MSU won...why do people care so much haha
7. What is one embarrassing thing that has happened to you since arriving at the University of Michigan?
can't really think of anything. I don't get embarrassed that easily
8. What is one thing in your life that makes you stressed out?
people that get in my way
9. If you could change anything that happened to you in high school, what would that be?

- the lame people I went to high school with...they're a lot like the people here*
10. If you could change one thing about yourself, what would that be?
not a thing. obviously I am the best
 11. Do you miss your family?
nope, so nice to not have to deal with their stupid problems
 12. What is one habit you'd like to break?
i always stop for pedestrians who are trying to cross the street, but what's the point? i got places to be

Block 3

1. If you could have one wish granted, what would that be?
obviously more wishes
2. Is it easy or difficult for you to meet people? Why?
not hard to meet people, but most people suck so it's pointless
3. Describe the last time you felt lonely.
doesn't happen to me
4. What is one emotional experience you've had with a good friend?
why are we supposed to get all sappy? not feeling it
5. What is one of your biggest fears?
being mediocre
6. What is your most frightening early memory?
mimes...can't believe I used to be scared of those losers
7. What is your happiest early childhood memory?
being described as "gifted"
8. What is one thing about yourself that most people would consider surprising?
if you're in my inner circle, i look out for you
9. What is one recent accomplishment that you are proud of?
i bribed my GSI to give me an A on a paper
10. Tell me one thing about yourself that most people who already know you don't know.
ate jimmy johns for lunch

Study 4: Box model instructions

Now, we would like you to consider your partner's choices of articles for you to read. In particular, we would like to know what factors you believe influenced your partner's decision over what articles to pick for you. To answer this question, we will ask you to draw a model that depicts the influence of various factors on your partner's decision.

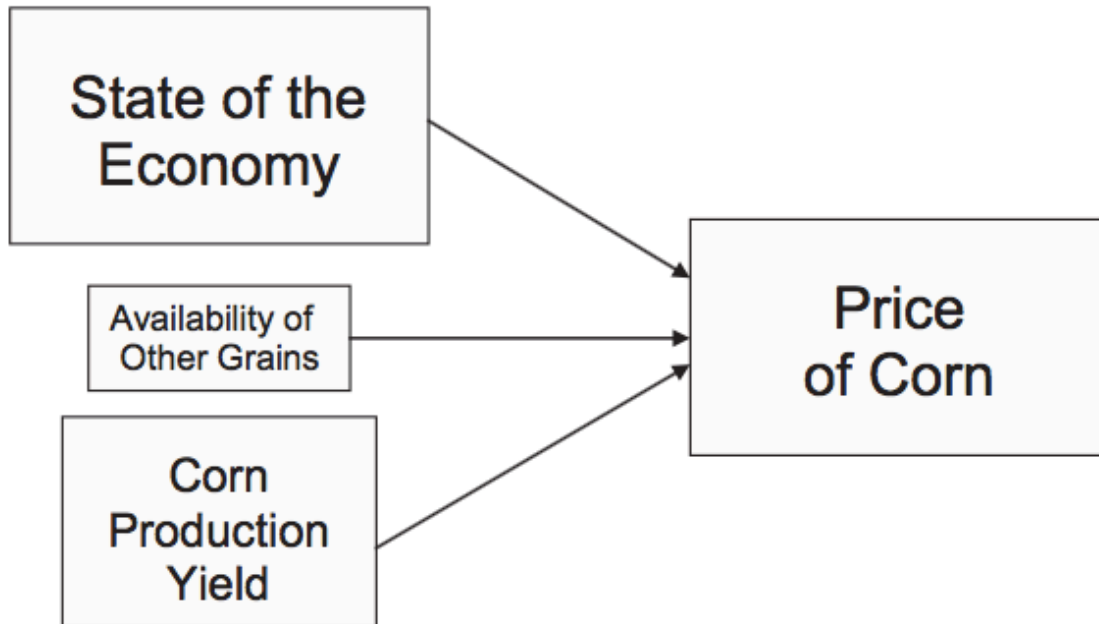
There are models for predicting all sorts of things. These models generally include a number of different factors that are believed to predict an outcome, and they assign different values to those factors depending on how important each one is thought to be.

Example: A model for predicting the price of corn next season might include 3 factors:

- 1) The state of the economy (e.g., is there a recession?)
- 2) The availability of other grains (e.g., is this a good season for wheat?)

- 3) The yield of corn production that season (e.g., did a good deal of corn grow this season, or not much?)

Let's imagine that our model assumes that the **state of the economy** is the most important factor, that the **yield of corn** is a close second, and that the **availability of other grains** is a distant third. In that case, the model could look something like this (below).



Now it's your turn. Using the pencil and graph paper provided to you by the experimenter (please notify the experimenter if you do not have these materials), please illustrate the influence of each of the following factors on your partner's choice of articles for you.

The outcome you are predicting in this model is: **Your partner's choice of articles for you.**

Here are some potential factors to include in your model:

- 1) Your beliefs and attitudes.
- 2) Your partner's beliefs and attitudes.
- 3) Your personality.
- 4) Your partner's personality.
- 5) Random chance.
- 6) Other

If you choose a factor under "Other", please specify what that factor is in your model.