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What is This?

Do You Want to Convince Me or to Be Understood?: Preference-Consistent Information Sharing and Its Motivational Determinants

Nadira Faulmüller[1], Andreas Mojzisch[2], Rudolf Kerschreiter[3], and Stefan Schulz-Hardt[4]

Abstract

In two experiments, we provide evidence for a fundamental discussion asymmetry, namely, preference-consistent information sharing. Despite being in a dyadic situation requiring open information exchange and being given no incentive to do so, participants communicated more information that supported their individually preferred decision alternative than information that contradicted it. Preference-consistent information sharing was not caused by biased recall and occurred in written as well as in face-to-face communication. Moreover, we tested whether preference-consistent information sharing was influenced by statements by bogus discussion partners indicating that they held a congruent versus incongruent preference to the participants' preference and that they understood versus did not understand the participants' preference. We found that when partners stated that they understood the participants' preference, subsequent preference-consistent information sharing was considerably reduced. This indicates that a motivation to be understood by others might be an important driving force underlying preference-consistent information sharing.

For the last quarter of a century, information sharing in decision-making groups has been studied intensively in social psychology. The direction of this line of research was set by Stasser and Titus (1985) who suggested that group discussions may be dominated by information held by all group members prior to discussion (shared information) rather than information held by only one group member (unshared information). Stasser and Titus' work led to a flood of studies, making the proposed sharedness bias one of the most consistent findings in small group research (for a meta-analysis, see Lu, Yuan, & McLeod, 2011). However, in the same article, Stasser and Titus also mentioned a second idea, namely, that discussions may tend to be biased toward "information that supports members' existent preferences" (p. 1467). Put differently, group members might pool more *preference-consistent* information (i.e., information that supports their prediscussion decision preferences) than *preference-inconsistent* information (i.e., information that contradicts these initial choices). To date, this suggestion has received little attention, at least empirically.

This lack of attention in small group research is remarkable, given the vast amount of work discussing *consistency biases* in individual information processing. The tendency to favor information consistent with one's own beliefs, expectations, attitudes, or decisions is a long-recognized and empirically well-documented phenomenon (for a review, see Nickerson, 1998). For example, it has been shown that people actively *search* for information that supports their own preexisting views and/or avoid disconfirming information, be it in the domain of attitudes, beliefs, or stereotypes (e.g., Hart et al., 2009). Moreover, people tend to *evaluate* information in the

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light of their views: They judge disconfirming information to be of lower quality than confirming information (e.g., Edwards & Smith, 1996). Furthermore, people tend to *recall* information consistent with their established hypotheses more easily than inconsistent information (e.g., Stangor & McMillan, 1992). Given this research tradition, it is surprising that such consistency biases have not been the focus of empirical research on *sharing* of information in groups.

It is even more remarkable that group researchers paid so little attention to the distinction between preference-consistent and preference-inconsistent information when we take into account that a substantial number of studies on biased information sampling used a *hidden profile* (Stasser, 1988) prediscussion information distribution (e.g., Postmes, Spears, & Cihangir, 2001; Scholten, Van Knippenberg, Nijstad, & De Dreu, 2007; Winquist & Larson, 1998). In a hidden profile, sharedness and preference consistency of information are inherently confounded: Most or all of the shared pieces of information support the group members' preferred decision alternative. An intriguing implication of this confound is that the sampling advantage favoring shared information may, at least partially, reflect a tendency for group members to favor preference-consistent over preference-inconsistent information.

Preference-Consistent Information Sharing

Recently, the possible sampling advantage of preference-consistent information in groups has attracted interest in theoretical articles (Brodbeck, Kerschreiter, Mojzisch, & Schulz-Hardt, 2007; Mojzisch & Schulz-Hardt, 2006; Wittenbaum, Hollingshead, & Botero, 2004). Moreover, several empirical studies have been published that indicate that such a discussion bias may indeed exist: In a study by Dennis (1996), group members mentioned more information that was preference consistent and unshared than information that was preference inconsistent and unshared. However, because shared information was not analyzed, it is unclear whether there was an overall bias for preference-consistent information. Schulz-Hardt, Brodbeck, Mojzisch, Kerschreiter, and Frey (2006) showed that participants repeated preference-consistent information more frequently than preference-inconsistent information during a discussion. However, they did not analyze this bias regarding the introduction of new information. Finally, in two studies that used a transcript of a fictitious group discussion, participants intended to discuss a larger proportion of their preference-consistent information than of their preference-inconsistent information (Greitemeyer, Schulz-Hardt, & Frey, 2003; Mojzisch, Grouneva, & Schulz-Hardt, 2010). However, no actual information exchange took place in these experiments.

Building on this evidence and the seminal idea proposed by Stasser and Titus (1985), we hypothesize that in addition to the well-documented sharedness bias, there is a second, no

less fundamental discussion asymmetry, namely, *preference-consistent information sharing*. One aim of the present study is to provide unequivocal empirical evidence for such a discussion bias favoring preference-consistent information.

Why Discuss Preference-Consistently? Convincing Others Versus Being Understood

Proposing a discussion bias in favor of preference-consistent information leads to the question of how this bias might arise. Recently, the central role *motivations* play in group information processing has been emphasized by theoretical (e.g., De Dreu, Nijstad, & Van Knippenberg, 2008; Hollingshead, Jacobsohn, & Beck, 2007; Wittenbaum et al., 2004) and empirical work (e.g., Bechtoldt, De Dreu, Nijstad, & Choi, 2010; De Dreu & Beersma, 2010; Toma & Butera, 2009; Steinel, Utz, & Koning, 2010). Following this line of research, in the present study, we deal with possible motivational origins of preference-consistent information sharing. More specifically, we focus on two *social motivations* that may underlie this bias, that is, motivations that are related to the social setting of discussing and deciding together with another person.

First, individuals might have the *motivation to convince* their fellow group members of their own opinion, and, to do so, predominantly share preference-consistent information. In daily life, there are competitive decision-making situations in which we might push our personal agenda (De Dreu et al., 2008; Wittenbaum et al., 2004). For example, when it comes to choosing a team member for a tedious task, it would not be surprising to see people expressing a motivation to convince others. In contrast, in more cooperative situations, like a team of researchers having to decide which experiments to propose to get mutual funding, no such incentive for preference-consistent communication is given. Nevertheless, even in such situations, group members may still wish "to get their own preferred alternative adopted by the group" (Wittenbaum et al., 2004, p. 299). Thereby, group members may perceive the persuasion of others as an opportunity to gain social power, which people tend to find desirable (e.g., Sassenberg, Ellemers, & Scheepers, 2012) or they may simply act on the assumption that they know what is best for the group.

Second, in addition to a motivation to convince the other group members, another motivation may also lead to preference-consistent information sharing, namely, the motivation *to be understood* by others. Researchers from different disciplines agree that people seek to be understood regarding their thoughts and feelings (e.g., Prilleltensky & Lobel, 1987; Van Kaam, 1959). Indeed, empirical research emphasizes the role of felt understanding. For example, being understood is associated with satisfaction about interactions (Cross, Bacon, & Morris, 2000), as well as with the maintenance of social relationships

(Reis, Clark, & Holmes, 2004), and the happiness experienced therein (Cahn, 1990). People who feel understood also experience higher positive affect (Oishi, Koo, & Akimoto, 2008), daily well-being (Lun, Kesebir, & Oishi, 2008), and satisfaction with their lives (Seder & Oishi, 2009) compared with people who do not feel understood. Moreover, speakers judge their communication counterpart more positively when this counterpart asks questions implying the intention to understand the speakers' reasoning (Chen, Minson, & Tormala, 2010). In sum, several findings from different areas stress the importance of being understood. Hence, a core function of communication may be to meet this need (compare Foppa, 1995; Luft, 1969; Malle, 2004). Accordingly, we suggest that seeking to be understood leads to preference-consistent information sharing: People use their contributions in the discussion to make their thoughts comprehensible to their communication partners. Put differently, they try to give reasons for why they favor one decision alternative over the others, which implies sharing information consistent with their preference.

The Present Research

In the present study, we aim to answer the questions whether there is a systematic discussion bias favoring preference-consistent information and whether this bias is fostered by a motivation to be understood and/or by a motivation to convince. We conducted two experiments in which participants worked on a decision task together with a bogus partner. Because it is almost impossible to directly manipulate the motivation to be understood and the motivation to convince without giving rise to possible demand effects (e.g., by paying an incentive for successfully convincing the partner), we addressed these motivations by manipulating necessary conditions for them to come into effect. To this end, we varied the partner's utterances.

First, a motivation to be understood should be particularly important if the partner explicitly states that she does not comprehend one's thoughts. In contrast, this motivation should be particularly irrelevant if the partner clearly states that she understands one's opinion. Hence, we addressed the motivation to be understood by indicating that the partner did or did not understand the participant's decision preference (*preference understanding: understanding* vs. *nonunderstanding*). Second, a motivation to convince should become particularly relevant if talking to somebody who holds a different position on the issue being discussed. If the partner already shares one's opinion, however, this motivation should lose its importance. Hence, we made the participants believe that their partner either had the same or a different initial decision preference (*preference congruity: congruity* vs. *incongruity*).

Both independent variables, preference understanding and preference congruity, were manipulated in a 2 × 2 design. The main dependent variable was the discussion bias in favor of preference-consistent information. We formulated the following hypotheses:

Hypothesis 1: Participants share more preference-consistent than preference-inconsistent information.
Hypothesis 2a: Preference-consistent information sharing is stronger under the condition of preference nonunderstanding than under the condition of preference understanding.
Hypothesis 2b: Preference-consistent information sharing is stronger under the condition of preference incongruity than under the condition of preference congruity.

In Experiment 1, we used a paradigm similar to the one used by Wittenbaum, Hubbell, and Zuckerman (1999, Experiments 1 and 2): Participants exchanged information in *written* form with a bogus partner. As we asked participants to transcribe the information they wanted to share from the experimental materials, we could rule out biased discussion being caused by biased information recall. In Experiment 2, we sought to extend our findings to a more natural and, hence, externally valid scenario. Therefore, participants exchanged information *face to face* with a confederate.

Experiment 1

Method

Participants and design. The sample included 80 students (51 female, $M = 21.69$ years). One participant had to be excluded because she failed to indicate a preference. The experiment had a 2 (preference understanding vs. nonunderstanding) × 2 (preference congruity vs. incongruity) between-subjects factorial design.

Decision task. The decision task used is an extended adaptation of the material developed by Wittenbaum and colleagues (1999). It described two candidates (named A and B) applying for a professorship in economics. Our full information set comprised 64 attributes, half of which were positive (e.g., "His research on consumer behavior is regarded as outstanding") and half of which were negative (e.g., "Parts of the literature he uses in courses are outdated"). In the first pretest, 47 participants were asked to rate the valence of these 64 pieces of information on a −3 (*very negative*) to +3 (*very positive*) scale and their relevance on a 0 (*totally irrelevant*) to 6 (*very relevant*) scale. The attributes were shown to be unambiguously positive ($M = 2.28$, $SD = 0.840$) or negative ($M = −1.46$, $SD = 1.10$) and comparable in relevance ($M_{pos} = 4.13$, $SD_{pos} = 1.24$; $M_{neg} = 4.09$, $SD_{neg} = 1.48$). The information was divided into four areas of expertise (referring to the applicants' education, employment in private industry, teaching experience, and employment in the academic sector). Each area contained 16 attributes, 8 describing each candidate. Of these 8 attributes, 4 were positive and 4 were negative. Hence,

each area implied that both candidates were—on average—equally suited for the job. In the second pretest, 48 participants received all four areas (and hence, full information) in randomized order. Based on each single area, we asked them to indicate how qualified each candidate was for the position on a 7-point scale and to choose one of them. In each one of the four areas, candidates were judged to be equally qualified (all $|t|$s < 0.883, all ps > .05) and were picked equally often (all χ^2s < 1.04, all ps > .05). Furthermore, having read the information of all four areas, participants deemed both candidates similarly qualified (M_A = 4.67, SD_A = 0.975; M_B = 4.54, SD_B = 1.01), $t(47)$ = 0.659, p > .05, and picked both candidates equally often as their overall choice, χ^2 (1, n = 48) = 0.333, p > .05.

In the main experiment, each participant randomly received three of the four areas of information. Of these three areas, the partner was explicitly said to receive two as well (but not the third) and, additionally, the fourth area (unknown to the participant). Hence, participants received 48 items, of which 32 were shared and 16 unshared. They were aware of the existence of unshared knowledge and of the fact that their partner would build her decision preference on a partially different informational basis. We included unshared attributes in the decision case because without unshared knowledge, an exchange of information before making a mutual decision would be less reasonable in the eyes of the participants and less ecologically valid. Moreover, a discussion partner who prefers the same candidate as I do but cannot comprehend *why I* prefer this candidate is less plausible if preferences result from exactly the same informational basis.

Note that we did not use a hidden profile distribution of information to avoid confounding preference consistency with sharedness, as is inevitable in hidden profiles. Overall, our participants received 12 positive and 12 negative attributes per candidate. Hence, they held 24 preference-consistent and 24 preference-inconsistent pieces of information, independent of which candidate they preferred. Providing participants with equal amounts of preference-consistent and preference-inconsistent information allowed us to unambiguously assess whether or not one type of information is favored over the other: Imagine we had, for example, given participants 36 preference- consistent and 12 preference-inconsistent attributes. Then it would be unclear whether a participant who shared 10 preference-consistent and 6 preference-inconsistent attributes showed a preference-consistency bias because she absolutely shared more preference-consistent than preference-inconsistent information or—on the contrary—an inconsistency bias, as she relatively shared more preference-inconsistent than preference-consistent information given her initial information distribution.

Procedure. Either four or six students participated in each experimental session. On arrival, participants were escorted to one of two adjacent rooms. In each room, participants received a cover letter which explained that they would be asked to mutually find the better of two job applicants, together with an assigned partner in the other room. To this end, participants would exchange information in written form. Then, participants received a booklet containing the information materials, which they had at hand throughout the whole experimental session. Participants were informed about the four areas of expertise and explicitly told which areas they had and which areas their partner had. The attributes of the two candidates followed, ordered by area and candidate. After having studied the information material, participants indicated which candidate they individually preferred.

Thereafter, the information exchange started. Participants received a questionnaire form and were asked (a) to state their decision preference and (b) to copy 10 attributes they wanted to share with their partner. This first information list made it possible to observe whether participants shared more preference-consistent than preference-inconsistent information prior to any experimental manipulation.

Next, the experimenter collected the information lists and allegedly brought them to the respective communication partner. About 5 min later, the experimenter returned with bogus replies, which contained the manipulation of the independent factors: In a handwritten message, the bogus partner claimed to have the same versus a different decision preference (i.e., manipulation of preference congruity) and to understand versus not understand the participant's preference (i.e., manipulation of preference understanding; the wording of both manipulations is given in Table 1). After participants had read their bogus partner's reply, they received a second form and got the chance to copy pieces of information for their partner again. Participants were free to choose the amount of attributes they wanted to share, with a minimum of 0 and a maximum of 10. In addition, there were no restrictions regarding which attributes to share, even if this meant repeating information already included in the first list. This second information list allowed us to determine the number of preference-consistent versus preference-inconsistent attributes communicated depending on preference understanding and preference congruity. After participants had filled in a questionnaire containing manipulation checks, they were thanked and debriefed.

Results and Discussion

Control Variables and Manipulation Checks. A check for potential interfering effects showed that participants' age, sex, candidate preference (52% Candidate A, 48% Candidate B), and which three areas of the informational material they received had no influence on any of the dependent variables. To check whether the manipulation of preference congruity and preference understanding had been successful, we asked our participants to rate on a 0 (*not at all*) to 6 (*totally*) scale, whether (a) their partner shared their preference and (b) their partner understood their preference. As predicted, a 2 × 2 ANOVA showed that participants recognized whether their partner

Table 1. Manipulation of Experimental Factors Via Partner Message in Experiment 1 and Experiment 2

	Preference congruity	
Preference understanding	Congruity	Incongruity
Understanding	Experiment 1: I, too, believe A is the better candidate, and, like you, I would choose him. And, given the information you just passed on to me, I also understand why you prefer him. Experiment 2: I, too, believe A is the better candidate. And, given the information you just passed on to me, I also understand why you prefer him.	Experiment 1: I believe B is the better candidate, and, unlike you, I would choose him. But, given the information you just passed on to me, I understand why you prefer candidate A. Experiment 2: I believe B is the better candidate. But, given the information you just passed on to me, I understand why **you** prefer candidate A.
Nonunderstanding	Experiment 1: I, too, believe A is the better candidate, and, like you, I would choose him. But, given the information you just passed on to me, I don't understand why you prefer him. Experiment 2: I, too, believe A is the better candidate. But, given the information you just passed on to me, I don't understand why **you** prefer him.	Experiment 1: I believe B is the better candidate, and, unlike you, I would choose him. And, given the information you just passed on to me, I also don't understand why you prefer candidate A. Experiment 2: I believe B is the better candidate. And, given the information you just passed on to me, I also don't understand why you prefer candidate A.

Note: Wording is given for participants preferring Candidate A. Analogous messages were given to participants with preference for Candidate B.

had the same preference ($M = 5.81$, $SD = 1.01$) or not ($M = 0.21$, $SD = 0.84$), $F(1, 75) = 738.69$, $p < .001$, $\eta_p^2 = .91$. Perceived preference congruity was neither significantly affected by the manipulation of preference understanding, $F(1, 75) = 2.92$, $p > .05$, nor by an interaction of the two factors, $F(1, 75) = .006$, $p > .05$. Moreover, participants felt more understood when their partner declared that she understood their preference ($M = 5.34$, $SD = 1.19$) than when their partner stated that she was not able to comprehend the participants' preference ($M = 0.73$, $SD = 1.27$), $F(1, 75) = 308.90$, $p < .001$, $\eta_p^2 = .81$. Again, felt understanding was neither significantly affected by the manipulation of preference congruity, $F(1, 75) = 2.74$, $p > .05$, nor by an interaction of the two factors, $F(1, 75) = 1.02$, $p > .05$. Hence, we can conclude that preference understanding and preference congruity were successfully manipulated.

Preference-Consistent Information Sharing. As an indicator for preference-consistent information sharing, the number of preference-inconsistent items transcribed was subtracted from the number of preference-consistent items transcribed. Positive numbers thus indicate a communication bias favoring preference-consistent information, negative numbers indicate a bias favoring preference-inconsistent information, and a value of 0 indicates balanced communication. On the first information list (i.e., prior to the experimental manipulation), participants on average copied 7.20 ($SD = 1.54$) attributes consistent with their preference and 2.84 ($SD = 1.61$) preference-inconsistent items.[1] Hence, with an average difference value of 4.37 ($SD = 3.13$), participants showed a clear communication bias in favor of preference-consistent information, as a one sample t test against zero showed, $t(78) = 12.42$, $p < .001$.

This indicates that even in situations where no incentive for biased communication is given, people show a discussion bias favoring preference-consistent information. Note that this discussion bias cannot be due to recall effects because participants transcribed the information conveyed directly from the informational material.

To assure that preference-consistent information sharing is independent of sharedness of information, we additionally conducted the analyses reported above for shared and unshared attributes separately. Participants showed a significant preference-consistency bias in shared information ($M = 2.38$, $SD = 2.43$), $t(78) = 8.70$, $p < .001$, and in unshared information ($M = 1.99$, $SD = 1.82$), $t(78) = 9.69$, $p < .001$. In sum, Hypothesis 1 was supported.

Effects of Preference Understanding and Preference Congruity. We analyzed the preference-consistency bias for the attributes transcribed on the second information list in a 2 (preference understanding vs. nonunderstanding) × 2 (preference congruity vs. incongruity) factorial ANOVA.[2] (See Table 2 for the overall amount of information transcribed, the number of preference-consistent and preference-inconsistent items, and the difference value for each experimental condition.)

Preference understanding. The ANOVA revealed a significant main effect for preference understanding: When participants were confronted with a partner who did not understand their preference, they showed a more pronounced preference-consistency bias ($M = 7.49$, $SD = 2.30$) than when they were understood ($M = 2.55$, $SD = 3.21$), $F(1, 75) = 78.82$, $p < .001$, $\eta_p^2 = .51$. However, as a one sample t test against zero revealed, even under the condition of being understood, communication was not completely unbiased, $t(37) = 4.90$, $p < 001$. Thus, Hypothesis 2a was supported. These findings

Table 2. Means and Standard Deviations (in Parentheses) for Pieces of Information Communicated (in Written Form) in Experiment 1 As a Function of Preference Congruity and Preference Understanding

Information communicated	Experimental condition			
	Congruity and understanding	Congruity and nonunderstanding	Incongruity and understanding	Incongruity and nonunderstanding
Overall amount	5.53 (3.44)	8.37 (1.64)	7.38 (2.55)	7.82 (2.22)
Preference-consistent	3.12 (1.90)	8.00 (1.49)	5.71 (1.95)	7.59 (2.24)
Preference-inconsistent	2.41 (2.40)	0.37 (0.83)	1.67 (1.91)	0.23 (1.07)
Preference-consistency bias	0.71 (2.62)	7.63 (1.77)	4.05 (2.89)	7.36 (2.72)

indicate that the motivation to be understood might play an important role in preference-consistent information sharing but does not fully account for the preference-consistency bias.

Preference congruity. In comparison, the effects of preference congruity were less pronounced. Although there was a significantly higher preference-consistency bias when preferences were incongruent ($M = 5.74$, $SD = 3.24$) than congruent ($M = 4.36$, $SD = 4.13$), $F(1, 75) = 7.10$, $p < .01$, $\eta_p^2 = .09$, a significant interaction with preference understanding, $F(1, 75) = 9.79$, $p < .01$, $\eta_p^2 = .12$, indicated that this congruity effect was only present when preference understanding was given: When they were understood by their discussion partner, participants showed a significantly higher preference-consistency bias when preferences were incongruent ($M = 4.05$, $SD = 2.89$) than when preferences were congruent ($M = 0.71$, $SD = 2.62$), $F(1, 75) = 16.12$, $p < .001$. However, when the bogus partner responded with nonunderstanding, the participants' bias did not depend on preference congruity ($M_{\text{Congruity}} = 7.36$, $SD_{\text{Congruity}} = 2.72$; $M_{\text{Incongruity}} = 7.63$, $SD_{\text{Incongruity}} = 1.77$), $F(1, 75) = 0.11$, $p > .05$. Albeit speculatively, this suggests that the motivation to convince might only play a role if the need to be understood is already fulfilled. In line with this idea, in the condition with congruent preferences and understanding, the preference-consistency bias ($M = 0.71$, $SD = 2.62$) was no longer significant when tested against zero, $t(16) = 1.11$, $p > .05$. Thus, Hypothesis 2b was only partially supported.

Separate analyses for shared and unshared information. When analyzing shared and unshared information separately, all effects reported above remained stable: The main effect for preference understanding as well as the interaction of both factors (including the simple main effect of preference congruity in the conditions of preference understanding) were found in shared (all Fs > 4.27, all ps < .05) as well as in unshared information (all Fs > 4.52, all ps < .05). No additional, previously undetected effects were found. Hence, Experiment 1 consistently demonstrated that the preference-consistency bias arises in shared and unshared information. Therefore, sharedness was not further analyzed in Experiment 2.

Preference certainty. As our task implied that both decision alternatives were more or less equally well suited, participants might have developed only weak preferences. To check for potential interfering effects of preference (un)certainty, we asked participants to indicate their certainty immediately after they had stated their initial preference. We used a 0 (*not at all*) to 6 (*totally*) scale. Participants' average certainty was $M = 3.35$ ($SD = 1.22$), indicating a medium level of confidence and preference stability. This did not differ across the four experimental conditions (all Fs < 0.261, all ps > .05). Preference certainty and the preference-consistency bias were not significantly correlated, $r = .16$, $p > .05$, and when checking for a mediation by including preference certainty as a covariate in the ANOVA, we found the main effect for preference understanding, the main effect for preference congruity, as well as the interaction of both factors to be unchanged (all Fs > 6.72, all ps < .05). Moreover, preference certainty had no moderating influence on the effect of preference understanding ($\beta = .118$, $p > .05$) nor on the effect of preference congruity ($\beta = .148$, $p > .05$) on the preference-consistency bias. Hence, our effects were not influenced by preference certainty.

In sum, Experiment 1 provides clear-cut evidence for a general discussion bias favoring preference-consistent over preference-inconsistent information, even when recall effects have been ruled out. Moreover, because this bias was mainly affected by whether the participants felt understood by their partner, it supports the idea that a motivation to be understood might be a cause of preference-consistent information sharing. In contrast, a motivation to convince the partner only seems to play a secondary role, because incongruent preferences affected preference-consistent information sharing only under the condition of being understood.

Experiment 2
Method

Participants and design. The sample included 80 students (45 female, $M = 21.50$ years). Again, the experiment was based on a 2 (preference understanding vs. nonunderstanding) × 2 (preference congruity vs. incongruity) factorial design.

Decision task. We used the same decision task as in Experiment 1. Each participant received 48 attributes characterizing

two job applicants (24 preference consistent, 24 preference inconsistent).

Procedure. We invited only one participant per experimental session. The participant first received a cover letter, which explained that she was to work on a personnel selection task together with a partner. Then information materials that contained the attributes of the two job candidates were distributed. She was told to memorize the attributes (within 30 min), as taking the information materials to the discussion was not permitted.

Thereafter, the participant and her partner were brought together in one room and seated face to face. The participants were unaware that their partner, a male student assistant, was a confederate of the experimenter. His utterances were predefined, and he had been trained in how to behave prior to the experiment.

The experimenter started videotaping and asked the two discussion members to exchange information and to mutually decide in favor of one of the candidates. The discussion had no time limit. The confederate initiated the discussion with the question, "So, what do you think?" Most participants stated their decision preference and mentioned some candidate attributes. If a participant mentioned information without stating her preference, the confederate asked for it directly. If a participant stated her preference and asked for the confederate's opinion, he did not reveal his bogus preference but asked for information ("Aren't we supposed to exchange information, too?"). Using these questions, all participants were led to state their preference and to share some information before the confederate revealed his bogus preference. We used this part of the discussion as the basis to assess whether, prior to any experimental manipulation, a preference-consistency bias occurs in face-to-face communication.

After the participant had finished mentioning information, the confederate carried out the manipulation of the independent variables: He stated—depending on the experimental condition—that he held the same versus a different preference and that he understood versus did not understand the preference of the participant. In all experimental conditions, the wording followed the wording used in Experiment 1 (see Table 1). The confederate neither repeated his bogus preference nor showed signs of (non)understanding at any other point. Apart from the two sentences containing the manipulation, the confederate did not say anything else at this time but waited for the participant to react. The information the participant mentioned in the following conversation allowed the preference-consistency bias depending on preference understanding and preference congruity to be observed.

Apart from the manipulation of the independent variables, the confederate behaved identically in all experimental conditions. He acted naturally and mentioned information himself. On average, the confederate contributed 3.16 attributes ($SD = 2.81$) to the discussion, with no differences depending on the experimental factors (all Fs < 0.663, all ps > .05). He introduced the attributes literally, with neutral framing expressions

(e.g., "What I remember is that A was the one whose research on consumer behavior is regarded as outstanding."). According to Experiment 1, a communication bias in favor of preference-consistent information seems to be the general communication behavior in such a situation. Hence, to act naturally on one hand, but not to "pass on" preference-consistent communication to the participant on the other hand, we trained the confederate to show a slight preference-consistency bias in his utterances. Overall, he mentioned 1.97 ($SD = 1.74$) attributes consistent with his bogus preference and 1.19 ($SD = 1.20$) preference-inconsistent items, $F(1, 76) = 45.72$, $p < .001$, $\eta_p^2 = .38$. The confederate's preference-consistency bias was unaffected by the experimental manipulation (all Fs < 0.356, all ps > .05).

The confederate kept the conversation going until the participant indicated that she did not intend to share further information (for example, by asking the confederate to now officially state the decision in the case of congruent preferences or by asking the experimenter how to proceed further). In this moment, the experimenter directly asked the discussants whether they wanted to share further information. The confederate waited for the participant to answer and agreed with her opinion in all cases. After the participant explicitly stated that she had no further information to share, the experimenter ended the discussion phase (which took about 5 min on average). She told the discussants that they did not have to make a decision. Instead, they were asked to individually fill in a questionnaire that contained manipulation checks. Thereafter, participants were thanked and fully debriefed.

Discussion coding. Two research assistants, both unaware of the hypotheses, coded the videotapes of the discussions. For a statement to be counted as preference consistent or preference inconsistent, (a) its valence and (b) which candidate it described had to be clearly determinable. Here, the valence the participant implied and the candidate she ascribed the information to were taken as a basis for coding, even if the statement deviated from the wording in the informational materials. Each research assistant coded 30 discussions exclusively. Twenty videotapes (five for each experimental condition) were coded independently by both research assistants to estimate coding reliability. The two coders concurred in 99% of all cases (this high rate is not surprising as it is relatively easy to determine whether a piece of information is preference-consistent). They reached agreement on the remaining 1% after rewatching and discussing the respective videotapes.

Results and Discussion

Control Variables and Manipulation Checks. Participants' age, sex, candidate preference (46% Candidate A, 54% Candidate B), and the assigned areas of the informational material had no effect on any of the dependent variables. As indicated by the manipulation checks, which were calculated with the full design similar to Experiment 1, the participants recognized whether the confederate allegedly had the same preference

Table 3. Means and Standard Deviations (in Parentheses) for Pieces of Information Communicated (Face to Face) in Experiment 2 as a Function of Preference Congruity and Preference Understanding

Information communicated	Experimental condition			
	Congruity and understanding	Congruity and nonunderstanding	Incongruity and understanding	Incongruity and nonunderstanding
Overall amount	3.76 (3.67)	9.39 (5.81)	7.19 (7.08)	11.85 (9.49)
Preference-consistent	2.00 (2.37)	7.06 (4.91)	4.10 (5.05)	7.85 (5.74)
Preference-inconsistent	1.76 (1.90)	2.33 (1.68)	3.10 (2.98)	4.00 (4.28)
Preference-consistency bias	0.24 (2.21)	4.72 (5.19)	1.00 (4.32)	3.85 (3.54)

($M = 5.67$, $SD = 0.81$) or not ($M = 1.33$, $SD = 1.42$), $F(1, 75) = 289.85$, $p < .001$, $\eta_p^2 = .79$. Perceived preference congruity was neither significantly affected by the manipulation of preference understanding, $F(1, 75) = 3.25$, $p > .05$, nor by an interaction of the two factors, $F(1, 75) = 1.96$, $p > .05$. The participants also felt more understood when the confederate stated that he comprehended their preference ($M = 5.14$, $SD = 0.90$) than when he said he did not ($M = 3.89$, $SD = 1.29$), $F(1, 75) = 26.53$, $p < .001$, $\eta_p^2 = .26$. Again, perceived preference understanding was neither significantly affected by the manipulation of preference congruity, $F(1, 75) = 3.14$, $p > .05$, nor by an interaction of the two factors, $F(1, 75) = 1.90$, $p > .05$. Hence, the manipulation of the independent variables was successful.

Preference-Consistent Information Sharing. After a participant had stated her preference, and before the confederate carried out the manipulation, participants mentioned more preference-consistent ($M = 4.35$, $SD = 3.64$) than preference-inconsistent items ($M = 1.91$, $SD = 2.36$). Hence, the preference-consistency bias amounted to 2.44 ($SD = 2.94$) and differed significantly from zero, $t(79) = 7.42$, $p < .001$. As expected, in this phase, the bias did not depend on the experimental factors (all Fs < 1.17, all ps > .05). Therefore, Experiment 2 supports Hypothesis 1 replicating preference-consistent information sharing as shown in Experiment 1, this time in the context of a face-to-face discussion.[3]

Effects of Preference Understanding and Preference Congruity. The preference-consistency bias shown by the participants between the experimental manipulation and the end of the discussion was analyzed in a 2 (preference understanding vs. nonunderstanding) ×2 (preference congruity vs. incongruity) factorial ANOVA.[4] (See Table 3 for the descriptive statistics.)

Preference understanding. Similar to Experiment 1, the ANOVA revealed a main effect for preference understanding: Participants who were not understood by their partner showed a significantly higher bias ($M = 4.26$, $SD = 4.36$) than participants who were understood ($M = 0.62$, $SD = 3.41$), $F(1, 76) = 17.43$, $p < .001$, $\eta_p^2 = .19$. The latter communicated almost representatively in relation to the knowledge they held; that is, their preference-consistency bias did not significantly

deviate from zero, $t(41) = 1.18$, $p > .05$ (which was not the case for participants who were not understood, $t(37) = 6.03$, $p < .001$). Thus, Hypothesis 2a was supported.

Preference congruity. Preference congruity did not significantly influence the preference-consistency bias: Participants showed a similar bias when their partner had the same ($M = 2.31$, $SD = 4.44$) or a different preference ($M = 2.39$, $SD = 4.17$), $F(1, 76) = 0.004$, $p > .05$. The interaction of the experimental factors was also not significant, $F(1, 76) = 0.865$, $p > .05$. In other words, whereas in Experiment 1 preference congruity affected the preference-consistency bias when understanding was given, no such conditional effect was observed in Experiment 2. Thus, Hypothesis 2b received no support in the face-to-face setting. Hence, it is possible that the influence of a motivation to convince is too small to be expressed in a more natural setting with more "noise."

Preference certainty. On a 0 (*not at all*) to 6 (*totally*) scale, participants expressed about average preference certainty ($M = 3.26$, $SD = 1.35$), which did not significantly differ across the experimental conditions (all Fs < 1.03, all ps > .05). Again, certainty did not significantly correlate with the preference-consistency bias, $r = .10$, $p > .05$, and when it was included as a covariate in the ANOVA reported above, all results remained stable: A main effect for preference understanding was found, $F(1, 75) = 16.55$, $p < .001$, $\eta_p^2 = .18$, and neither a main effect for preference congruity nor an interaction of both factors emerged (both Fs < 0.838, both ps > .05). Moreover, preference certainty had no moderating influence on the effect of preference understanding on the preference-consistency bias, $\beta = .044$, $p > .05$. Hence, as in Experiment 1, the degree of preference certainty did not influence any of the effects reported.

Summing up, Experiment 2 replicates and extends the results of Experiment 1 by providing evidence that a communication bias in favor of preference-consistent information also occurs in face-to-face settings. Moreover, it is important to note that in contrast to several previous studies (e.g., Dennis, 1996; Schulz-Hardt et al., 2006; Stasser & Titus, 1985), we did not use a hidden profile distribution in which sharedness and preference consistency of information are inherently confounded. Therefore, we can exclude that the preference-consistency bias observed in our study was driven or

aggravated by a shardness bias. We also found that this bias is stronger when participants received the feedback that their discussion partner did not understand their preference, whereas it is smaller when they felt understood. These findings are in line with the idea that a motivation to be understood might fuel preference-consistent information sharing.

General Discussion

People often work together to make optimal decisions in situations with no incentives that could lead them to seek personal advantage over their discussion partner. These situations require information to be shared openly, for example, when a team of doctors discusses their knowledge to select the best treatment for a patient or when two researchers debate which journal to submit their manuscript to.

The idea underlying the present study is that even in such a context of cooperative decision making, people discuss more information supporting their individual preference than information contradicting it. We aimed to provide unequivocal evidence for this general tendency to exhibit *preference-consistent information sharing*. Moreover, we tested if this bias is affected by (a) whether or not a discussion partner allegedly understood the reasons for the participants' own preference and by (b) whether the partner holds the same preference as or a different preference to the participant. We did so to gain information about the role of two social motivations that could underlie preference-consistent information sharing, namely, (a) the *motivation to be understood* in one's thoughts and, hence, also in one's decision preference and (b) the *motivation to convince* others to adopt one's own preferred alternative.

Preference-Consistent Information Sharing

Our two experiments provide clear evidence for preference-consistent information sharing. Participants shared more than twice as many preference-consistent as preference-inconsistent pieces of information, even though they had an equal amount of both at their disposal. This result was not caused by recall effects because participants copied the items they wanted to share directly from the experimental materials (Experiment 1). Moreover, preference-consistent information sharing also occurred in face-to-face settings (Experiment 2).

Motivational Determinants of Preference-Consistent Information Sharing

Across two experiments, participants showed significantly stronger preference-consistent information sharing when their discussion partner claimed not to understand why they held their particular decision preference, as compared with participants who were allegedly understood by their partner. This effect was found for a written communication as well

as for a face-to-face discussion, thereby lending support to the assumption that the effect is stable and can also be found in more natural decision-making settings. These results indicate that a motivation to be understood might indeed be a cause for preference-consistent information sharing.

With respect to preference congruity, in Experiment 1, we observed a significant but relatively small conditional effect: If participants were informed that their partner understood their decision preference, they showed a larger bias in favor of preference-consistent information when preferences were incongruent than when they were congruent. No such effect was apparent when understanding was not given. This might indicate that a motivation to convince others can play a secondary role in the development of preference-consistent information sharing, inasmuch as it becomes crucial if the primary goal to be understood by the communication partner has already been achieved. In the face-to-face setting of Experiment 2, however, this effect was absent. Hence, at least in cooperative settings like the ones investigated in our experiments, a motivation to convince others is not the primary driving force underlying preference-consistent information sharing. In primarily competitive situations in daily life, however, a motivation to convince might exert greater influence (compare De Dreu et al., 2008; Wittenbaum et al., 2004).

Limitations

Clearly, a limitation of our study is that we did not *directly* manipulate the motivation to be understood and the motivation to convince. Rather, we addressed these motivations by manipulating *necessary* conditions for them to come into effect: A motivation to be understood should cease to be important if the partner states that she understands why the participant holds her preference, and a motivation to convince should become irrelevant if the partner already holds the same decision preference as the participant. Hence, our results imply that the motivation to convince does not seem to be a primary cause of preference-consistent information sharing because this bias was not substantially reduced when the partner was already convinced. At the same time, the moderating effects of preference understanding imply that a motivation to be understood is a promising candidate for explaining the preference-consistency bias. However, we do not know whether our manipulations are also *sufficient* to produce the presumed motivational effects. To avoid demand effects, we refrained from asking participants about the extent to which they want to convince their partner or to be understood by her in the forthcoming discussion. Hence, more evidence is needed before we can confidently accept a motivation to be understood as an explanation for preference-consistent information sharing.

As a consequence of this indirect relation between our theoretical concepts and our experimental manipulations, the question arises whether other motivational states could have contributed to the effects we found. We focused on *social*

motivations, but it is also conceivable that nonsocial motivations might contribute to the preference-consistency bias. If this was the case and if these nonsocial motivations were affected by our understanding manipulation, then this would present a problem for the interpretation of our results. Cognitive dissonance immediately comes to mind as a possible nonsocial motivation capable of causing a preference-consistency bias: Participants might have developed a motivation to reduce dissonance that resulted from their initial choice, and the utterance of understanding by their discussion partner might have offered them an opportunity for self-affirmation that reduced their dissonance (compare Steele, 1988). This might have led to more unbiased communication as a result. Similarly, when confronted with nonunderstanding by their partner, participants could have perceived this as a threat and feel motivated to restore the certainty in their own decision by collecting—and uttering—mainly preference-consistent arguments.

Notwithstanding the importance of cognitive dissonance theory, there are three reasons why we consider dissonance reduction unlikely to be responsible for the effects we found: First, cognitive dissonance is conceptualized (Festinger, 1957, 1964) and empirically shown (Frey, 1981) to follow actual (i.e., irreversible) decisions, rather than preference statements (i.e., reversible decisions). We used the latter in our study. Second, social disagreement is expected to increase cognitive dissonance (Festinger, 1957). Hence, if preference-consistent information sharing served as a means of dissonance reduction for our participants, we should have found a more pronounced bias under the condition of preference incongruity than we actually did. Third, empirical evidence from the field of information search shows that mechanisms to reduce cognitive dissonance are moderated by decision certainty: When confidence in the own decision is stronger, the bias toward belief confirming evidence also rises (e.g., Schulz-Hardt, Frey, Lüthgens, & Moscovici, 2000; Schulz-Hardt, Jochims, & Frey, 2002). As described above, we did not find any moderating influence of preference certainty. Hence, we regard it as unlikely that cognitive dissonance played a major role in our experiments. However, further research is needed to disentangle the influence of different motivations on preference-consistent information sharing.

In any case, we do not claim that preference-consistent information sharing is *exclusively* driven by social motives like the motivation to be understood. For example, as hypothesized by Mojzisch et al. (2010), the well-documented phenomenon that preference-consistent information is evaluated more favorably than preference-inconsistent information (e.g., Edwards & Smith, 1996) might lead people to (unintentionally) mention primarily preference-consistent information if they attempt to share "high-quality" information with their communication partner. Our study did not capture such processes and, hence, only covered a subset of the factors that could give rise to preference-consistent information sharing.

Preference-Consistent Information Sharing and the Quality of Group Decisions

Even though we did not use a hidden profile information distribution in our experiments, evidence for systematic preference-consistent information sharing, as provided in our study, may have important implications for the quality of group decisions in hidden profile situations. Hidden profiles are group decision tasks in which the correct solution cannot be detected by the group members prior to an exchange of information because each of them initially possesses a subset of information supporting an inferior decision alternative. Shared and unshared information point to different decisions, and the option implied by the unshared information is the correct one. Groups typically fail to solve hidden profiles (see Lu et al., 2011), and research has intensively tried to identify the causes for this failure (e.g., Faulmüller, Kerschreiter, Mojzisch, & Schulz-Hardt, 2010; Gigone & Hastie, 1993; Greitemeyer & Schulz-Hardt, 2003; Mojzisch & Schulz-Hardt, 2010; Winquist & Larson, 1998). As a dominant explanation, the argument has been put forward that a discussion bias in favor of shared information prevents groups from discussing sufficient unshared information for the superiority of the correct solution to become evident (e.g., Stasser, 1992). However, in a hidden profile, sharedness and preference consistency are inherently confounded. Given the findings of our study, namely, that people favor to discuss preference-consistent information, it is possible that the failure to discuss unshared information is—at least partly—due to its preference inconsistency. Hence, if we want to prevent biased discussions in groups, we should not only address the determinants of a sharedness bias but also those of a preference-consistency bias.

Suggestions for Future Research

Even though our study indicates that the motivation to be understood by others might influence information sharing, the deeper roots of this motivation lie beyond the scope of this article. In particular, our data do not reveal whether our participants were expressing a basic human need or rather following a communicative convention. Psycholinguistic theory holds that each speech act involves an appeal addressed by the sender to the receiver (Bühler, 1934/1999). Following this reasoning, one could argue that people take utterances of nonunderstanding as an appeal to pass on preference-consistent information. Somewhat similar to this, Stasser and Titus (1985, 1987) speculated that group members might follow a social expectation that leads them to actively advocate their preferred decision alternative during discussion. However, some authors conceptualize being understood "as an agent of essential psychological human need" (Prilleltensky & Lobel, 1987, p. 221). This perspective also seems plausible, given the central role felt understanding plays for the assessment of different types of relationships (e.g., Elliott & James,

1989) and for the willingness to engage in future interaction (e.g., Reis et al., 2004), and given the positive emotions (e.g., Oishi et al., 2008; Seder & Oishi, 2009) and the physical well-being (e.g., Lun et al., 2008) it evokes. Further research is needed to disentangle these two possible deeper roots of preference-consistent information sharing.

Moreover, it is conceivable that a motivation to be understood is subject to cultural and situational variance. All our participants were Westerners, and findings from such a population do not necessarily apply to all people (Heinrich, Heine, & Norenzayan, 2010). Lun, Oishi, Coan, Akimoto, and Miao (2010) found systematic cultural variations in responses to being misunderstood. They demonstrated at the functional, behavioral, and neurophysiological level of analysis that felt misunderstanding was motivating for European American participants but demotivating for Asian and Asian American participants. Lun et al. argued that Westerners may perceive being misunderstood as a challenge to their own perspectives that can be overcome. In contrast, Easterners may be discouraged by misunderstanding as they take it as a sign of social disconnection. Albeit speculatively, these findings may suggest that the result of our study (i.e., nonunderstanding increases preference-consistent information sharing) might indeed be limited to Western populations. By contrast, in an Eastern population, people might react to nonunderstanding by reducing preference-consistent argumentation to maintain social harmony. Future research is called for to test this idea.

Moreover, we investigated student participants who assumed that they would be working together with another student. Malle (2004) suggested that people higher in the hierarchy of social power would be less likely to offer explanations for what they do or say. This implies that people in a more powerful position might show less preference-consistent information sharing due to a less pronounced motivation to be understood or due to a greater conviction of being understood by others even in the absence of such explanations. How social status might affect the motivation to be understood and subsequently influence preference-consistent information sharing is another question for future research.

In our suggestions above, we only touch on a few of the many possible avenues for future research on preference-consistent information sharing. We view our study as a first step toward understanding this consistency bias in group information sharing. Our hope is that it will stimulate further research extending our knowledge about the influences of consistency tendencies—which are so well documented in individual settings—to the context of groups.

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Data collection took place at the University of Göttingen in accordance with the university's ethical guidelines. Nadira Faulmüller is now working at the University of Oxford and Delft University of Technology.

Declaration of Conflicting Interests

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Notes

1. The mean values total 10.04 because one participant transcribed 13 instead of 10 attributes.
2. Note that the analyses reported below are based on all information included on the second information list, regardless of whether the attributes were repeated or new with respect to the first information list. We do not report separate analyses for information introduction and information repetition as very few pieces of information were repeated overall ($M = 1.01$, $SD = 1.28$; 49% of participants did not repeat any attributes). Hence, the effects result mainly from the transcription of new information. When we analyzed new information exclusively, all descriptive patterns and results of significance tests reported remained stable. When we analyzed only repeated information, all descriptive patterns remained the same, but some effects failed to reach statistical significance due to the very small amount of repeated information.
3. Some participants mentioned information *before* they stated their preference. Whether these attributes were consistent or inconsistent with the participants' preference could only have been determined post hoc. Therefore, these statements were not counted. If these statements (with their preference-consistency attributed post hoc) were included in the analysis of unmanipulated preference-consistent information sharing, all results reported above remained stable, with the effect growing even stronger. Overall, participants shared 6.00 attributes ($SD = 8.97$) prior to stating their preference.
4. As in Experiment 1, all analyses reported below are based on all the information the participants mentioned during discussion, regardless of whether the attributes were repeated or not. Again, very few pieces of information were repeated ($M = 1.11$, $SD = 2.04$; 55% of participants did not repeat any attributes). When including only information that was brought into the discussion for the first time, all descriptive patterns and all results of significance tests reported remained stable. When we analyzed the repeated information exclusively, all descriptive patterns remained the same, but some effects failed to reach statistical significance, likely due to the very small amount of repeated information.

References

Bechtoldt, M. N., De Dreu, C. K. W., Nijstad, B. A., & Choi, H. S. (2010). Motivated information processing, social tuning, and group creativity. *Journal of Personality and Social Psychology, 99*, 622-637. doi:10.1037/a0019386

Brodbeck, F. C., Kerschreiter, R., Mojzisch, A., & Schulz-Hardt, S. (2007). Group decision making under conditions of distributed knowledge: The information asymmetries model. *Academy of Management Review, 32*, 459-479.

Bühler, K. (1999). *Sprachtheorie: Die Darstellungsfunktion der Sprache* [Theory of language: The representational function of language]. Stuttgart, Germany: Lucius & Lucius (Original work published 1934).

Cahn, D. D. (1990). Perceived understanding and interpersonal relationships. *Journal of Social and Personal Relationships, 7*, 231-244. doi:10.1177/0265407590072005

Chen, F. S., Minson, J. A., & Tormala, Z. L. (2010). Tell me more: The effects of expressed interest on receptiveness during dialog. *Journal of Experimental Social Psychology, 46*, 850-853. doi:10.1016/j.jesp.2010.04.012

Cross, S. E., Bacon, P. L., & Morris, M. L. (2000). The relational-interdependent self-construal and relationships. *Journal of Personality and Social Psychology, 78*, 791-808. doi:10.1037/0022-3514.78.4.791

De Dreu, C. K. W., & Beersma, B. (2010). Team confidence, motivated information processing, and dynamic group decision making. *European Journal of Social Psychology, 40*, 1110-1119. doi:10.1002/ejsp.763

De Dreu, C. K. W., Nijstad, B. A., & Van Knippenberg, D. (2008). Motivated information processing in group judgment and decision making. *Personality and Social Psychology Review, 12*, 22-49. doi:10.1177/1088868307304092

Dennis, A. R. (1996). Information exchange and use in small group decision making. *Small Group Research, 27*, 532-550. doi:10.1177/1046496496274003

Edwards, K., & Smith, E. E. (1996). A disconfirmation bias in the evaluation of arguments. *Journal of Personality and Social Psychology, 71*, 5-24. doi:10.1037/0022-3514.71.1.5

Elliott, R., & James, E. (1989). Varieties of client experience in psychotherapy: An analysis of the literature. *Clinical Psychology Review, 9*, 443-467. doi:10.1016/0272-7358(89)90003-2

Faulmüller, N., Kerschreiter, R., Mojzisch, A., & Schulz-Hardt, S. (2010). Beyond group-level explanations for the failure of groups to solve hidden profiles: The individual preference effect revisited. *Group Processes & Intergroup Relations, 13*, 653-671. doi:10.1177/1368430210369143

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Festinger, L. (1964). *Conflict, decision, and dissonance*. Stanford, CA: Stanford University Press.

Foppa, K. (1995). On mutual understanding and agreement in dialogues. In I. Marková, C. F. Graumann, & K. Foppa (Eds.), *Mutualities in dialogue* (pp. 149-175). New York, NY: Cambridge University Press.

Frey, D. (1981). Reversible and irreversible decisions: Preference for consonant information as a function of attractiveness of decision alternatives. *Personality and Social Psychology Bulletin, 7*, 621-626. doi:10.1177/014616728174018

Gigone, D., & Hastie, R. (1993). The common knowledge effect: Information sharing and group judgment. *Journal of Personality and Social Psychology, 65*, 959-974. doi:10.1037/0022-3514.65.5.959

Greitemeyer, T., & Schulz-Hardt, S. (2003). Preference-consistent evaluation of information in the hidden profile paradigm: Beyond group-level explanations for the dominance of shared information in group decisions. *Journal of Personality and Social Psychology, 84*, 322-339. doi:10.1037/0022-3514.84.2.322

Greitemeyer, T., Schulz-Hardt, S., & Frey, D. (2003). Präferenzkonsistenz und Geteiltheit von Informationen als Einflussfaktoren auf Informationsbewertung und intendiertes Diskussionsverhalten bei Gruppenentscheidungen [Preference consistency and sharedness of information as predictors of information evaluation and intended behavior in group discussions]. *Zeitschrift für Sozialpsychologie, 34*, 9-23. doi:10.1024//0044-3514.34.1.9

Hart, W., Albarracin, D., Eagly, A. H., Brechan, I., Lindberg, M. J., & Merrill, L. (2009). Feeling validated versus being correct: A meta-analysis of selective exposure to information. *Psychological Bulletin, 135*, 555-588. doi:10.1037/a0015701

Heinrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61-135. doi:10.1017/S0140525X0999152X

Hollingshead, A. B., Jacobsohn, G. C., & Beck, S. J. (2007). Motives and goals in context: A strategic analysis of information sharing in groups. In K. Fiedler (Ed.), *Social communication* (pp. 257-280). New York, NY: Psychology Press.

Lu, L., Yuan, Y. C., & McLeod, P. L. (2011). Twenty-five years of hidden profile studies in group decision making: A meta-analysis. *Personality and Social Psychology Review, 16*, 54-75. doi:10.1177/1088868311417243

Luft, J. (1969). *Of human interaction*. Palo Alto, CA: Mayfield.

Lun, J., Kesebir, S., & Oishi, S. (2008). On feeling understood and feeling well: The role of interdependence. *Journal of Research in Personality, 42*, 1623-1628. doi:10.1016/j.jrp.2008.06.009

Lun, J., Oishi, S., Coan, J. A., Akimoto, S., & Miao, F. F. (2010). Cultural variations in motivational responses to felt misunderstanding. *Personality and Social Psychology Bulletin, 36*, 986-996. doi:10.1177/0146167210362979

Malle, B. F. (2004). *How the mind explains behavior: Folk explanations, meaning, and social interaction*. Cambridge, MA: MIT Press.

Mojzisch, A., Grouneva, L., & Schulz-Hardt, S. (2010). Biased evaluation of information during discussion: Disentangling the effects of preference consistency, social validation, and ownership of information. *European Journal of Social Psychology, 40*, 946-956. doi:10.1002/ejsp.660

Mojzisch, A., & Schulz-Hardt, S. (2006). Information sampling in group decision making: Sampling biases and their consequences. In K. Fiedler & P. Juslin (Eds.), *Information sampling*

and adaptive cognition (pp. 299-325). Cambridge, England: Cambridge University Press.

Mojzisch, A., & Schulz-Hardt, S. (2010). Knowing others' preferences degrades the quality of group decisions. *Journal of Personality and Social Psychology, 98*, 794-808. doi:10.1037/a0017627

Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology, 2*, 175-220. doi:10.1037/1089-2680.2.2.175

Oishi, S., Koo, M., & Akimoto, S. (2008). Culture, interpersonal perceptions, and happiness in social interactions. *Personality and Social Psychology Bulletin, 34*, 307-320. doi:10.1177/0146167207311198

Postmes, T., Spears, R., & Cihangir, S. (2001). Quality of decision making and group norms. *Journal of Personality and Social Psychology, 80*, 918-930. doi:10.1037/0022-3514.80.6.918

Prilleltensky, I., & Lobel, T. E. (1987). The experience of being understood: A phenomenological-structural analysis. *Multivariate Experimental Clinical Research, 8*, 221-238.

Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201-225). Mahwah, NJ: Lawrence Erlbaum.

Sassenberg, K., Ellemers, N., & Scheepers, D. (2012). The attraction of social power: The influence of construing power as opportunity versus responsibility. *Journal of Experimental Social Psychology, 48*, 550-555. doi:10.1016/j.jesp.2011.11.008

Scholten, L., Van Knippenberg, D., Nijstad, B. A., & De Dreu, C. K. W. (2007). Motivated information processing and group decision making: Effects of process accountability on information processing and decision quality. *Journal of Experimental Social Psychology, 43*, 539-552. doi:10.1016/j.jesp.2006.05.010

Schulz-Hardt, S., Brodbeck, F. C., Mojzisch, A., Kerschreiter, R., & Frey, D. (2006). Group decision making in hidden profile situations: Dissent as a facilitator for decision quality. *Journal of Personality and Social Psychology, 91*, 1080-1093. doi:10.1037/0022-3514.91.6.1080

Schulz-Hardt, S., Frey, D., Lüthgens, C., & Moscovici, S. (2000). Biased information search in group decision making. *Journal of Personality and Social Psychology, 78*, 655-669. doi:10.1037/0022-3514.78.4.655

Schulz-Hardt, S., Jochims, M., & Frey, D. (2002). Productive conflict in group decision making: Genuine and contrived dissent as strategies to counteract biased information seeking. *Organizational Behavior and Human Decision Processes, 88*, 563-586. doi:10.1016/S0749-5978(02)00001-8

Seder, P. J., & Oishi, S. (2009). Ethnic/racial homogeneity in college students' Facebook friendship networks and subjective well-being. *Journal of Research in Personality, 43*, 438-443. doi:10.1016/j.jrp.2009.01.009

Stangor, C., & McMillan, D. (1992). Memory for expectancy-congruent and expectancy-incongruent information: A review of the social and social developmental literatures. *Psychological Bulletin, 111*, 42-61. doi:10.1037/0033-2909.111.1.42

Stasser, G. (1988). Computer simulation as a research tool: The DISCUSS model of group decision making. *Journal of Experimental Social Psychology, 24*, 393-422. doi:10.1016/0022-1031(88)90028-5

Stasser, G. (1992). Pooling of unshared information during group discussion. In S. Worchel, W. Wood, & J. A. Simpson (Eds.), *Group process and productivity* (pp. 48-67). Newbury Park, CA: SAGE.

Stasser, G., & Titus, W. (1985). Pooling of unshared information in group decision making: Biased information sampling during discussion. *Journal of Personality and Social Psychology, 48*, 1467-1478. doi:10.1037/0022-3514.48.6.1467

Stasser, G., & Titus, W. (1987). Effects of information load and percentage of common information on the dissemination of unique information during group discussion. *Journal of Personality and Social Psychology, 53*, 81-93. doi:10.1037/0022-3514.53.1.81

Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 261-302). New York, NY: Academic Press.

Steinel, W., Utz, S., & Koning, L. (2010). The good, the bad and the ugly thing to do when sharing information: Revealing, concealing and lying depend on social motivation, distribution and importance of information. *Organizational Behavior and Human Decision Processes, 113*, 85-96. doi:10.1016/j.obhdp.2010.07.001

Toma, C., & Butera, F. (2009). Hidden profile and concealed information: Strategic information sharing and use in group decision making. *Personality and Social Psychology Bulletin, 35*, 793-806. doi:10.1177/0146167209333176

Van Kaam, A. L. (1959). Phenomenal analysis: Exemplified by a study of the experience of "really feeling understood." *Journal of Individual Psychology, 15*, 66-72.

Winquist, J. R., & Larson, J. R., Jr. (1998). Information pooling: When it impacts group decision making. *Journal of Personality and Social Psychology, 74*, 371-377. doi:10.1037/0022-3514.74.2.371

Wittenbaum, G. M., Hollingshead, A. B., & Botero, I. C. (2004). From cooperative to motivated information sharing in groups: Moving beyond the hidden profile paradigm. *Communication Monographs, 71*, 286-310. doi:10.1080/0363452042000299894

Wittenbaum, G. M., Hubbell, A. P., & Zuckerman, C. (1999). Mutual enhancement: Toward an understanding of the collective preference for shared information. *Journal of Personality and Social Psychology, 77*, 967-978. doi:10.1037/0022-3514.77.5.967