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When Asking "What" and "How" Helps You Win: Mimicry of Interrogative Terms Facilitates Successful Online Negotiations

Kate Muir,[1] Adam Joinson,[1] Emily Collins,[1,*] Rachel Cotterill[2] and Nigel Dewdney[2,†]

1 Applied Digital Behaviour Lab, School of Management, University of Bath, Bath, UK
2 Department of Computer Science, University of Sheffield, Sheffield, UK
* Human Factors Excellence (HuFEx), School of Psychology, Cardiff University, Cardiff, CF10 3AT, UK
† School of Management, University of Bath, Bath, BA2 7AY, UK

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Correspondence
Kate Muir, School of Sciences, Bath Spa University, Newton Park, Newton St Loe, Bath BA2 9BN, UK; e-mail: k.muir@bathspa.ac.uk.

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Abstract

Strategic word mimicry during negotiations facilitates better outcomes. We explore mimicry of specific word categories and perceptions of rapport, trust, and liking as underlying mechanisms. Dyads took part in an online negotiation exercise in which word mimicry was manipulated: Participants were instructed to mimic each other's words (both-mimic), one participant mimicked the other (half-mimic), or neither participant mimicked (neither-mimic). When given a simple instruction to mimic their partner, participants mimicked both the style (personal pronouns, adverbs, linguistic style, interrogative terms) and the content (affiliation terms, power terms, and assents) of their partner's messages. Mimicry was associated with greater joint and individual points gain and perceptions of rapport from the mimicked partner. Further, mimicry of interrogative terms (e.g., how, why) mediated positive effects of mimicry upon negotiation outcomes, suggesting the coordination of question asking between negotiators is an important strategy to create beneficial interactions and add value in negotiations.

Negotiations are an often contentious and unpredictable communicative situation, involving distribution of limited resources, between negotiators with mutually exclusive goals. Negotiations can be described as a "process whereby differing perspectives on outcomes exist amongst negotiators, so there are obstacles to reaching an agreement" (Bayram & Ta, 2018, p. 27). Further, negotiators often expect distrust and competition (Fisher, Ury, & Patton, 1991). Establishing a positive relationship, including feelings of trust and rapport between negotiating partners, is thus an important step toward successful outcomes (Nadler, 2004). Mimicry, the imitation of verbal and nonverbal behaviors, has been linked to positive perceptions of the mimicker from the mimicked (Chartrand, Maddux, & Lakin, 2005) and positive outcomes of negotiations for both the mimicker and the mimicked (Maddux, Mullen, & Galinsky, 2008). Thus, mimicry is one way in which negotiators can establish a positive relationship, even in short time frames, and achieve a successful negotiation outcome.

How does mimicry facilitate negotiations? Previous research has examined the development of trust between negotiators as a promising mediator of the effects of mimicry upon negotiation outcomes

(Maddux et al., 2008; Swaab, Maddux, & Sinaceur, 2011). In this study, we extend this line of research by exploring two potential mechanisms underlying the positive effects of verbal mimicry upon negotiation outcomes: mimicry of specific word types, and enhanced perceptions of trust, rapport, and liking from the mimicked party toward the mimicker. We highlight the role of mimicry of interrogative terms as a previously unexplored mediator. Further, we suggest that contextual factors relating to the negotiation situation may be an important influence upon the underlying mechanisms through which verbal mimicry exerts beneficial effects upon negotiation outcomes.

Verbal Mimicry and Negotiation Outcomes

There is a long history in the study of mimicry, that is, the imitation, copying, or similarity in nonverbal and verbal behaviors between conversationalists (Chartrand & Lakin, 2013), and for good reason. Mimicry seems to be a ubiquitous part of human communication (Chartrand, Maddux, & Lakin, 2005), and under most circumstances, it is associated with positive outcomes. These include increased likelihood of prosocial behavior being performed by the mimicked (van Baaren, Holland, Kawakami, & van Knippenberg, 2004), greater liking and rapport felt by the mimicked toward the mimicker (Guéguen, 2009), and greater tips gained by a mimicking waitress (Jacob, Gueguen, Martin, & Boulbry, 2011).

In terms of mimicry and negotiations, behavioral mimicry is associated with successful outcomes. The outcomes of a negotiation can be characterized as successful in several ways. One way is recording whether a deal is reached within the allocated negotiation time period which is acceptable to all parties. Alternatively, some negotiation exercises (e.g., New Recruit: Neale, 1997) quantify negotiation outcomes using a points system, measuring the number of points gained at the end of the negotiation by the dyad as a whole (joint points) or by each individual in the negotiation (individual points). Maddux et al. (2008) found that when individuals purposefully imitated the behavioral mannerisms of their conversational partner during face-to-face negotiations, they achieved better negotiation outcomes. These outcomes included reaching an acceptable deal (study 2) and increased joint and individual points gain (study 1), compared with negotiations in which neither partner mimicked. Further, the mimicker gained more individual points compared with the mimicked, showing a clear advantage of mimicking in terms of gaining more points in the negotiation (study 1).

In this study, we are particularly interested in verbal mimicry, in which negotiators mimic individual words, expressions, or entire phrases used by their partner. Where negotiations take place online or in otherwise computer-mediated environments, harnessing the positive effects of behavioral mimicry can be difficult given the more limited nature of nonverbal cues (Swaab, Maddux, & Sinaceur, 2011). In these circumstances, where nonverbal cues are limited, negotiators may be more likely to perform verbal mimicry, by mimicking the language, sentences, or words their partner uses during the negotiation (Scissors et al., 2009).

Just like behavioral mimicry, verbal mimicry has been associated with better outcomes of online negotiations, both in terms of reaching an agreement (Huffaker, Swaab, & Diermeier, 2011) and in terms of individual points gain (Swaab et al., 2011). Verbal mimicry also leads to positive outcomes in situations outside of negotiations. For instance, mimicking the words used by a partner during face-to-face interactions has shown to increase compliance rates with requests for money (Fischer-Lokou, Guegen, Lamy, Martin, & Bullock, 2014). Thus, mimicking the language of one's negotiation partner during computer-mediated negotiations could be a useful strategy in the negotiator's toolbox.

Communication accommodation theory (CAT: Dragojevic, Gasiorek, & Giles, 2016) offers a theoretical explanation for how verbal mimicry facilitates negotiation outcomes. CAT describes how people adjust elements of their communication, both verbal and nonverbal, to be more like (termed convergence) or less like (termed divergence) their conversational partner, or a group. This process can occur along several dimensions including nonverbal behavior (such as gestures), accent, tone of voice, and topic choice, down to the level of specific words used. Convergence can be goal-driven: Communication

will be adjusted to be more like another individual or group when the goal is to affiliate or appear more alike, and the opposite when trying to emphasize differences or appear dissimilar. For instance, having a goal to affiliate with a conversational partner increases behavioral mimicry (Lakin & Chartrand, 2003). Communicative goals can also be to facilitate understanding, as in when individuals adjust the complexity of the topics they discuss or use similar terminology. Further, when convergence in communication is perceived by the recipient as appropriate to the situation or conversational context, it fosters positive feelings between conversationalists, including trust, rapport, and liking (Dragojevic et al., 2016). Thus, CAT predicts that if verbal mimicry during a negotiation is perceived as appropriate to the situation (as opposed to patronizing, for example), this could result in better understanding of the topics under discussion or enhanced perceptions of trust, rapport, and liking between negotiators. In turn, this could facilitate more optimal negotiation outcomes for one or both parties.

Mediating Mechanism: Mimicry of Specific Word Types

We propose that one explanation for the beneficial effects of verbal mimicry upon negotiation outcomes is via the mimicry of *specific* word types. CAT (Giles, 2016) suggests that perceived appropriateness by the mimicked partner influences whether mimicry is received positively or not (Dragojevic et al., 2016). It is therefore possible that mimicry of *some* word types in negotiations is perceived as appropriate, and linked to positive negotiation outcomes, but not others. For example, mimicking words that aid clarification of negotiation processes and outcomes (e.g., financial or cognitive processing terms such as *think, know*) could be perceived as appropriate, whereas mimicry of negative emotion terms (e.g., angry, sad) could not be. In this way, rather than *all* verbal mimicry being beneficial to negotiation outcomes, it could matter *which* words are mimicked. In other words, the effects of verbal mimicry upon negotiation outcomes may be mediated through the mimicry of specific word types.

Firstly, function words are a promising category of words which could mediate the effects of word mimicry. Function words are those that do not have any meaning in themselves but are used to "stitch together" the content within a sentence. For example, in the sentence "You'll be happy to know I've decided to take the offer," the words *happy*, *know*, *decided*, *take,* and *offer* are content, conveying meaning. The other words are function words without any intrinsic meaning, which act to relay relationships between the content. Linguistic style matching (LSM) refers to the extent to which conversation partners use similar proportions of function words in their speech. Some research suggests that high levels of LSM (i.e., negotiators mimicking each other's use of function words) are linked to positive outcomes of negotiations. Richardson, Taylor, Snook, Conchie, and Bennell (2014) reported higher levels of linguistic style matching between police interrogators and suspects were associated with greater success in these negotiations, in terms of higher rates of confessions, compared with lower levels of LSM which were associated with lower rates of confessions. Similarly, where presidential candidates matched their opponent's linguistic style in debates, this was associated with improved polling numbers (Romero, Swaab, Uzzi, & Galinsky, 2015).

However, the evidence as to the usefulness of linguistic style matching in facilitating successful negotiations is mixed, as LSM does not always predict positive negotiation outcomes. Richardson, McCulloch, Taylor, and Wall (2018) found that verbal mimicry only predicted negotiation success (in terms of coming to an agreement) when dyads negotiated face to face under conditions of symmetric power, but not asymmetric power (e.g., one member had more power in the negotiation than their partner: study 1). Further, Ireland and Henderson (2014) discovered that the extent of LSM in the messages of dyads negotiating using an instant messaging program *negatively* predicted the likelihood of an agreement being reached within the allotted negotiating time. Thus, although mimicry of function words could be a word category that mediates the effects of word mimicry in negotiations, the evidence is currently mixed, and the role of LSM needs further clarification.

Turning to message content, the evidence is equally mixed about potential mediating word categories. Firstly, matching of *positive emotional language* (e.g., terms such as *happy*, *joyful*) between negotiators has been associated with positive outcomes of negotiations in terms of more agreements (Bayram & Ta, 2018; Ireland & Henderson, 2014; Taylor & Thomas, 2008), trust between negotiators, and individual points gain (Scissors, Gill, Geraghty, & Gergle, 2009; Swaab et al., 2011), but these effects have not always been reliable (Huffaker et al., 2011; Scissors et al., 2009). Positive outcomes of negotiations in terms of agreements or points gain have also been associated with matching in *assent* terms (words such as *yes*, *agree*: Huffaker et al., 2011; Swaab et al., 2011), use of the *present* and *future* tense (Bayram & Ta, 2018; Scissors et al., 2009; Taylor & Thomas, 2008), and words indicating *cognitive processing* such as *insight* and *causation* terms (Bayram & Ta, 2018). These results could suggest that, in line with CAT, where negotiators match each other's use of these word types, this aids understanding and helps conversationalists to better negotiate deals for one or both parties (Dragojevic et al., 2016).

Yet, the picture is complicated. Matching in some word categories either *does not* predict or can be detrimental to successful outcomes of negotiations, including matching in *negative emotion* terms such as *angry* or *sad* (Bayram & Ta, 2018; Huffaker et al., 2011; Scissors et al., 2009; Swaab et al., 2011; Taylor & Thomas, 2008), the use of the *past tense* (Taylor & Thomas, 2008), and some *cognitive processing* terms such as *discrepancies* and *differentiation* (Bayram & Ta, 2018), and *certainty* and *exclusivity* terms (Taylor & Thomas, 2008).

Taking these studies together, the *type* of words that are mimicked seem to be critical to the success of word mimicry as a negotiation strategy, pointing to mimicry of only certain types of words as a potential mediator. However, the literature on the effectiveness of linguistic style matching in negotiations is mixed, and some promising effects of content matching in negotiations have been observed in only a limited number of studies (Bayram & Ta, 2018; Ireland & Henderson, 2014; Scissors et al., 2009; Swaab et al., 2011; Taylor & Thomas, 2008). Thus, there is not a consistent picture about the types of words that could act as a mediator of the effects of verbal mimicry. This is important because understanding the effectiveness of mimicry of different word categories will highlight how best to harness the power of word-level mimicry in negotiations, by only mimicking those word categories which have evidenced positive effects. Therefore, in the present study we explore matching in linguistic style, alongside a variety of content terms (including those word categories that have been identified in previous research: positive emotion terms, assent terms, past, present and future tense terms, and cognitive processing terms), as mediators of the effects of verbal mimicry in online negotiations.

Mediating Mechanism: Interpersonal Perceptions of Trust, Rapport, and Liking

Alternatively, perceptions of trust, rapport, and liking felt by the mimicked toward the mimicker could act as a mediating mechanism for the effects of verbal mimicry. According to CAT, where conversationalists mimic the language use of their partner (termed "convergence" within CAT), this is generally perceived positively by the mimicked individual, in terms of how much the mimicked individual feels trust, rapport, and liking toward the mimicker (Dragojevic et al., 2016). These enhanced perceptions could help to build a positive working relationship between negotiators. Feasibly, when one negotiator mimics another, this develops feelings of trust and encourages effective communication between negotiators, allowing both parties to discover mutually beneficial priorities (Maddux et al., 2008). Using this knowledge, dyads can then achieve better deals for both negotiation partners in terms of greater joint points gain. For the mimicking individual, they can elicit useful information about their partner's priorities, and this knowledge can be exploited to claim added value for themselves, resulting in greater individual points gain. In both cases, the positive interpersonal feelings generated by mimicry facilitate information sharing which helps negotiating parties to create mutually acceptable agreements, instead of failing to come to an agreement or coming to an impasse (Maddux et al., 2008).

This idea already has some support in the literature. Firstly, *trust* between negotiating partners has already been shown to mediate the effects of behavioral mimicry upon negotiation outcomes (Maddux et al., 2008), and trust also mediated the effects of word mimicry upon online negotiation outcomes (Scissors et al., 2009; Swaab et al., 2011). Similarly, mimicry has also been shown to increase feelings of *rapport*, the subjective feeling that you are engaged with, coordinated with, and experiencing mutual positivity with your conversational partner (Tickle-Degnen & Rosenthal, 1990). Mimicry of function words by one individual toward another has been associated with greater perceptions of rapport between conversationalists (Muir, Joinson, Cotterill, & Dewdney, 2016). Behavioral mimicry has also resulted in increased *liking* of the mimicker by the mimicked (Guéguen, 2009). Further, greater feelings of rapport and liking can lead to better outcomes of negotiations. In one study, participants who took part in a prenegotiation "schmoozing" session, designed to let the negotiators get to know each other, reported greater positive feelings toward their negotiation partners and achieved better negotiation outcomes compared with participants who did not "schmooze" (Morris, Nadler, Kurtzberg, & Thompson, 2002).

Taking the previous literature together, it seems that the negotiation *context* is important in predicting the conditions under which verbal mimicry facilitates negotiation outcomes. Potentially, verbal mimicry could function to enhance trust, rapport, and liking, facilitating greater information sharing which leads to better negotiation outcomes, but only under certain circumstances. Such circumstances could be influenced by the type of relationship involved (e.g., romantic relationships vs. police interrogators and suspects), the communication medium (e.g., face-to-face vs. computer-mediated communication), or the power levels between negotiation partners (e.g., asymmetric vs. symmetric). Thus, the inconsistency in the literature points to a need for exploratory work to further clarify our understanding of the connections between verbal mimicry, LSM, interpersonal perceptions of the mimicker, and negotiation outcomes.

Present Study

We examined mimicry of specific word types and interpersonal perceptions of trust, rapport, and liking as mediating mechanisms behind the effects of verbal mimicry in negotiations. We utilized a simple mimicry manipulation within the context of an online negotiation exercise, with the following three experimental conditions: One participant instructed to mimic their partner's messages during the negotiation, while their partner did not receive any such instruction (half-mimic); neither participant received an instruction to mimic (neither-mimic); and both participants received an instruction to mimic the content of their partner's messages (both-mimic). This latter condition was to explore whether the effects of mimicry were cumulative—if both negotiators were mimicking each other, did this increase the effects beyond if only one partner mimicked? In this study, we focused on answering two main research questions: (a) Does a mimicry instruction result in better negotiation outcomes on the part of the mimicker or mimicked (individual points gain) and/or for the dyad (joint points gain)? (b) Are the effects of the mimicry instruction upon individual and joint points gain mediated through the mimicry of specific word types or through interpersonal perceptions of trust, rapport, or liking?

Method

Participants

A power analysis using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) suggested a total sample size of 76 participants, to yield 95% chance of detecting an effect size of $f = 0.42$ (relating to the difference in individual points gain between mimicker and mimicked: Maddux et al., 2008; Swaab et al., 2011). Eighty-four participants took part in the study (58 females, 24 males, 1 transgender, and 1 declined to say), with a mean age of 26 years ($SD = 9.75$). Participants were undergraduate and postgraduate

students. Twenty-eight participants were in the neither-mimic (control) condition, 28 participants were in the half-mimic condition, and 28 participants were in the both-mimic condition. Participants each received a small monetary reward at the end of the study as a token of thanks for their participation. Ethical approval for the study was granted by the School of Psychology Ethics Committee of the university in which the study took place.

Negotiation Exercise

For the negotiation exercise, we adapted the New Recruit exercise (Neale, 1997) which has been widely used in mimicry research (Maddux et al., 2008; Romero et al., 2015; Swaab et al., 2011). The exercise consists of a negotiation between a job candidate and recruiter, over terms of an employment offer extended to the candidate. The terms consisted of eight issues of concern (e.g., salary, bonus, job location), each with five options (e.g., bonus options range from 10% to 2%). Each option is worth a number of points to the recruiter and candidate, with higher number of points indicating a stronger preference. The aim for each individual is to gain the greatest possible number of points by the end of the negotiation period. Starting date and salary were distributive issues (the preferences of recruiter and candidate were in direct opposition), job assignment and location were compatible issues (preferences of recruiter and candidate were identical), and the remaining four issues were integrative: Bonus and moving expenses were more valued by the candidate than the recruiter, whereas vacation time and insurance plan were more valued by the recruiter than the candidate.

It is therefore possible for negotiation partners to create value and mutually beneficial deals, by conceding on issues which are of lower importance to them in exchange for the issues which are of high importance. However, they will only discover these areas of mutual interest by sharing information and cooperating with each other throughout the negotiation.

Mimicry Manipulation

Each participant received some "important instructions," which were included at the end of an instruction booklet detailing the negotiation task. The important instructions contained the mimicry manipulation. Participants instructed to mimic their partner received the following instructions (adapted from Maddux et al., 2008, and Swaab et al., 2011):

> Successful negotiators recommend that forming a good rapport and being on the "same wavelength" as your negotiation partner are key to getting a good deal. One way to achieve this is to mimic the general speaking style and language of your negotiation partner. Linguistic and verbal mimicking seems to facilitate online negotiations in particular.
>
> You should try to mimic the words your negotiation partner uses. For example, if the other person uses certain jargon, metaphors, grammar, specific words, or abbreviations (such as "y'know" for "you know") you should do the same. So, for instance, if your negotiation partner says "**can we agree on A for this one mate,**" you could reply "well **mate** that's worse for me but **we can agree on A for this one.**"
>
> It is important you do not tell your partner about the content of these important instructions, otherwise this technique completely backfires. Also, do not direct too much of your attention to this mimicking so you do not lose focus on the outcome of the negotiation. Thus, you should find a happy medium of consistent but subtle mimicking that does not disrupt your focus.

Participants who were not instructed to mimic (both participants in dyads in the neither-mimic condition, and the nonmimicking participant in the half-mimic condition) received the following control instructions:

> Successful negotiators recommend that focusing on the information in your negotiation plan and your best outcome is key to getting a good deal. One way to achieve this is to negotiate with this information always in the back of your mind. They say that this will help get you through the negotiations and get a good deal.

In the half-mimic condition, one participant received the mimicry instructions and their partner received the control instructions. The half mimicry condition was counterbalanced so that in seven pairs the recruiter mimicked, and the candidate did not (n = 14) and in seven pairs the candidate mimicked, and the recruiter did not (n = 14). In the neither-mimic condition, both participants received the control instructions. In the both-mimic condition, both participants received the mimicry instructions.

Procedure

Participants were recruited to the study in pairs and were unknown to each other prior to the study. The study took place in a computer laboratory, in which participants sat at individual workstations, separated by a screen. Upon arrival, participants were randomly allocated to the role of either job candidate or recruiter and given an instruction booklet containing a description of the negotiation task, their role within the negotiation, and the issues to be negotiated, along with the points values for each option. The negotiation instructions specified that the objective was to end the negotiation with the maximum number of points they could gain. The instruction booklets also included their "important instructions" (mimicry instruction or control instruction, depending on experimental condition).

Participants were given 15 min to read through their instruction booklets and privately prepare for the negotiation, including creating a negotiation plan which incorporated their "important instructions." At the end of the preparation period, participants then had 30 min to negotiate with their partner to reach an agreement. Participants used an online instant messaging program for the negotiation (www.hipchat.com). Participants entered an individual chat room where they could chat privately. The HipChat system automatically kept a secure transcript of all messages sent and received by users. These transcripts were only available for access by the administrative account owner (in this case, the first author) and were retrieved later for analysis.

At the end of the 30-min negotiation period, participants completed the following outcome measures.

Negotiation Outcomes: Individual and Joint Points

Immediately after the end of the 30-min negotiation period, participants in the recruiter role completed a "contract," detailing which option both parties agreed on, for each of the eight issues in the negotiation. Each option was worth a number of points to recruiter and candidate: For example, if both parties agreed on a bonus of 8%, this was worth 400 points to the recruiter and 3,000 points to the candidate, but if a bonus of 2% was agreed on, this was worth 1,600 points to the recruiter and zero points to the candidate. The points gained by the recruiter and candidate on each of the eight issues were summed to yield *individual points gain,* which could range from a possible −8,400 to 13,200 points. *Joint points gain* was calculated by summing the individual points gain for both members in a dyad.

Manipulation Check

After the recruiter completed the contract, participants completed a manipulation check to see whether participants had read and understood the mimicry manipulation. Participants were asked: "Can you recall the important instructions you received at the start of the negotiation? Please write here what the important instructions advised you to do during the negotiation." Participants also indicated the percentage of time they followed the instructions throughout the negotiation, from 0% to 100% of the time.

Interpersonal Perceptions

Participants completed a measure of subjective "clicking" or *rapport* felt during the interaction (Niederhoffer & Pennebaker, 2002: 3 items, $\alpha = .77$, $M = 13.98$, $SD = 3.88$). Participants were asked to what extent they felt the negotiation went smoothly, they were comfortable during the negotiation, and they truly got to know their negotiation partner, each on a scale from 1 (not at all) to 7 (very much). Responses to each item were summed to form a rapport score which could range from 3 to 21. Participants also completed a measure of *trust* and a measure of *liking*. Participants were asked "how much did you trust your conversational partner during the negotiation?" and "how much did you like negotiating with this person?" each on a scale from 1 (not at all) to 5 (very much).

Results

Manipulation Check

Of the 42 participants who were given instructions to mimic their partner, 69% (29 participants) recalled that their "important instructions" involved advice to mimic their negotiation partner and thus were judged to have recalled the mimicry instructions correctly. These participants reported mimicking for 54% of the time ($SD = 28.52$, range = 10–100%). These self-reported mimicry proportions are in line with other mimicry studies (32% and 42%: Maddux et al., 2008; 35% and 55%: Swaab et al., 2011). Of the 42 participants who were given the control instructions, 95% (40 participants) successfully recalled their instructions and reported following them for 74% of the time ($SD = 22.52$, range = 2–100%).

Which Word Categories Did Negotiators Mimic?

Negotiation transcripts were similar between dyad mimicry conditions in terms of number of messages exchanged, $F(2, 39) = 2.17$, $p = .13$, $\eta_p^2 = .10$ ($M_{\text{neither-mimic}} = 19.07$, $SD = 8.52$; $M_{\text{half-mimic}} = 24.85$, $SD = 9.06$; $M_{\text{both-mimic}} = 19.35$, $SD = 7.11$), and length as defined by word count, $F(2, 39) = 0.25$, $p = .78$, $\eta_p^2 = .001$ ($M_{\text{neither-mimic}} = 707.14$, $SD = 2.45$; $M_{\text{half-mimic}} = 655.50$, $SD = 253.18$; $M_{\text{both-mimic}} = 650.85$, $SD = 203.24$). Participants sent a similar number of messages whether they mimicked their negotiation partner or not, $t(82) = -.39$, $p = .69$ ($M_{\text{mimic}} = 20.83$, $SD = 8.16$; $M_{\text{not-mimic}} = 21.61$, $SD = 10.17$), and whether they were in the recruiter or candidate role, $t(82) = 0.91$, $p = .36$ ($M_{\text{recruiter}} = 22.14$, $SD = 10.23$; $M_{\text{candidate}} = 20.31$, $SD = 7.99$).

All dyads negotiated for the full 30 min, although ten dyads failed to come to a full agreement, instead making a partial agreement by agreeing on fewer than the full eight issues. There was no difference in the dyads who came to only a partial agreement on dyad mimicry condition, $x^2(2) = 4.20$, $p = .12$ (*half-mimic* = 2 dyads; *both-mimic* = 6 dyads; *neither-mimic* = 2 dyads), number of messages exchanged, $F(1, 40) = 2.28$, $p = .14$, $\eta_p^2 = .05$ ($M_{\text{partial}} = 17.60$, $SD = 6.55$; $M_{\text{full}} = 22.18$, $SD = 8.83$), or message length in terms of word count, $F(1, 40) = 0.14$, $p = .70$, $\eta_p^2 = .003$ ($M_{\text{partial}} = 695.80$, $SD = 270.35$; $M_{\text{full}} = 663.46$, $SD = 221.16$).

We next explored the characteristics of the negotiation transcripts in terms of the types of words that participants used, before calculating the extent to which participants matched each other in their use of these words per mimicry condition. We assumed that matching in the neither-mimic condition represented a "natural" level of matching, so purposeful mimicry would be evident in increased levels of matching in one or more word categories in the half-mimic or both-mimic conditions compared with the neither-mimic condition.

Word Use in Negotiation Transcripts

The transcripts of the negotiations were firstly separated out into two files, one for each participant containing their messages. These files were then processed using Linguistic Inquiry and Word Count

software (LIWC: Pennebaker, Booth, Boyd, & Francis, 2015) which yields the percentage to which words within a piece of text fall into a number of different word categories, such as positive emotions (e.g., happy), or work-related words (e.g., job). The LIWC software produces approximately 90 output variables for each processed piece of text (Pennebaker et al., 2015), covering a wide range of cognitive and emotional processes, personal concerns, and psychological drives alongside function word categories.

We firstly calculated the average percentage that each word category (yielded by LIWC) was present within the negotiation transcripts, giving us an approximation of the types of words that participants used in their negotiations (see column 3 in Table 1, below, labeled *percentage use*). Other studies using New Recruit report similar percentages (Elfenbein, Curhan, Eisenkraft, Shirako, & Brown, 2009; Romero et al., 2015).

Calculating Matching in Transcripts

The next stage of the analysis involved calculating the extent to which participants matched their conversational partner's use of each of these word categories. We used the percentages provided by LIWC to determine the extent of matching for each dyad, using the linguistic style matching (LSM) metric. The LSM metric measures the extent to which two conversationalists are matched in their use of a word category (or set of categories) across the whole conversation (Niederhoffer & Pennebaker, 2002). To calculate LSM, the absolute value of the difference in use of a word category between two speakers is divided by the total for each category. We used the following formula to calculate LSM for each word category (Ireland et al., 2011). Assents are used as an example category here.

$$\mathrm{LSM}_{\mathrm{assents}} = 1 - \left[\frac{|\mathrm{assents}_1 - \mathrm{assents}_2|}{\mathrm{assents}_1 + \mathrm{assents}_2 + 0.0001}\right]$$

In this formula, $\mathrm{assents}_1$ represents the percentage of assents used by speaker 1, and $\mathrm{assents}_2$ represents the percentage of assents used by speaker 2. To prevent empty sets in the formula (e.g., in potential cases where assents were not used by one or both speakers), 0.0001 is added to the denominator. This formula yields an LSM score for the word category for the dyad ranging between 0 and 1, with 1 representing complete matching in the use of this word category between the conversationalists.

We calculated an LSM score, using this formula, for each word category output by LIWC (as identified in Table 1). To keep our analysis comparable to other research into the effects of linguistic style in negotiations (Ireland & Henderson, 2014; Richardson et al., 2018; Richardson et al., 2014), we also calculated matching in *linguistic style.* This was achieved by calculating separate matching scores (using the above formula) for the nine word categories defined as representing linguistic style: adverbs, articles, auxiliary verbs, conjunctions, impersonal pronouns, negations, personal pronouns, prepositions, and quantifiers (Niederhoffer & Pennebaker, 2002). These were then averaged to yield a composite measure of matching in linguistic style. This score again ranges between 0 and 1, with higher scores representing greater matching in linguistic style between the two speakers.

Determining Purposeful Mimicry of Word Categories

To determine which word categories were purposefully mimicked, we tested whether levels of matching in each word category and in linguistic style differed between the dyad mimicry conditions (neither-mimic vs. half-mimic vs. both-mimic). For clarity, in the following analyses we present only significant results, although matching is presented for all word categories in Table 1 (see columns 4, 5, and 6 labeled *matching*). Levels of matching for the following word categories were highest in the both-mimic condition, followed by half-mimic, with the lowest levels of matching in the neither-mimic condition: affiliation terms, $F(2, 39) = 4.34$, $p = .02$, $\eta_p^2 = .18$; power terms, $F(2, 39) = 4.66$, $p = .01$, $\eta_p^2 = .19$; assent terms, $F(2, 39) = 11.97$, $p < .001$, $\eta_p^2 = .38$; interrogative terms, $F(2, 39) = 3.51$, $p = .04$, $\eta_p^2 = .15$; linguistic style, $F(2, 39) = 4.74$, $p = .01$, $\eta_p^2 = .19$; personal pronouns, $F(2, 39) = 4.74$, $p = .01$, $\eta_p^2 = .31$; and adverbs, $F(2,$

Table 1
Mean Percentage Use of Word Categories in Negotiations and Levels of Matching in Word Categories for Both-Mimic, Half-Mimic, and Neither-Mimic Conditions

			Matching		
LIWC word category	Examples	Percentage use	Neither-mimic	Half-mimic	Both-mimic
Linguistic style[†,‡]			0.73 (0.08)	0.75 (0.09)	0.82 (0.06)
Function words	It, to	50.93 (6.21)	0.93 (0.04)	0.92 (0.05)	0.94 (0.03)
Pronouns	I, itself	16.11 (3.61)	0.86 (0.09)	0.88 (0.13)	0.89 (0.06)
Personal Pronouns[†,§]	Her, them	11.30 (2.92)	0.73 (0.11)	0.87 (0.12)	0.88 (0.08)
Impersonal Pronouns	It, those	4.79 (2.06)	0.72 (0.21)	0.76 (0.19)	0.77 (0.16)
Articles	An, the	4.73 (1.55)	0.84 (0.13)	0.76 (0.16)	0.87 (0.12)
Prepositions	To, with	11.71 (3.00)	0.81 (0.14)	0.89 (0.07)	0.86 (0.14)
Auxiliary verbs	Will, have	10.90 (2.68)	0.88 (0.11)	0.84 (0.11)	0.87 (0.10)
Adverbs[†,‡]	Very, really	5.21 (2.22)	0.69 (0.11)	0.72 (0.12)	0.83 (0.14)
Conjunctions	And, but	5.92 (1.70)	0.91 (0.05)	0.82 (0.13)	0.82 (0.13)
Negations	Not, never	0.81 (0.66)	0.64 (0.32)	0.52 (0.37)	0.64 (0.30)
Verbs	Eat, carry	18.11 (3.27)	0.88 (0.08)	0.88 (0.07)	0.90 (0.10)
Adjectives	Long, free	5.89 (2.85)	0.73 (0.18)	0.84 (0.12)	0.82 (0.15)
Compare	Greater, best	2.47 (1.31)	0.66 (0.22)	0.72 (0.26)	0.69 (0.25)
Interrogatives[†,§]	How, when	1.68 (1.28)	0.51 (0.28)	0.67 (0.19)	0.75 (0.24)
Numbers	Second, three	1.87 (2.58)	0.54 (0.40)	0.44 (0.42)	0.59 (0.36)
Quantifiers	Few, many	1.44 (0.82)	0.66 (0.72)	0.57 (0.31)	0.63 (0.28)
Affective Processes	Happy, sad	11.98 (4.80)	0.78 (0.14)	0.83 (0.13)	0.72 (0.12)
Positive Emotion	Love, nice	11.18 (4.89)	0.77 (0.16)	0.79 (0.13)	0.70 (0.11)
Negative Emotion	Hurt, nasty	0.63 (0.58)	0.54 (0.32)	0.62 (0.24)	0.46 (0.24)
Anxiety	Worry, fear	0.15 (0.25)	0.73 (0.40)	0.66 (0.47)	0.55 (0.49)
Anger	Hate, kill	0.004 (0.02)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Sadness	Cry, sad	0.32 (0.39)	0.48 (0.47)	0.50 (0.31)	0.50 (0.35)
Social Processes	Mate, they	11.76 (4.72)	0.70 (0.12)	0.76 (0.13)	0.80 (0.18)
Family	Dad, aunt	0.05 (0.20)	0.04 (0.09)	0.02 (0.00)	0.05 (0.06)
Friends	Buddy, mate	0.23 (0.32)	0.30 (0.41)	0.29 (0.39)	0.34 (0.40)
Female	Girl, her	0.003 (0.02)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Male	Boy, his	0.005 (0.02)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Cognitive Processes	Cause, know	11.74 (3.45)	0.87 (0.08)	0.80 (0.12)	0.85 (0.10)
Insight	Think, know	2.15 (1.29)	0.66 (0.24)	0.67 (0.18)	0.66 (0.25)
Causation	Because, effect	1.15 (1.00)	0.58 (0.28)	0.67 (0.28)	0.53 (0.21)
Discrepancies	Should, would	3.90 (1.71)	0.76 (0.14)	0.74 (0.21)	0.81 (0.10)
Tentative	Maybe, perhaps	2.40 (1.20)	0.71 (0.22)	0.69 (0.25)	0.66 (0.19)
Certainty	Always, never	1.41 (1.95)	0.63 (0.24)	0.33 (0.31)	0.43 (0.34)
Differentiation	But, else	2.95 (1.35)	0.72 (0.17)	0.74 (0.17)	0.67 (0.18)
Perceptual Processes	Look, heard	1.38 (1.37)	0.43 (0.36)	0.42 (0.34)	0.63 (0.21)
See	View, saw	0.41 (0.66)	0.40 (0.46)	0.27 (0.43)	0.41 (0.42)
Hear	Listen, hear	0.65 (0.08)	0.52 (0.41)	0.41 (0.44)	0.37 (0.40)
Feel	Feel, touch	0.19 (0.27)	0.18 (0.39)	0.59 (0.37)	0.62 (0.51)
Drives		12.35 (4.40)	0.78 (0.14)	0.83 (0.12)	0.89 (0.09)
Achievement	Win, success	3.64 (2.04)	0.71 (0.21)	0.75 (0.19)	0.82 (0.16)
Affiliation[†,§]	Ally, friend	4.55 (2.93)	0.64 (0.17)	0.77 (0.17)	0.81 (0.09)
Power[†,§]	Superior, bully	1.47 (0.90)	0.52 (0.24)	0.69 (0.13)	0.73 (0.19)
Reward	Take, prize	3.84 (2.47)	0.68 (0.24)	0.77 (0.19)	0.74 (0.19)
Risk	Danger, doubt	0.59 (0.50)	0.70 (0.33)	0.61 (0.27)	0.57 (0.41)
FocusPast	Ago, did	1.17 (0.96)	0.69 (0.29)	0.54 (0.30)	0.67 (0.27)
FocusPresent	Today, now	13.95 (3.18)	0.89 (0.10)	0.86 (0.07)	0.87 (0.07)

Table 1
(continued)

			Matching		
LIWC word category	Examples	Percentage use	Neither-mimic	Half-mimic	Both-mimic
FocusFuture	May, will	2.33 (1.22)	0.60 (0.25)	0.72 (0.24)	0.73 (0.17)
Relativity	Area, exit	12.99 (3.35)	0.88 (0.09)	0.88 (0.08)	0.84 (0.10)
Motion	Arrive, go	1.54 (0.86)	0.81 (0.20)	0.71 (0.28)	0.68 (0.22)
Space	Down, in	5.44 (1.99)	0.75 (0.18)	0.83 (0.16)	0.73 (0.18)
Time	End, until	6.22 (2.50)	0.84 (0.10)	0.83 (0.10)	0.85 (0.09)
Work	Job, majors	4.55 (3.01)	0.73 (0.21)	0.65 (0.32)	0.78 (0.16)
Money	Cash, owe	3.45 (1.62)	0.77 (0.12)	0.79 (0.17)	0.75 (0.17)
Leisure	Cook, movie	0.87 (0.68)	0.62 (0.29)	0.57 (0.31)	0.68 (0.36)
Home	Kitchen	0.10 (0.27)	0.44 (0.49)	0.70 (0.48)	0.62 (0.51)
Religion	Altar, church	0.008 (0.04)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Death	Coffin, kill	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Biological Processes	Eat, pain	0.79 (0.68)	0.45 (0.34)	0.68 (0.34)	0.61 (0.40)
Body	Hands, cheek	0.22 (0.44)	0.79 (0.35)	0.49 (0.44)	0.77 (0.37)
Health	Flu, pill	0.52 (0.47)	0.57 (0.40)	0.51 (0.35)	0.51 (0.44)
Sexual	Love, sex	0.003 (0.002)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Ingestion	Eat, pizza	0.004 (0.002)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Informal Language		5.22 (4.57)	0.47 (0.26)	0.62 (0.69)	0.70 (0.24)
Assent[†,‡,§]	Agree, OK	4.13 (4.22)	0.33 (0.29)	0.57 (0.21)	0.76 (0.17)
Swear	Damn, shit	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Netspeak	Lol, btw	0.76 (0.57)	0.58 (0.34)	0.45 (0.43)	0.35 (0.42)
Nonfluencies	Er, umm	0.35 (0.52)	0.58 (0.50)	0.24 (0.36)	0.54 (0.46)
Filler	Imean, youknow	0.01 (0.06)	0.42 (0.34)	0.52 (0.42)	0.48 (0.36)

Note. Word categories and examples taken from Pennebaker et al. (2015). Higher values of matching indicate greater similarity in word use between partners, with values of 1 indicating perfect matching in percentage use of word category between negotiation partners. Standard deviations presented in brackets. Linguistic style is a composite measure of nine categories of function words (adverbs, articles, auxiliary verbs, conjunctions, impersonal pronouns, negations, personal pronouns, prepositions, and quantifiers).

[†]Matching is significantly greater for the both-mimic compared with neither-mimic condition.

[‡]Matching is significantly greater for the both-mimic compared with the half-mimic condition.

[§]Matching is significantly greater for the half-mimic compared with neither-mimic condition.

39) = 4.20, $p = .02$, $\eta_p^2 = .17$. This suggests that these categories were the ones that participants purposefully mimicked, over and above natural levels of matching.

The Effects of Mimicry on Joint and Individual Points Gain

Following other studies using the New Recruit exercise, we removed the dyads who failed to reach an agreement within the allotted time, in terms of dyads who agreed on fewer than the full eight issues in the negotiation (Curhan & Pentland, 2007). This left 12 pairs in the neither-mimic condition, 10 pairs in the half-mimic condition (5 pairs where the recruiter mimicked and 5 pairs where the candidate mimicked), and 10 pairs in the both-mimic condition.

Joint points gain was calculated by summing the individual points gain for each dyad. Dyads in the both-mimic condition gained the most points, $F(2, 28) = 9.59$, $p < .001$, $\eta_p^2 = .24$ ($M = 10{,}800.00$, $SD = 2{,}469.51$), followed by dyads in the half-mimic condition ($M = 9{,}050.00$, $SD = 2{,}155.65$), with dyads in the neither-mimic condition gaining the lowest number of joint points ($M = 6{,}909.09$, $SD = 2{,}719.89$). We then explored where this advantage in joint points gain originated by examining the

mimicry manipulation's effects upon individual points gain, for example, did participants who mimicked gain more points individually? The answer is yes: Individuals gained more points at the end of the negotiation if they mimicked their partner, $F(1, 61) = 3.89$, $p = .05$, $\eta_p^2 = .08$ ($M = 5{,}040.00$, $SD = 2{,}542.00$), compared with if they did not mimic their partner ($M = 3{,}628.12$, $SD = 2{,}959.42$), and if they were in the candidate role compared with recruiter role, $F(1, 61) = 8.81$, $p = .004$, $\eta_p^2 = .15$ ($M_{\text{candidate}} = 5{,}415.00$, $SD = 2{,}612.01$; $M_{\text{recruiter}} = 3{,}357.27$, $SD = 2{,}868.13$).

Which Word Categories Were the Most Effective to Mimic?

To preserve clarity and space, in the analyses that follow we present significant effects only. We examined whether the effects of mimicry upon points gain were mediated through the matching of particular word categories. Matching is a dyad-level variable, so we focused this analysis upon joint points gain as this is also a dyad-level variable (unlike individual points gain). We firstly predicted joint points gain from the word categories that showed increased matching in the half- and both-mimic compared with neither-mimic conditions (*affiliation, power, assent, personal pronouns, adverbs, interrogatives, and linguistic style*), and thus could be assumed were the word categories that participants purposefully mimicked. With increased matching in *assent* terms and *interrogative* terms, there was an increase in joint points gain, *assent* $F(1, 24) = 5.01$, $p = .03$, $\eta_p^2 = .12$; $\beta = .51$, and *interrogatives* $F(1, 24) = 4.04$, $p = .05$, $\eta_p^2 = .15$; $\beta = .19$. The rest of the word categories that showed increased matching in the half- and both-mimic compared with neither-mimic conditions did not predict joint points gain.

Given there was greater matching in assent and interrogative terms in the both-mimic and half-mimic compared with neither-mimic conditions, and in turn matching in assent and interrogative terms predicted joint points gain, we then explored whether this represented a significant mediation relationship. We used model 4 of the PROCESS macro for SPSS (Hayes, 2013) to test our mediation hypothesis. The PROCESS macro allowed us to test whether the effects of dyad mimicry condition (x) upon joint points gain (y) were mediated through matching of assent terms or interrogative terms (m). Bootstrapped 95% confidence intervals with 5,000 resamples confirmed that matching in interrogative terms mediated the effects of dyad mimicry condition on joint points gain ($\beta = .23$, boot $SE = .09$, bootstrap 95% CI [0.04, 0.44]). Dyads in the both-mimic and half-mimic conditions gained an increased number of points jointly at the end of the negotiation, via an increase in matching in interrogative terms in their negotiations. There were no other significant indirect effects. The direct effect of dyad mimicry condition (neither-mimic vs. half-mimic vs. both-mimic) on joint points was no longer significant, $t(31) = 0.10$, $p = .92$, 95% CI [−1,102.60, 1,216.54], $b = 56.97$, $SE = 565.12$, suggesting full mediation by interrogative terms.

We also examined whether matching in the mimicked word categories (affiliation, power, assents, personal pronouns, adverbs, interrogatives, and linguistic style) predicted interpersonal perceptions. Given that matching is a dyad-level variable, we computed shared interpersonal impressions for each dyad (average ratings per dyad of rapport, trust, and liking) and predicted these from matching in a multivariate ANOVA. However, there were no significant effects, so we refrain from discussing this analysis further.

Were the Effects of Mimicry Mediated Through Interpersonal Impressions of Rapport, Trust, and Liking?

In this section, we explored whether an individual's mimicry (or not) influenced the interpersonal perceptions (rapport, trust, and liking) formed by their partner, and whether these ratings mediated the effects of the mimicry manipulation upon individual points gain. Again, for clarity we present significant effects only. A multivariate ANOVA on the ratings of rapport, trust, and liking with individual mimicry condition (mimicker rating their nonmimicking partner [*half-mimic condition*], nonmimicker rating their mimicking partner [*half-mimic condition*], both mimicking partners rating each other [*both-mimic condition*], and both nonmimicking partners rating each other [*neither-mimic condition*]) as the

Table 2
Mean Ratings of Rapport, Trust, and Liking per Mimicry Condition

	Mimicry condition			
Interpersonal perception	Mimicked rating mimicker (half-mimic)	Mimicker rating mimicked (half-mimic)	Mimicker rating mimicker (both-mimic)	Control rating control (neither-mimic)
Rapport	16.80 (1.30)*	14.60 (4.16)	15.60 (2.91)*	12.27 (2.83)
Trust	4.00 (0.01)	3.80 (0.83)	3.20 (0.91)	2.91 (1.10)
Liking	4.60 (0.54)	3.80 (0.83)	4.00 (0.81)	3.27 (0.90)

Note. Standard deviations in brackets.
*Significantly greater than ratings in the neither-mimic condition at $p < .05$.

independent variables revealed significant effects of mimicry condition for rapport, $F(2, 80) = 3.23$, $p = .03$, $\eta_p^2 = .11$, but not liking, $F(2, 80) = 1.02$, $p = .43$, $\eta_p^2 = .03$, or trust, $F(2,80) = 1.05$, $p = .37$, $\eta_p^2 = .04$. Table 2 shows that ratings of rapport were higher where the mimicked participant rated the mimicker, and where both participants were mimicking, compared with where no participants mimicked. Clearly, mimicking was associated with enhanced perceptions of rapport.

We next explored whether these interpersonal perceptions predicted individual points gain. We predicted individual points gain from the ratings of rapport, trust, and liking made by that participant's negotiation partner (i.e., predicting points gain for Person A from the ratings made by Person B), controlling for the direct effects of Person A's mimicry condition (mimic vs. not mimic) upon their individual points gain. Partner-rated liking positively predicted individual points gain, $F(1, 61) = 6.96$, $p = .01$, $\eta_p^2 = .11$, $\beta = .38$, but partner-rated rapport, $F(1, 61) = 3.03$, $p = .08$, $\eta_p^2 = .05$, $\beta = .19$, and partner-rated trust, $F(1, 61) = 0.38$, $p = .54$, $\eta_p^2 = .007$, $\beta = -.21$, did not predict individual points gain.

We again used model 4 of the PROCESS macro for SPSS (Hayes, 2013) to test for any mediation of the effects of mimicry condition (x) upon individual points gain (y) via interpersonal perceptions of rapport, trust, or liking (m). However, none of the indirect effects were significant and the direct effect of mimicry condition (mimic vs. not mimic) on individual points gain remained significant, $b = -1{,}554.94$, $SE = 758.22$, $t(31) = -2.05$, $p = .05$, 95% CI [−3,073.85, −36.02].

Discussion

We add to the body of research showing that mimicry facilitates negotiations (Maddux et al., 2008; Swaab et al., 2011). Our results are clear: Mimicry was a beneficial strategy in terms of more points gained by mimickers, and higher ratings of rapport made about the mimicker by the mimicked. Further, we found that it was mimicry of a specific word type that was the mediating mechanism underlying the effects of mimicry, in terms of increased joint points gain. Our results suggest that mimicry of *interrogative* terms could be of importance in facilitating negotiations.

Mimicking each other's use of question forms within the negotiation context (e.g., *What* do you think? *How* should we do this? *Why* do you want that?) could encourage greater information sharing, which is associated with more effective deals for dyads as a whole (Maddux et al., 2008). This is referred to as "value creating"; by sharing information about the issues which are most important to them, dyads can create deals that benefit both parties. Indeed, asking questions has been associated with better performance in negotiations (Elfenbein et al., 2009). Increasing the use of question phrases via the mimicry of interrogative terms allows negotiators to focus on what is important in the negotiation, to discover shared priorities, and clarify areas of mutual interest, therefore allowing dyads to create value. Theoretically, mimicking interrogative terms could serve to increase understanding between negotiation partners, in line with functions of accommodation within CAT (Dragojevic et al., 2016).

Interestingly, we did not find any effects of linguistic style matching (LSM) upon the outcome of the negotiation, in contrast to previous research (Richardson et al., 2018; Richardson et al., 2014; Taylor & Thomas, 2008). There is an argument that LSM reflects the extent to which conversationalists are paying attention or engaged socially with each other (Niederhoffer & Pennebaker, 2002). Thus, depending on the context, LSM can be evident in both positively and negatively emotionally toned interactions (Bowen, Winczewski, & Collins, 2017). Our results are therefore in line with this interpretation and suggest that LSM is not guaranteed to have an enhancing effect upon negotiation outcomes.

We also noted that participants in the half- and both-mimic conditions showed an increased level of matching (compared with the neither-mimic condition) along *several* dimensions of language, both content- and style-related. Further, examining levels of matching in the neither-mimic condition indicates that some dimensions of language (e.g., total function words) were matched to a high level in the negotiations regardless of whether participants were told to mimic or not. Thus, consistent with the interactive alignment model of language coordination (IAM: Garrod & Pickering, 2004) our results suggest that coordination along several dimensions of language occurs automatically as conversations unfold, as a natural and necessary part of conversation. Notably, though, we can increase these "natural" levels of matching through strategic mimicry, in order to enhance understanding and thus the chances of securing positive negotiation outcomes.

In line with predictions from CAT, mimicry enhanced perceptions of rapport. However, neither rapport, trust, nor liking mediated the effects of mimicry. This could suggest that the *context* and *nature* of the negotiation is an important element influencing which mechanisms and processes emerge as mediators of the effects of verbal mimicry. Potentially, interpersonal variables could have emerged as mediators in a different negotiation context. For instance, Maddux et al. (2008) found that trust (but not rapport or liking) mediated the effects of behavioral mimicry upon negotiation outcomes in a complex, multi-issue negotiation scenario in which success was predicated on negotiators sharing sensitive information. It is perhaps not surprising that trust was a mediator of the effects of mimicry in this negotiation context. In contrast, in the New Recruit negotiation exercise (Neale, 1997), perhaps success was less dependent on the formation of a positive relationship between negotiators and more on efficient sharing of relevant information. In this case, shared understanding was an important influence on negotiation success, which was facilitated by mimicry of interrogative terms. This interpretation suggests that the mediating mechanisms underlying the success of verbal mimicry as a negotiation strategy depend on the negotiation context, complexity, and interpersonal dynamics of the situation.

It is possible that mentioning the use of mimicry in order to form a rapport in our mimicry instructions could have induced a more interpersonal focus in the mimicry condition, compared with a task-based focus in the control condition. Potentially then, the mimicry instructions could have changed other aspects of participants' communication, in order to form a rapport, which we did not capture. However, we do not believe that this possibility accounts for our results. Firstly, in our manipulation check, participants who recalled their prenegotiation "important instructions" remembered being instructed to mimic the words of their partner, but no participants mentioned the formation of rapport as a goal. Secondly, if our instructions *did* induce an interpersonal focus, this would have been evident in a mediating effect of either affiliation terms, or in partner-rated rapport upon the effects of the mimicry instructions on points gain. Finally, there is evidence that instructing people to mimic changes the mimicker's self-view to be more defined in terms of their relation to others (Redeker, Stel, & Mastop, 2011). This means that even without an explicit instruction to form rapport via mimicry, giving people an instruction to mimic may, in and of itself, unintentionally encourage an interpersonal focus. Disentangling these explanations for the effects of mimicry upon negotiation outcomes would be an interesting direction for future research.

The *timing* of mimicry also forms an interesting direction for future research. For instance, it is possible there is a time lag between a word and phrase being uttered and it being mimicked by a negotiation partner. In order to capture such temporal elements of mimicry, in future research turn-by-turn LSM

(Niederhoffer & Pennebaker, 2002) could be utilized. This measure calculates the correlation in the use of a word category between Person A and Person B, lagged by one or more turns. Using this measure could illustrate the temporal dynamics of mimicry.

Limitations and Future Directions

Our work has some limitations and suggests several directions for future work. Given the exploratory nature of this study, we firstly would like to see our results replicated to ensure the observed effects are reliable. We also intend to pursue a more direct test and manipulation of the mimicry of interrogative terms in relation to negotiation outcomes, as to our knowledge we are the first study in the mimicry literature to find an effect for this word category.

We noticed that participants playing the candidate role gained more points than those in the recruiter role, regardless of whether they mimicked or were being mimicked. Previous research using this negotiation task has also noted this quirk (Maddux et al., 2008). Possibly, the job candidate role may be a more familiar social role, making it easier for participants to perform and succeed in the negotiation. Moreover, participants' prior negotiation experience could also have influenced their success in the negotiation task. In future research, we aim to collect and control for participants' previous experience with negotiation situations and to increase the variety of negotiation tasks used. Our results suggest that verbal mimicry helps in negotiations with multiple issues and potential trade-offs, with future research exploring whether this can be extended to different negotiation types such as those with a "no-win" situation for one or more partners.

We acknowledge that our lack of mediating effects for trust is surprising given previous findings in this area (Maddux et al., 2008; Swaab et al., 2011). Potentially, this could be accounted for by our single-item measure of trust, although previous research has reported mediating effects of trust using a single-item measure (Maddux et al., 2008). To increase the reliability of our results, we aim to address this in future research by using validated measures with multiple items (Swaab et al., 2011). Moreover, the short 15-min period participants were given to practice mimicking and prepare for the negotiation could also account for the lack of mediation effects for trust, liking, and rapport. Potentially, this short period was not sufficient for participants to become competent mimickers. This would limit the extent to which they performed mimicry during the negotiation and by extension, limit the effects of mimicry upon perceptions of trust, liking, and rapport. A longer, more in-depth training period in verbal mimicry would enable the full potential of mimicry's effects upon negotiation outcomes to be explored, both in terms of interpersonal perceptions and in terms of points gain. It is interesting to note, however, that participants were able to perform verbal mimicry after only a short preparation period, and when engaged in a challenging negotiation. This suggests that verbal mimicry has promise as a negotiation technique. We also suggest additional measures of how much mimicry took place would be beneficial. This could take the form of a content analysis of negotiation transcripts. Incorporating these aspects in future research will explore the best ways to utilize mimicry as a negotiation strategy.

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Kate Muir, is a Lecturer in Forensic Psychology at Bath Spa University. Her research concerns interpersonal communication, and how interacting with others impacts on various elements of cognition and social relationships.

Adam Joinson, is Professor of Information Systems at the University of Bath. He works on behaviour and technology, with a foci on social behaviour and cybersecurity.

Emily Collins, is a Lecturer in Human Factors at Cardiff University. Her research takes an interdisciplinary, mixed methods approach, exploring the use and design of technology for positive outcomes in the context of work life balance, well-being and cyber security.

Rachel Cotterill, completed her PhD in natural language processing, with an emphasis on stylometry and social power. She has research interests in applying computational techniques to the intersections of linguistics and social dynamics

Nigel Dewdney, completed his PhD in computer science, looking at methods for detecting novel propositions made in social media, and has interests in linguistic influences, dialogue analysis, and language modelling.