

Mimicry and seduction: An evaluation in a courtship context

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Recent studies have found that mimicking the verbal and nonverbal behavior of strangers enhances their liking of the individual who mimicked them. An experiment was carried out in two bars during six sessions of speed dating for which young women confederates volunteered to mimic or not some verbal expressions and nonverbal behaviors of a man for 5 minutes. Data revealed that the men evaluated the dating interaction more positively when the woman mimicked them, and that mimicry was associated with a higher evaluation score of the relation and the sexual attractiveness of the woman. Mimicry appears to influence perceptions of physical attributes in addition to personal and social attributes.

Keywords: Chameleon effect; Mimicry; Speed dating; Mating.

It has been shown that individuals mimic the verbal or non-verbal behavior of people with whom they interact. Giles and Powesland (1975) found that people mimic the accents of their counterparts. Chartrand and Bargh (1999) discovered that participants were more likely to touch their faces when they interacted with a face-touching confederate who was a stranger than when they interacted with a foot-shaking confederate.

If people mimic their counterparts in social interactions, mimicry is also associated with a higher positive evaluation of the mimicker. Maurer and Tindall (1983) found that when a counselor mimicked the arm and leg position of a client, this mimicry enhanced the client's perception of the counselor's level of empathy more than when the counselor did not mimic the client. Chartrand and Bargh (1999, study 2) engaged participants in a task with a confederate who was instructed either to mimic the mannerism

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of the participant or to exhibit neutral, nondescript mannerisms. Compared to those who were not mimicked, participants who were mimicked by the confederate subsequently reported a higher mean of liking the confederate and described their interaction with the confederate as more smooth and harmonious. If mimicry is associated with greater liking of mimickers, several studies have also shown that mimicry leads to enhancement of pro-social behavior toward mimickers. Van Baaren, Holland, Steenaert, and Van Knippenberg (2003) found that a waitress who mimicked the verbal behavior of her customers by literally repeating their order received significantly larger tips. Van Baaren, Holland, Kawakami, and Van Knippenberg (2004) also found that an experimenter who mimicked the posture (position of arms, legs, etc.) of participants received more help from them (helping the experimenter to pick up pens “accidentally” dropped on the floor) than from participants who were not mimicked. Rapport and affiliation are also associated with mimicry. Lakin and Chartrand (2003) found that participants who were primed with the unconscious concept of affiliation mimicked more favorably the confederate seen on a videotape than when no affiliation priming was used.

The above-mentioned studies show that mimicry seems to enhance social relationships. According to Lakin, Jefferis, Cheng, and Chartrand (2003), the relationship between mimicry and liking or pro-social behavior can be explained in terms of human evolution. In other words, mimicry could serve to foster relationships with others. This behavior could serve a “social glue” function, binding people together and creating harmonious relationships. Furthermore, in these later studies liking was also measured by scales but without behavioral intention or real social behavior toward the mimicker. Similarly, liking and person perception were the only dimensions measured in these studies, and no other social dimensions were explored, such as the attractiveness of the target. We think that if mimicry serves a “social glue” function, then more than a liking measure is affected by mimicry, and various measures of interpersonal attraction are also influenced by mimicry.

The aim of our experiment was to explore the role of mimicry in relationships between individuals by specifically examining the role of mimicry in the relation between a man and a woman in a courtship situation. Men who participated in various sessions of speed dating were mimicked or not by female confederates, and afterward they had to evaluate their different dating partners. Because mimicry is associated with a greater desire for affiliation and rapport, a positive perception of the mimicker, persuasiveness, and a higher level of altruistic behavior toward the mimicker, we made the assumption that women who mimicked men would be evaluated more favorably, and would be perceived to be more attractive by the men, than women who did not mimic them.

METHOD

Participants

The participants were 66 single males (ranging in age from 23 to 30) chosen at random during different sessions of speed dating organized in a large town (350,000 inhabitants) in France.

Procedure

The experiment was conducted during six sessions of speed dating organized in two bars. Speed dating is a system that makes it possible for people to meet a large number of potential dating partners in a short time. Participants pay a fee of about €10–20 to participate in a session. In one bar used here, a maximum of 12 men and 12 women are permitted to register for each session, and 10 men and 10 women in the other bar. In both bars the sessions are stratified by age (20–30, etc.). During a session of speed dating, the men and women rotate in order to meet all of the participants during a series of short “dates.” The participants are assigned a number on arrival and wear a tag with that number. During each rotation, which lasts 5 minutes in the two bars where our experiment was carried out, the man and woman meet each other. Participants are free to discuss whatever they like, and during each round personal information (hobbies, education, jobs, etc.) and sometimes very intimate information (sexual activities, fantasies, etc.) is exchanged. At the end of each round the organizer rings a bell to signal the participants to move on to the next table, to begin a new “date” with another person of the opposite sex. In the two bars where our experiment was carried out, the men move at the signal while the women remain at their tables. Therefore our independent variable was manipulated during each round in which a woman encountered a man whom she did not know before.

Three women confederates (aged between 20 and 22) with previous experience in speed dating volunteered to take part in the experiment, and one of the three was chosen to participate in a given session in which the experiment was conducted. The women confederates were instructed to mimic or not mimic the verbal and nonverbal behavior of some men during a round. The three women confederates were not informed about the effect of mimicry on the attitudes, social perception, or behavior of the mimicked person toward the mimicker. The men who were mimicked or not were selected at random based on the number that was assigned to them when they arrived at the bar. Each confederate had a list that indicated the number of each man she had to mimic or not, so that the subjective selection of one man in one condition was avoided. In the mimicry condition, the woman confederate was instructed to mimic the verbal behavior of the man

by literally repeating some of his words, verbal expressions, or statements. For example, the woman confederate was instructed to repeat or not repeat some of the man's verbal expressions ("It's great," "It's fun,"...) or other sentences ("You really do this?" to which the confederate answered "Yes" in the non mimicry condition and "Yes, I really do this" in the mimicry condition). The confederate was instructed to try to repeat five expressions or sentences during the round. The confederate was also instructed to mimic nonverbal behavior of the men (i.e., when he stroked his face, folded his arms, or scratched his ear ...) during the round, and to try to mimic a nonverbal behavior five times with a delay of 3–4 seconds after the man had shown this nonverbal behavior. In the non-mimicry condition, the woman confederate was instructed to be careful not to mimic the verbal expressions, sentences, or nonverbal behavior of the men. With the exception of the difference in verbal and nonverbal behavior in the mimicry condition, the three women confederates were instructed to act in the same way with all the men by smiling in the same manner, by the content of their responses, and by the questions they asked the men during each round.

At the end of the session the male participants gave the organizers a list of five numbers corresponding to the numbers of the five women to whom they would like to give their contact information. The men listed five women by order of preference (the women followed the same procedure). As a rule, if there is a match in the session, contact information is given to both parties. The rank order of the confederate was evaluated between the sub-group of men that was mimicked and the other group that was not mimicked. If the confederate was not included in the group of five women selected by a man, the value of 0 was attributed. If the confederate was ranked fifth in the classification, the value of 1 was attributed. If she was placed in the fourth, third, second, or first position, the value attributed was 2, 3, 4, or 5 respectively.

In addition, each man was asked to respond to a short survey about the confederate. A male experimenter approached each man and asked him to evaluate the confederate, and at the same time he refreshed the participant's memory by recalling the confederate's first name, her number, and where she had been sitting in the bar. The participants were asked to evaluate the quality of the round with the confederate and her sexual attractiveness with the help of two semantic scales with two opposite adjectives. Each scale was graduated with nine steps. The first scale measured the quality of the interaction with the confederate: *The session with this woman was of [1] poor quality / [9] high quality*. The second scale measured the sexual attractiveness of the woman confederate: *This woman had [1] very low sexual attractiveness / [9] very high sexual attractiveness*. After responding, the participants in the experimental condition were debriefed.

RESULTS

The dependent variables used in this experiment were the rank order of the three women confederates in the various sessions, the quality of the round, and the sexual attractiveness of the confederates. No interaction was found between the experimental conditions and the three confederates with each dependent variable, so data were collapsed across confederates.

An ANOVA revealed a significant effect of the experimental condition for each of the dependant variables. Women who mimicked men during the round of dating were more favorably chosen by men to give them their contact information ($M=2.91$, $SD=1.16$) than the same women who did not mimic them ($M=2.30$, $SD=1.10$); $F(1, 65)=5.51$, $p<.03$, $\eta^2=.09$). The women's mimicking of men during the round of dating was associated with an increase in the men's evaluation of the quality of the interaction ($M=5.33$, $SD=1.19$) compared to when the women did not mimic them ($M=4.61$, $SD=1.09$); $F(1, 65)=9.54$, $p<.005$, $\eta^2=.15$). The women confederates who mimicked men during the round of dating were evaluated as having greater sexual attractiveness ($M=6.39$, $SD=1.14$) than the women who did not mimic ($M=5.54$, $SD=1.11$); $F(1, 65)=11.48$, $p<.002$, $\eta^2=.16$).

In order to study the relation between the three dependent variables, a correlation analysis (Bravais-Pearson's coefficient) was performed between the three dependent variables. We found a significant and positive relation between the rank-order of the confederates and the evaluation of the quality of the interaction, $r(65)=.67$, $p<.001$, the rank-order and sexual attractiveness, $r(65)=.61$, $p<.001$, and between the quality of the interaction and sexual attractiveness, $r(65)=.57$, $p<.001$.

DISCUSSION

The experiment offers evidence that mimicry is associated with greater attractiveness of women in a dating situation. It was found that when our women confederates were instructed to mimic some of a man's verbal expressions or sentences, and to mimic the nonverbal behaviors he displayed during the 5-minute interaction, this mimicry was associated with a higher rank-order of preference for providing their contact information. It was also found that the quality of the interaction was perceived more positively in the mimicking condition. At least, it was found that confederates were perceived by men to be more sexually attractive in the mimicry condition.

The effect of mimicry on the perception of the quality of the interaction and the preference for the confederate is congruent with previous experimental studies (Chartrand & Bargh, 1999, study 2; Maurer & Tindall, 1983) which found that people who were mimicked reported a subsequent higher mean of liking of the mimicker, and described their interaction with the mimicker as more smooth and harmonious compared to

those who were not mimicked. However, in our experiment we also found that mimicry had an effect on the perception of sexual attractiveness of the confederates. This effect is new if we considerate the literature on mimicry. Sexual attractiveness of women evaluated by men is weakly explained by personal or social attributes but strongly associated with physical attributes (Swami & Furnham, 2008) and research has found that men, more than women, value physical attractiveness in a mate, whereas women, more than men, value good financial prospects and higher status (Buss, 1989; Kenrick, Groth, Trost, & Sadalla, 1993; Shackelford, Schmitt, & Buss, 2005). In order to test the impact of sexual attractiveness per se, a partial correlational analysis was performed between rank-order of the confederates and sexual attractiveness controlled by the quality of the interaction. A significant link was found, $r(64)=.37$, $p<.005$, which seems to show that the effect of sexual attractiveness cannot only be considered as a halo effect mediated by the quality of interaction. Interestingly, we found that the partial correlation was significant only in the mimic condition, $r(31)=.41$, $p<.02$, whereas it was not in the control condition, $r(31)=.26$, $p=.15$. Thus, with men, mimicry seems to have the power to influence not only the perception of the personal or social attributes of the female mimicker but also her physical attributes.

Lakin et al. (2003) have suggested that mimicry could serve to foster relationships with others. Mimicry increases the positive perception of the mimicker, and we know that perceiving someone more positively is important to increase the probability of interacting with him/her. In courtship interaction, where sexual attractiveness is important especially for men, mimicry increases the sexual attractiveness of the mimicker, which probably leads, in return, to an increase in the desire to interact with the mimicker.

This study has several limitations that need to be addressed. The method was similar than the methodology used by Maurer and Tindall (1983) who have studied the effect of mimicry in a counselor/client interaction. However, although care was taken to ensure that the two experimental groups were treated in the same way and only differed in the amount of mimicry, it may be possible that the experimental conditions differed in other respects. It would be necessary to conduct a more controlled experiment by controlling the verbal and nonverbal behavior of the woman confederate in order to maintain the same behavior with the exception of the mimicry instruction.

In conclusion, by using an experimental approach in a real context it was found in this study that mimicry is associated with greater preference and liking for a female in a courtship situation in which a female was instructed to mimic some of the verbal and nonverbal behaviors of the male. This aspect has never been examined previously. It was also found that sexual

attractiveness was affected by mimicry. To our knowledge this effect is the first found in the mimicry literature and seems to show that mimicry has an effect on the perception of the physical attributes of the mimicker. Although our results need replication and further extension, such data seem to show that mimicry plays an important role in affiliation and rapport, as well as in romantic relationships and matching.

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