

# August 2014

# PREDICTING JURORS' VERDICT PREFERENCE FROM BEHAVIORAL MIMICRY

MATTHEW GROEBE, PH.D., GAROLD STASSER, PH.D., AND KEVIN-KHRISTIÁN COSGRIFF-HERNANDEZ, M.A.



The first time trial counsel learns of a jury's verdict preference, it is too little too late – the jury has finished deliberating and their verdict is being read to the court. It would be helpful to identify the current verdict preference of the jurors before the trial is over, or if possible, before the trial has even commenced. Such knowledge could lead to more effective jury selection and a more informed and directed approach to presenting one's arguments during trial. In other words, knowing the current verdict preference of various jurors affords an attorney the opportunity to "read the tea leaves" and adjust his or her trial strategy based on real time feedback. The main question is how to ascertain a juror's verdict preference at any particular point during trial. One possible solution is by monitoring the jurors' non-verbal behaviors, specifically the degree to which the jurors mimic the attorneys throughout the trial.

## WHAT IS MIMICRY?

Mimicry is broadly defined as an unconscious reaction of imitating other peoples' behaviors, movements, postures, and facial expressions (Chartrand & Bargh, 1999). One key component of mimicry is that it occurs outside of conscious awareness. Thus, those engaging in mimicry (i.e., mimickers) are unaware that they are replicating the behaviors of someone else (i.e., the mimickee). Mimicry can be differentiated from imitation, which is a conscious process and requires deliberate intention.

The second component of the definition is that there are many different stimuli one can mimic. This includes the facial expressions of others, such as anger, happiness, or sadness. For instance, people tend to smile more when exposed to happy faces, and they tend to display more facial sadness when exposed to sad faces (Dimberg et al., 2000). Mimicry of various facial expressions can also facilitate emotional mimicry via emotional contagion. An example of this is how we are more likely to smile when we see a smiling, happy face. Due to facial feedback mechanisms, our smiling in turn makes us feel happy and thus we adopt the emotion of our interaction partner (Lundquist & Dimberg, 1995). A third type of mimicry is verbal mimicry, in which people adopt each other's accents, speech rate, and hesitations (Cappella & Planalp, 1981). The final type of mimicry, and the primary focus of this study, is behavioral mimicry, which refers to the adoption of the mannerisms, posture, gestures, and motor movements of one's interaction partner (Chartrand & Bargh, 1999). An example would be shaking one's foot when one's interaction partner is shaking her foot or leaning forward when one's interaction partner is leaning forward.

The term "chameleon effect" refers to the passive and unintentional tendency to adapt to our social surroundings and match the behaviors of others in our social environment (Chartrand & Bargh, 1999). Humans are very adept at altering behaviors to blend in with our surroundings, and as mentioned earlier, we are not aware of our tendency or of others' tendencies to engage in this behavior. Mimicry plays such an integral role in our daily lives that it has become an automatic process able to occur without the specific intent of the mimicker.

#### THE EVOLUTIONARY BASIS OF MIMICRY

The presence of mirror neurons suggests that we are pre-wired with the ability to mimic. These are neurons that fire both upon perceiving another person engage in an action, and upon oneself engaging in that same action (Chartrand & van Baaren, 2009). For instance, perceiving someone else perform a certain behavior such as leg crossing automatically activates our own motor representation of crossing our own legs, thus making it more likely that we engage in that action. The mirror neuron system supporting mimicry is so deep-rooted that one-month-old infants have been shown to smile, open their mouths, and stick out their tongues when they see someone else doing the same (Meltzoff & Moore, 1977). By nine months of age, this ability has rapidly progressed to the ability to mimic more abstract emotional expressions such as joy, sadness, and anger (Termine & Izard, 1988). These findings suggest that there are particular behaviors that we are more prone to mimic, and that mimicry is something that occurs at all ages.

In addition to the biological evidence on mirror neurons, evolutionary psychology also helps explain the purpose of mimicry. Humans are social animals (Aronson, 1999), and our daily lives are filled with social interactions with loved ones, colleagues, acquaintances, and strangers. Given the importance of other people in our daily lives, we are strongly motivated to ensure that our social interactions are successful.

In our less predictable and more dangerous evolutionary past, our ancestors lived in a harsh and unforgiving environment where individuals who were alone were at a survival and reproductive disadvantage (Buss & Kenrick, 1998). In order to survive and reproduce, individuals were forced to rely on others to complete necessary survival activities – e.g., hunting, gathering, protecting against predators, or raising offspring (Lakin et al., 2003). Harmonious group living was therefore essential to early human survival. Individuals who were able to maintain cordial group relationships were more likely to be included in the group and survive (de Waal, 1989). On the contrary, individuals who were

unsuccessful at maintaining good standing with the group were unlikely to survive. So any behavior that increased the odds of remaining in one's social group would be selected for, whereas any behavior that decreased those odds would be selected against. Individuals who were able to maintain successful group relations passed on their social strategies and techniques (including nonconscious behaviors such as mimicry) to future generations.

Before the advent of language, nonverbal behaviors carried significant weight in portraying our inner perspectives to others. It has been theorized that mimicry connotes the message of "I am like you" to the mimickee (Lakin et al., 2003). Over time, these nonverbal behaviors became automatic and thus able to occur without conscious awareness, thereby freeing up valuable cognitive resources. While initially having a survival value by facilitating communication between two people, mimicry eventually evolved to serve a "social glue" function, helping to increase affiliation, bind people together, and create harmonious group relationships (Lakin et al., 2003). It is to these positive interpersonal consequences of mimicry that we turn next.

#### IMPLICATIONS OF MIMICRY

Mimicry has been shown to have numerous positive effects, both upon the mimicker and the mimickee. In an interaction, those who have been mimicked report a greater liking of their interaction partner if they were mimicked than they do if they were not mimicked, which in turn brings them closer together (Chartrand & Bargh, 1999). Mimickees also report that an interaction with a partner who mimicked them went more smoothly than an interaction with a non-mimicking partner. It is important to highlight that people are not consciously aware of the presence or absence of mimicry, and they do not ascribe its presence or absence as a reason for their feelings about their interaction partner. In sum, people are unknowingly bound closer together via behavioral mimicry.

The link from mimicry to liking is not a one-way street. There is a bidirectional relationship between mimicry and liking, such that we tend to mimic people we like more than people we do not like (Stel et al., 2010). In a persuasion context, salespeople who mimic the customer are more successful at selling their product than salespeople who do not mimic the customer (Tanner et al., 2008). Furthermore, when listening to a message intended to be persuasive, people who are mimicked during the presentation of the message report more agreement with the message than people who are not mimicked (Bailenson & Yee, 2005). Research also suggests that individuals are more easily persuaded by those whom they like (Cialdini, 2001). To that end, if mimickers are more likely to mimic a target they like, it follows that they are more easily persuaded by that target and are therefore likely to be receptive to messages from that target.

# MODERATORS FOR AMOUNT OF MIMICRY

Mimicry is context-dependent and is moderated (i.e. increases or decreases) depending on the identity of the mimickee. As noted above, we tend to mimic those we like to a greater extent than those we do not like (Stel et al., 2010). Thus, we tend to mimic targets we view favorably to a greater extent than targets we view unfavorably. We also show increased behavioral mimicry towards targets who hold similar attitudes, whether those attitudes are something mundane such as preference for a hypothetical vacation destination (van Swol & Drury, unpublished) or something more entrenched and strongly held such as preferences for a candidate in a presidential debate (McHugo et al., 1991). Thus, the research is clear that mimicry is not indiscriminately applied to the same degree to all targets. Instead, it is (non-consciously) directed towards favored targets. To that end, it is a very subtle indicator of liking for a target and receptivity towards that target's message.

# **RESEARCH AIM**

The goal of this research was to identify a way to assess jurors' current verdict preferences in a discreet and unobtrusive manner. It was hypothesized that the extent to which a juror mimics an attorney would predict his or her verdict

preference. For example, jurors who are in favor of the defense will mimic the defense attorney more than jurors who are not in favor of the defense. This information can be helpful in two phases of trial. During *voir dire*, it is important to be able to identify jurors who are initially favorable to your side, or at least uncover and remove jurors who are initially predisposed to favor the opposing side. This is particularly important because of the strength of primacy effects, in which initial impressions and preferences hold inordinate influence in one's final decision (Asch, 1946). To the extent that those initial leanings can be identified, that could go a long way in empaneling a favorable jury.

Behavioral mimicry can also be assessed during evidence presentation. If an attorney wants to know how jurors are responding to her presentation, she can take note of jurors' mimicry behaviors. This can be done by performing a few distinct potentially mimicable behaviors (e.g. rubbing her face, putting her hands together) and then observing the extent to which the jurors mimic those behaviors. If there is a noticeable amount of mimicry on behalf of the jurors, it could potentially indicate agreement with or receptivity to the message, whereas a lack of mimicry could potentially indicate disagreement with the message and a need to alter one's message. To sum up, the purpose of the research was to explore a unique way of assessing a juror's current verdict preference via the nonconscious process of behavioral mimicry.

#### METHODOLOGY

Videotapes from pretrial focus group research for six civil trials were used to conduct this study. (Videotapes were provided by Kevin-Khristián Cosgriff-Hernandez of Tara Trask, LLC.) The length of the videotapes varied, and four segments from each focus group were coded – an early segment from each side (e.g. plaintiff opening statement, defense opening statement) and a late segment from each side (e.g. plaintiff closing statement, defense closing statement). Thus, there were segments in the middle of the focus group that were not coded due to time and budgetary constraints. The segments always followed the format of plaintiff segment one, defense segment one, plaintiff segment two, and finally defense segment two. The videos followed a split-screen format, in which one camera was focused on showing all of the mock jurors. Mock jurors were seated, generally in a configuration of eight mock jurors in a row and three rows deep. Another camera focused on the presenting attorney, who was standing as he or she delivered the presentation. At the bottom of the screen was a time counter, so at any given moment in the segment it was possible to identify both the attorney's and the jurors' nonverbal behaviors.

A list of pre-determined potentially mimicable behaviors was created. This list included various behaviors that could be performed by both seated, silent mock jurors and a standing, presenting attorney. Thus, behaviors such as leg crossing and extensive hand gesturing were not included. Sample mimicable behaviors included face rubbing, posture shift, arm touching, and clothes adjusting. Several commonly held indicators of nonverbal agreement (smiling, forward lean, and head nodding) and nonverbal disagreement (arm crossing and head shaking) were also included. Attorneys and laypeople alike often believe that there are certain nonverbal behaviors that are indicative of agreement or disagreement with a speaker (Bousmalis et al., 2009). These variables were therefore included as well to explore whether behavioral mimicry was a better predictor of verdict preference than these commonly held indicators of nonverbal agreement and disagreement.

One group of coders went through the videos and focused on the nonverbal behaviors of the mock jurors. The nonverbal behavior of 43 mock jurors was coded across the six focus group videos. These mock jurors were clearly visible in the camera frame and they were all in the front row of their respective focus groups. This was done for convenience because the nonverbal behavior of these mock jurors was always captured on camera. The coders viewed the predetermined segments for each video, noting particular nonverbal behaviors as well as the time at which they occurred. The coders did not pay attention to the attorneys as they were giving their presentation. All videotapes were muted to reduce the chances of the coders being influenced or distracted by the attorney's presentation.

A separate coder went through the same segments of the six videos, focusing on the nonverbal behaviors of the attorneys. The attorney for the plaintiff and the attorney for the defense always remained the same throughout each of the six focus groups. This coder viewed the same pre-determined segments for each video, noting particular nonverbal behaviors as well as the time at which they occurred. The coder only paid attention to the attorneys, not the mock jurors during coding. Again, all videotapes were muted.

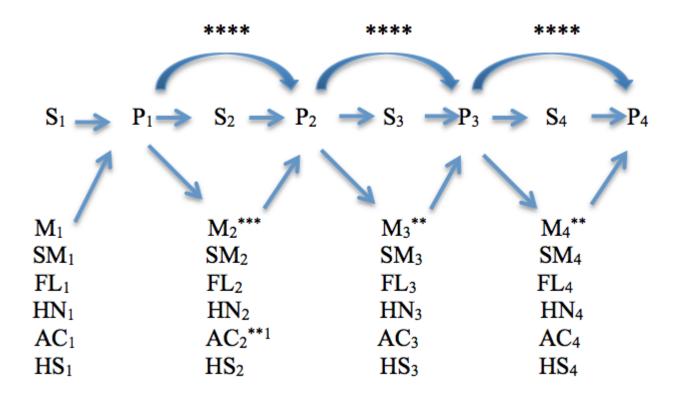
After the mock jurors' and attorneys' behaviors had been coded, their behaviors were matched up to calculate a mimicry score for each segment for each mock juror. Mimicry was defined as a mock juror's behavior replicating the attorney's behavior and occurring no later than ten seconds after the attorney's behavior. For example, if the attorney rubbed her face at 14:35 into the video and a mock juror rubbed her face at 14:40 into the video, it was counted as an instance of mimicry. However, if the attorney rubbed her face at 14:35 and the mock juror rubbed her face at 14:47, this was not counted as an instance of mimicry. Furthermore, certain commonly held nonverbal agreement behaviors (head nodding, smiling, forward lean) and nonverbal disagreement behaviors (head shaking and arm crossing) were categorized on their own as separate from behavioral mimicry, unless they occurred within ten seconds of the same behavior performed by the attorney, in which case they were classified as instances of mimicry.

Verdict preference was assessed after each focus group segment. Mock jurors were asked which side they currently favored after each segment (plaintiff or defense) as well as how easy it would be to change their opinion on a 1 (my opinion cannot be changed) to 4 (my opinion would be very easy to change) scale. From this, a composite score was calculated to create verdict preference after each segment. The composite verdict preference scale ranged from -4 (very strong pro-plaintiff preference) to +4 (very strong pro-defense preference). Verdict preferences assessed after the second defense segment were considered to be the final pre-deliberation preference, or in other words, the verdict preference jurors would hold going into deliberation.

# **RESULTS**

Behavioral mimicry predicted mock jurors' verdict preference on a segment by segment basis ( $\mathbb{R}^2$  for the mimicry scores ranged from .06 to .13, depending on the segment). In other words, within any given segment, knowing how much the mock juror mimicked the attorney was a statistically significant predictor of what his or her verdict preference might be following that segment. For example, mock jurors who mimicked the defense attorney to a greater extent during the first defense segment had stronger pro-defense verdict preferences following that first defense segment than mock jurors who mimicked the defense attorney to a lesser extent during the first defense segment. While behavioral mimicry was not a strong predictor of verdict preference on a segment by segment, it was still statistically significantly associated with verdict preference, suggesting that mimicry is an important factor to consider, at least as a temporary indicator of agreement. See Figure 1 below for a more detailed summary of the relationship between the variables included in the analyses.

Figure 1. An analysis was conducted to determine the relationship between prior preference, mimicry behavior, nonverbal agreement behaviors, and subsequent preference. Analyses were conducted on a segment-by-segment basis. The exception was that prior verdict preference for segment 1 could not be included because there was no prior preference for this first segment. Note that there are six predictors ( $M_n$ ,  $SM_n$ ,  $FL_n$ ,  $HN_n$ , ACn, and  $HS_n$ ) included in each segment,  $S_n$ . Significant regression coefficients are marked with an asterisk.



Sn = Segment (segments 1 and 3 for plaintiff presentations; segments 2 and 4 for defense presentations)

Pn = Preferences (Preferences 1 and 3 after plaintiff presentations; preferences 2 and 4 after defense presentations)

Mn = Total mimicry behavior for a given segment

SMn = Total smiling behavior for a given segment

FLn = Total forward lean behavior for a given segment

HNn = Total head nodding behavior for a given segment

 $ACn = Total \ arm \ crossing \ behavior \ for \ a \ given \ segment$ 

HSn = Total head shaking behavior for a given segment

[1] This is likely the result of a type I error. By chance alone we would expect 5% of the predictors to be significant. As there were 27 individual predictors throughout the segment-by-segment analyses, a type I error is not unlikely.

Although mimicry predicted verdict preference on a segment by segment basis, overall mimicry counts across the four coded segments did not predict final pre-deliberation preference, F(2,40) = 0.66, ns. However, this is not surprising because there were segments in between the first plaintiff and defense segments and the second plaintiff and defense segments that were not coded due to time and budgetary constraints. Stated otherwise, certain mimicry data that would help predict a mock juror's final pre-deliberation verdict was not coded and included in the analyses. Without this information, the ability to predict final pre-deliberation verdict was compromised.

While behavioral mimicry predicted mock juror verdict preference on a segment by segment basis, the individual commonly held nonverbal agreement and disagreement behaviors were not statistically significant predictors of verdict preference. Thus, forward lean, smiling, head nodding, head shaking, and arm crossing within a given segment

did not predict verdict preference when it was assessed subsequent to that segment. This suggests that unlike these commonly held nonverbal indicators of agreement and disagreement, knowledge about a juror's behavioral mimicry can provide a clue as to a juror's current verdict preference.

#### IMPLICATIONS AND RECOMMENDATIONS

The results suggest that mimicry is a moderately strong predictor of verdict preference. However, it is important to stress that the results suggest that mimicry is a predictor of *temporary* verdict preference. In other words, jurors who are mimicking a particular attorney during her presentation are likely more receptive to her message and thus more likely to be currently siding with that attorney at that point than jurors who are not mimicking that attorney as she gives her presentation. Given the findings that mimicry scores within a given segment predicted verdict preference subsequent to that segment but not on an overall basis, these results caution against relying too heavily on mimicry as an indicator for whether a juror will ultimately enter deliberations supporting a particular side. From running focus group research, it is clear that many mock jurors change their minds as they are presented with new evidence. Thus, even though a juror may be mimicking an attorney and appear receptive towards that attorney's message, new information later presented by the opposing side might change that juror's preference and they may end up favoring the other side.

This research found no support for the idea that there are certain nonverbal indicators of agreement or disagreement that can provide reliable information about one's preference. Thus, attorneys should be skeptical of relying too heavily on these nonverbal indicators of agreement and disagreement as true indicators for a juror's current preference. One possible reason for the lack of support may be due to the formality of the courtroom. Jurors may be aware that they should not display overt agreement and disagreement towards either side during the course of the trial. Another possible explanation is that there could be multiple reasons a juror engages in certain nonverbal behaviors (Frederick, 2006). For example, crossing one's arms could signal disagreement with the speaker, but it could also be because the juror is cold or it is just a comfortable way to rest one's arms. Behavioral mimicry, on the other hand, is an entirely nonconscious process and is less controllable. Furthermore, as mentioned earlier, people are not aware of the meaning behind mimicry. Thus, they do not know that by mimicking another person, they are in a sense showing their positivity towards that person. Mimicry is therefore a more promising avenue for providing a snapshot into one's current preference than relying on certain nonverbal agreement or disagreement behaviors as an indication of one's current preference.

The findings from this research can be employed during *voir dire*. The primary goal of jury selection is to remove jurors biased against one's side. A secondary goal is retaining favorable jurors. To achieve this, one can note (with the help of co-counsel and/or trial consultants) the extent to which certain potential jurors mimic each of the attorneys as they conduct *voir dire*. Jurors who display little mimicry for your side and extensive mimicry of the opposing attorney may come in to the trial predisposed to favor the other side. While their oral responses to questions might not reflect this, these jurors may be monitoring their responses and they may be potentially harmful. And given that behavioral mimicry is a nonconscious process, many jurors may not be consciously aware that they are initially biased towards a particular side. Thus, mimicry could provide a guide as to suitable candidates for peremptory challenges, or else targets for follow up questions to establish cause challenges. Conversely, jurors who mimic your side to a great extent during *voir dire* may be initially predisposed to favor your side and attempts should be made to rehabilitate any of their questionable responses. In this manner, mimicry can help elucidate jurors' initial proclivities, thereby helping you select a more favorable jury during *voir dire*.

Jurors' behavioral mimicry can also be assessed at various points throughout trial to provide a quick test of how jury members are responding to certain arguments. If you are presenting an argument and the jurors are mimicking you

less than before, that could suggest that these arguments are not resonating and you should change your strategy sooner rather than later. This would of course require you to be open to tailoring your arguments during trial, which attorneys are often hesitant to do, but it could give you the opportunity to make changes to parts of your case that are not resonating with the jury before deliberations begin, thereby increasing the chances of victory. If you are interested in how your current arguments are resonating with jurors you can even conduct a quick test by performing a few potentially mimicable behaviors (e.g. face rubbing) and then taking note of the extent to which your behaviors are subsequently mimicked by members of the jury. It is important to try this and practice reading others' behavioral mimicry before implementing it in the courtroom. Like anything else, practice will make it easier to read others' behavioral mimicry, allowing for less cognitive effort to be spent on reading the jurors' behaviors and allow more attention to be paid to trying your case.

Finally, although the focus of this research was on the extent to which jurors mimicking the attorneys can predict verdict preference, mimicry can go the other way as well. As alluded to earlier, there are many positive benefits conferred upon the mimicker (e.g. increased liking, perception of a smoother interaction, increased persuasiveness). While developing rapport with potential jurors is a tertiary goal during jury selection, it is a very important goal during the course of the trial. To the extent that a presenting attorney can mimic the nonverbal behaviors of the jurors throughout the trial, it can help develop rapport and endear the attorney to the jurors, making the jurors more receptive to the attorney (Tooher, 2009). It should be noted that theoretically this would not be an instance of mimicry. Rather, given its deliberate nature, this would be an instance of imitation. As such, it would have to be done very subtly and in a non-obvious manner. When consciously perceived by the target as deliberate imitation, there can be a backlash and all of the positive benefits will disappear.

In sum, this research provides attorneys with a tool they can use in court to help deselect unfavorable jurors during *voir dire* and to assess the effectiveness of their case on a moment-to-moment basis. While mimicry will not magically win your case, it can confer that slight needed advantage at trial. Instead of waiting until the verdict has already been announced to learn of the jury's finding, this research points to behavioral mimicry as a means of ascertaining the current mood of the jury before it is too late.

Matthew Groebe, Ph.D. is a litigation consultant with Womble Carlyle Sandridge & Rice, LLP in their Winston-Salem, North Carolina office. He provides a full range of litigation consulting services to a diverse range of clients nationwide. His doctoral degree is in Social Psychology.

Garold Stasser, Ph.D. is a professor of Social Psychology at Miami (OH) University in Oxford, Ohio. His main research focus is on the study of group decision-making and other group processes.

Kevin-Khristián Cosgriff-Hernandez, M.A. is a litigation consultant with Tara Trask, LLC in their Dallas, Texas office. He provides a full range of litigation consulting services to a diverse range of clients nationwide. His master's degree is in Communication Management. Mr. Cosgriff-Hernandez is completing his dissertation toward his doctorate in Communication from Texas A&M University.

### References

Aronson, E. (1999). *The social animal.* (8<sup>th</sup> ed.). New York: W.H. Freeman and Company.

Asch, S. (1946). Forming impressions of personality. *Journal of Abnormal and Social Psychology, 41*, 258-290.

Bailenson, J.N. & Yee, N. (2005). Digital chameleons: Automatic assimilation of nonverbal gestures in immersive virtual environments. *Psychological Science*, *16*(10), 814-819.

Bousmalis, K., Mehu, M., & Pantic, M. (2009). Spotting agreement and disagreement: A survey of nonverbal audiovisual cues and tools. Proc. IEEE Int'l Conf. Affective Computing and Intelligent Interfaces.

Buss, D.M. & Kenrick, D.T. (1998). Evolutionary social psychology. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4<sup>th</sup> ed., pp. 982-1026). New York: Oxford University Press.

Cappella, J.N. & Planalp, S. (1981). Talk and silence sequences in informal conversations III: Interspeaker influence. *Human Communication Research*, *7*, 117-132.

Chartrand, T.L. & van Baaren, R. (2009). Human mimicry. Advances in Experimental Social Psychology, 41, 219-274.

Chartrand, T.L. & Bargh, J.A. (1999). The chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology*, 76(6), 893-910.

Cialdini, R. (2001). *Influence: Science and practice*. Needham Heights, MA: Allyn and Bacon.

de Waal. F. (1989). Peacemaking among primates. Cambridge, MA: Harvard University Press.

Dimberg, U., Thunberg, M., & Elmehed, K. (2000). Unconscious facial reactions to emotional facial expressions. *Psychological Science*, *11*, 86-89.

Frederick, J. (2006). Understanding juror's nonverbal communication. The Jury Expert, 18(3), 1-8.

Lakin, J.L., Jefferis, V.E., Cheng, C.M. & Chartrand, T.L. (2003). The chameleon effect as social glue: Evidence for the evolutionary significance of nonconscious mimicry. *Journal of Nonverbal Behavior*, 27(3), 145-162.

Lundquist, L.O. & Dimberg, U. (1995). Facial expressions are contagious. Journal of Psychophysiology, 9, 203-211.

McHugo, G., Lanzetta, J., & Bush, L. (1991). The effects of attitudes on emotional reactions to expressive displays of political leaders. *Journal of Nonverbal Behavior*, 15(1), 19-41.

Meltzoff, A.N. & Moore, M.K. (1977). Imitation of facial and manual gestures by human neonates. Science, 198, 75-78.

Stel, M., van Baaren, R., Blascovich, J., van Dijk, E., McCall, C., Pollmann, M. van Leeuwen, M., Mastop, J., & Vonk, R. (2010). Effects of a priori liking on the elicitation of mimicry. *Experimental Psychology, 57*(6), 412-418.

Tanner, R.J., Ferraro, R., Chartrand, T.L., Bettman, J.R., & van Baaren, R. (2008). Of chameleons and consumption: The impact of mimicry on choice and preferences. *Journal of Consumer Research*, *34*, 754-766.

Termine, N.T. & Izard, C.E. (1988). Infants' responses to their mothers' expressions of joy and sadness. *Developmental Psychology*, 24, 223-229.

Tooher, N.L. (2009, December 30). Mirroring jurors can build rapport. Lawyers USA, pp. 5, 8.

Van Swol, L.M. & Drury, M. (2008). The effects of shared opinions on nonverbal mimicry. University of Wisconsin-Madison, submitted for publication.