The Effect of Black Leaders' Emotions on Group Coordination

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Understanding group coordination is becoming increasingly important as firms move toward a greater team orientation (Barsade, 2002). Whereas member of organization were considered to be just a part of cold machine in classical bureaucracy model, in the modern organization setting, members of an organization are regarded as critical parts of face-to-fact interactions. In this context, many organizational processes are grounded in the affective relations of group members. Thus, understanding the effects of leaders' emotions is critical, because leaders' emotions may influence the way subordinates feel, think, and act (Sy, Cote, & Saavedra, 2005).

The other substantial change in American Corporations is the increase of underrepresented minorities into business organizations. African Americans are leading this trend by taking a greater percentage of entry-level positions and more middle management roles (Tomaskovic-Devey et al., 2006). For instance, in 2002, about thirty-eight hundred thousand African Americans (25.7 percent of employed African Americans) secured management related and professional occupations. This number has increased to about forty-four hundred thousand in 2008 (U.S. Bureau of Labor Statistics, 2002, 2008). In this context, it is critical to understand African American leaders' leadership, and its effects on group level interactions. In this paper, I address the question of how Black leaders' emotional expressions affect group members' coordination in decision making process.

To understand how Black leaders' emotional expressions affect their group members' performance, I review the literature on group performance, focusing on the effects of leaders' emotional displays. This is followed by a discussion of nonprototypical leaders and their

leadership evaluations. Then, I review the research literature explaining leadership styles with respect to race. Finally, I examine how leaders' emotional expression and race interact to affect group members' coordination.

I conducted a literature search on October and November 2009 using the Web of Science. Key words: leader, leadership, emotion, group performance, race, gender and Black were used in different combinations, yielding 256 citations. I then refined the search focusing on Psychology, Business, and Management fields. This returned 132 results. Next, I limited the search to empirical studies and this left 92 results. I looked through the results for titular references and excluded articles only peripherally interested in leadership issue. This left 58 results and these articles formed the basis for the review. Of these, 27 were referenced in this paper.

Influence of the Leader's Emotion on Group Performance

Leaders' emotional displays are critical factors in explaining group members' performance because they can influence group members' thoughts and feelings much more than group members can influence leaders. People are more inclined to transmit their emotions when they have power, thereby allowing others more opportunities to interpret the powerful people's emotions (Anderson & Berdahl, 2002; Keltner, Gruenfeld, & Anderson, 2003). Meanwhile, less powerful people are most likely to adopt powerful others' emotions by attending to their affective displays (Fiske, 1993; Keltner & Robinson, 1997). Group members' awareness of and tendency to adopt leaders' emotions suggest that leaders are more likely to be transmitters of emotions whereas subordinates are more likely to be receivers of emotions (Damen, van Knippenberg, & van Knippenberg, 2008; Lewis, 2000; Sy et al., 2005). The empirical results

from Anderson, Keltner and John (2003) support this argument demonstrating that lower status individuals "catch" the emotions of higher status individuals more often than higher status individuals "catch" the emotions of lower status individuals.

If group members' thoughts and feelings are dependent on their leaders' emotional displays, leaders' affective displays might also influence group level behaviors. As Sy et al. (2005) suggest, leaders signal their goals and intentions through their expressions of emotions, and group members respond to those signals cognitively and behaviorally in ways that are reflected in the level of collaboration and effort expenditure. In line with this argument, several empirical researches have shown that leaders' emotional displays influence group performance.

For example, in a study of group performance in a service setting (George, 1995), sales mangers' positive mood yielded higher group performance, after controlling both managers' job satisfactions and job involvements. Similarly, in a recent study of networked computer tasks (Van Kleef et al., 2009), teams with a lower desire to develop and maintain a rich understanding of situations performed significantly better when their team leaders express happiness.

Contrary to the above research, several studies found that leaders' negative emotional displays can also be effective in promoting group performance. In the Tent-Building exercise, groups with a leader who expressed negative emotions expended more effort on the task than did groups with a leader who expressed positive emotions (Sy et al., 2005). In the study of networked computer tasks (Van Kleef et al., 2009), teams with a higher motivation to develop and maintain a rich understanding of situations performed better in a simulation team task when their team leaders express anger. This finding suggests that the interaction between the nature of the group (e.g. its motivation) and the positive or negative expressions of the leader are relevant in determining the group's success. Although empirical studies have yielded inconsistent

findings, they all confirm that leaders' emotional displays have a significant influence on group performance.

When it comes to group coordination, previous research has provided more consistent results and a positive relationship between leaders' emotional displays and group coordination. According to Sy et al. (2005), group coordination can be defined as group members' synergistic interaction that avoid slippage and wasted effort. In a study of store sales (George and Bettenhausen, 1990), groups with store managers who exhibit positive moods tend to have more prosocial behavior than do groups with the managers in a negative mood. Similarly, in a recent study of managerial decision making (Barsade, 2002), groups with highly positive affect exhibit more cooperation and less conflict than groups with highly negative affect. In the Tent-Building exercise, leaders' positive mood was also positively associated with group coordination (Sy et al., 2005). Given these facts, I posit that leaders' positive affect will be a significant predictor of better group coordination.

Nonprototypical Leader's Emotion and Leadership Evaluation

Unlike prototypical leaders (i.e. White male leaders), nonprototypical leaders (such as female or Black leaders) struggle with stereotyping (Eagley & Karau, 2002; Rosette, Leonardelli, & Phillips, 2008). This struggle is particularly acute when they express their emotions. As the impression formation model (Fiske & Neuberg, 1990) suggests, when perceivers meet targets, they are likely to categorize them on the basis of physical features (such as gender, age, or race) and then to form a category-based impression. Leaders who are identified with negative stereotypes (e.g. "women are weak" or "Blacks are threatening") face more constraints when

expressing their emotions. The reason for the constraints is that their emotional displays can lead to a *backlash* by violating stereotypes (Rudman & Fairchild, 2004) or reinforcing negative stereotypes.

For example, prior research has shown that negative emotional displays of female leaders (a type of nonprototypical leader) cause unfavorable consequences including lower evaluations of their leadership abilities. In leader effectiveness ratings, female leaders were rated lower when expressing anger than when expressing no emotion whereas male leaders were rated the same when expressing anger or no emotion (Lewis, 2000). In a study of status conferral (Brescoll & Uhlmann, 2008), professional women who expressed anger were consistently accorded lower status and lower wages and were seen as less competent than angry men and unemotional women. Furthermore, participants attributed the woman's anger more to internal factors and less to external factors than the male's anger. Similarly, female leader were evaluated as less effective when exhibiting more masculine (aggressive, independent, self-sufficient, forceful, dominant) leadership styles (Eagly & Johnson, 1990).

Influence of the Black Leader's Emotion on Group Coordination

Unlike female leaders, who are adversely affected by stereotypes of being 'warm' and 'communal', black leaders are adversely affected by stereotypes of being 'threatening.' Intergroup image theory (Alexander, Brewer, & Herrmann, 1999; Alexander, Brewer, & Livingston, 2003) suggests that if a specific in-group perceives the out-group as competing for the same resources and as having similar economic and political power, then the in-group member are more likely to generate *barbarian-enemy* image for the out-group members.

However, if the in-group regards the out-group as competing for the same resources but as inferior in power, then a *dependent* image will be generated. Using this theoretical assumption, if White people believe that a Black group is gaining in power, Whites may project the *barbarian-enemy* image (rather than *dependent* image) onto members of the Black group. In line with this prediction, an empirical study on intergroup perceptions (Alexander et al., 2003) found that White students from the urban high school rated Black group higher on the *barbarian-enemy* image than the *dependent* image.

Given this, I predict that negative emotional displays (such as anger) from Black leaders may lead to unfavorable consequences on group interactions, just as female leaders' negative displays did, but for a different reason. Black leaders' negative emotional displays interrupt effective team organizing by reinforcing threatening images whereas female leaders suffer from backlash by violating warm and communal image when they express negative emotions.

If the common *barbarian-enemy image* of Black groups evokes greater feelings of threat, then what will happen when Black leaders express positive emotions (such as enthusiasm or happiness)? Brent Staples's personal experience, which Steele and Aronson (1995) introduced in their studies, provides a hint to address this question. Steele and Aronson (1995) summarized his experience as follows:

> … Brent Staples, an African American editorialist for the *New York Times*, offers an example of this in his recent autobiography, *Parallel Time*. He describes beginning graduate school at the University of Chicago and finding that as he walked the streets of Hyde Park he made people uncomfortable. They grouped more closely when he walked by, and some even crossed the street to avoid him. He eventually realized that in that

> urban context, dressed as a student, he was being perceived through the lens of a race-class stereotype as a potentially menacing Black man. To deflect this perception he learned a trick; he would whistle Vivaldi. It worked. Upon hearing him do this, people around him visibly relaxed and he felt out of suspicion. (p. 802 - 803)

By whistling Vivaldi, Brent Staple could counter his threatening Black group image through at least following two channels: 1) by playing Vivaldi instead of Gangsta rap, he sent a message informing others that he is educated and intelligent 2) by whistling, he sent a message to others that he was in a good and relaxed mood and had no intention to harm other people. Given this observation, the positive emotional display of African Americans may contribute to attenuate stereotypical perceptions that Blacks are threatening. This suggests that Black leaders will be evaluated more favorably when they use certain types of disarming mechanisms.

A recent empirical study on African American leaders' appearances (Livingston & Pearce, 2009) confirmed this expectation. Livingston and Pearce (2009) compared the photos of ten current and former Black male chief executive officers (CEOs) with those of White male CEOs. They found that Black male CEOs were significantly more baby-faced than their White counterparts and were evaluated to be warmer than the White leaders. Furthermore, babyfaced Black CEOs tended to lead more prestigious corporations and earned higher salaries than mature-faced Black CEOs.

Based on above research, I hypothesize that the effect of leaders' emotional display on group coordination may depend on the leaders' race. Specifically, Black leaders' negative emotional expressions serve to reinforce their stereotypical as threatening to their subordinates. Subsequently groups with Black leaders expressing negative emotions are less likely to engage

in agreeable and friendly behavior and, hence, are less likely to coordinate among themselves. Meanwhile, this reinforcing process will not emerged in the case of White leaders. Following this rationale, I hypothesized the following:

Hypothesis 1: A group with a Black leader who expresses anger will exhibit worse coordination than will a White male leader express anger.

Second, I propose that groups with Black leaders who express positive emotions are more likely to have good group interaction and, hence, more coordination than those with White leaders who express positive emotions. As Livingston and Pearce (2009) suggested, disarming mechanisms can be more effective for African American leaders than White male leaders who do not need to be disarmed. Therefore, when Black leaders express positive emotions (such as enthusiasm), its positive effect on subordinates' coordination will be more distinctive than in the case of White male leaders' positive emotion displays. Given the above assumption, I hypothesize the following:

Hypothesis 2: A group with a Black leader who expresses enthusiasm will exhibit better coordination than will a White male leader express enthusiasm.

To investigate the effect of positive and negative emotional displays on group coordination, I focus on anger and enthusiasm for two reasons First, anger and enthusiasm often arise in the context of leader-follower interactions and group performance (Damen et al, 2008; Lewis, 2000). Second, comparing anger and enthusiasm allows this study to be connected to

previous work that has compared positive and negative emotional displays (Sy et al., 2005, Van Kleef et al., 2009).

Method

Research Participants. A total of 72 undergraduate students will participate in the study in exchange for $10. The participants will be assigned to one of the 12 groups of mixed gender and race so that the gender and race ratios are kept similar across all of the experiment groups. The size of group will be 6 and a group will be randomly assigned to one of the four experimental conditions, 3 groups in each condition. Each group will perform the task in a separate room.

Experimental Design. The experiment is a two-by-two between-subjects design. The two factors are leaders' race (Black vs. White) and their emotional displays (enthusiasm vs. anger). This is illustrated in Table 1, below.

Operationalizations. Two male confederates (a Black and a White aged around 35-40) will be chosen as the means to transmit the racial image and the desired affective condition. The same Black and White confederates play all two emotional roles so that there will be less chance of spurious differences due to different confederates. Professional drama actors will be hired as the confederates because of the acting talent necessary to play the two different types of emotions for the two affective conditions. Only male confederates will be used in this study to minimize potential gender effects on participants' perceptions and performance.

Two confederates will be extensively trained in the different nonverbal affective behaviors they need for each condition and in keeping the more verbal task-oriented behaviors as stable as possible across conditions. Nonverbal emotional displays are manipulated mainly by variations in facial expressions, tone of voice, and body language. In the enthusiastic condition, Black and White confederates smile frequently, speak in high-pitched pleasant tone, lean forward in their seats and raise thumbs in enthusiasm when they listen and give feedbacks to participants. In the angry condition, Black and White confederates frown often, speak in low-pitched unpleasant tone, lean back in their chairs crossing arms and make a fist in anger when they listen and give feedbacks to participants.

To minimize potential disarming mechanisms other than emotional displays, confederates' physical traits (having a baby face) and manners of dress are considered. Facial measurements and computer modeling reveal that babies and babyfaced adults of all ages share such features as a round face, large eyes, small nose, high forehead, and small chin (Zebrowitz, Fellous, Mignault, & Andreoletti, 2003; Zebrowitz & Montepare, 2005). To control disarming effects from these facial features, a Black and a White confederates who lack these facial features will be hired. Furthermore, two confederates will dress the same type of business casual attire (pressed khakis and a button-down long-sleeved shirt without a tie) to control potential disarming effects from the manner of dress.

The confederates read and fully understand all of the Murder Mystery task materials. During the group task, informational contents of confederates' statements will be limited to a) answers to participants' questions (asking or confirming the information on the task materials), b) statements needed to preside over the task. Two confederates do not know the hypotheses or specific purpose of the study.

To help their positioning as leaders, the confederates will be introduced as MBA students who volunteered to help the study. Each group is led by one of these male confederates.

Manipulation Checks.

Pretest: After training two confederates, four simulated group tasks (representing each of the experimental conditions) will be conducted with two experimenters (as group members). These group tasks will be videotaped and rated by thirty coders who are blind to the experimental conditions and the purpose of the study in exchange for $10. This set of coders will view only the confederates to check intended manipulations. The coders measure emotional displays by watching confederates' facial expressions, verbal tone, and body language throughout the course of the task and rate the level of a confederate's enthusiastic and angry mood on a scale of 1 (very slightly or not at all) to 5 (very much). For verifying the intended control on other potential disarming mechanisms (babyfaceness), the coders will be also asked to rate a Black and a White confederates' babyfaceness using 5-point scales (1 = not at all, 5 = very). After confirming that two confederates transmit the desired affective conditions and have the similar degree of babyfaceness, the real experiments will be conducted. All the question items are provided in Appendix one.

Posttest: A post experiment questionnaire will be distributed to verify the intended emotion manipulation. The question items will be used to measure perceptions of the leader's enthusiasm and anger. Responses will be rated on 5-point scale ranging from 1 (very slightly or not at all) to 5 (very much). For verifying the intended control on other potential disarming mechanisms, I will also ask participants to rate their group leaders' babyfaceness using 5-point scales (1 = not at all, 5 = very). All the question items are provided in Appendix two.

Dependent Variables

Self-report measures: Group coordination will be measured with three items: "As a group we worked effectively together," "As a group we were open to learning from one another," "As a group our effort are well coordinated." Responses will be rated on 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). After computing reliability checks, standardized z-scale score averaging three items will be used. In addition to these items, an item "I am satisfied with the group's decision-making process" is also asked to measure satisfaction on group decision making process on the same scale range.

Individual participants report the group decision by checking "the name of the one suspect your group believes murdered Robert Guion" (all responses agreed). Group performance will be based on whether the group chose the correct suspect. This is a dichotomous dependent variable (1 = correct, 0 = not correct). Participants also indicate how confident they are in the group's decision by responding to one item: "I am confident that the candidate selected by the group is the best choice." on 1 (strongly disagree) to 7 (strongly agree) scale.

Finally, at the end of the questionnaire, participants are asked their private opinion about the murder suspect. I ask this question to learn whether group members really changed their mind from their initial assessment of the case. All the post-question items are provided in Appendix two.

Video-coder measures: After videotaping group dynamics, two coders who are blind to the hypotheses of the study assess total group discussion time, speaking time proportions for each individual. Two coders also rate group cooperativeness and group competitiveness with question items: "Group members are willing to share the information with each other," "Group members

compete with each other during a discussion." Responses will be rated on 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Coder evaluation form is provided in Appendix three.

Group Task. I use the Murder Mystery task. Participants read information about a homicide investigation, including interviews with potential suspects, a map of the scene of the crime, a handwritten note, and a newspaper article (Appendix five). The interviews contain an equal amount of incriminating information about each suspect, but there are two pieces of exonerating information for Suspect 2 and three pieces of exonerating information for Suspect 3. After considering all the evidence, participants should conclude that only Suspect 1 had both the motive and opportunity to commit the crime and had attempted to frame one of the other suspects. Unlike a "hidden-profile" design in which group members receive a subset of the available information, all participants will receive the complete information packet. A thorough discussion of the case is beneficial to identifying the best suspect.

Experimental Procedure. Participants will be assigned to one of the twelve groups beforehand to balance race and gender ratios. As I use two confederates, only two groups will conduct the task at the same time. When group members are shown up for their session, researchers introduce the nature of the task, background and other important information on group procedure (the instruction is provided in appendix four).

Participants are presented with the Murder Mystery task (Stasser & Stewart, 1992) and given 20 minutes to make an individual decision as to which of three individuals is the most likely suspect and write a brief explanation for their choice (task material is provided in appendix

five). Participants are asked to abstain from any discussion before meeting with their groups and are told that they will be allowed to take one sheet of paper on which to make notes into the discussion. This is intended to help them reference relevant information without accessing the case itself (Phillips, Liljenquist, & Neale, 2009).

In the second part of the session, groups meet in adjacent rooms to discuss the suspects. At this point, researcher introduces a confederate as a group leader and explains the confederate, a professional MBA student, will guide the discussion to get a better group solution. Participants are told to discuss the information for 30 minutes and decide, as a group, which suspect is most likely to be guilty. During the discussion, confederates express manipulated emotional displays when they listen and give feedbacks to participants. Group discussions are videotaped.

After the discussion, each group is required to indicate a group suspect choice to the confederate. Participants then complete an individual post-discussion questionnaire (appendix two) assessing confidence in the group's decision, perceptions of how effective the group discussion is, and their personal belief regarding who really committed the murder. In addition, I ask group members to report how they evaluate group leader's emotions. After completing the post-discussion questionnaire, participants are debriefed and paid for their participation.

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Table 1. Experimental Design

		Race of Leader	
		Black Male	White Male
Leaders' Emotional Expression	Enthusiastic	A	B
	Anger	C	D

Appendix one: The pre-test questionnaire

Your Initials: _____
Tape Number: _____

Using the scale below, circle the ONE number that indicates the extent to which the videotaped group leader express each of the following emotions during the discussion (i.e., "During the discussion he was *angry*")

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	very much

enthusiastic	1 – 2 – 3 – 4 – 5	angry	1 – 2 – 3 – 4 – 5

Using the scale below, circle the ONE number that indicates the extent of the videotaped group leader's babyfaceness.

1	2	3	4	5
Not at all baby-faced	a little	moderately	quite a bit	Very baby-faced

YOUR Personal Information

Gender: Male_____ Female _____

Age: _____ years

Major:_____

Ethnicity: _____White/Caucasian
_____ Black/African American
_____ Asian, Asian American
_____ Hispanic/Latino

Appendix two: The post-discussion questionnaire

Post-Discussion Questionnaire

Please complete this questionnaire individually.
Do not discuss your responses.
We are interested in your own personal assessments.
Upon completion of the questionnaire please notify the experimenter.

Date: _____

Session Time: _____

Room Number: _____

YOUR INITIALS _____

Group Decision. Please check the box next to the candidate your group recommended.

☐ Candidate A ☐ Candidate B ☐ Candidate C

Using the scale provided, circle the ONE number that best indicates the extent to which you agree with the following statements.

	strongly disagree						strongly agree
I am confident that the candidate selected by the group is the best choice.	1	2	3	4	5	6	7
I am satisfied with the group's decision-making process.	1	2	3	4	5	6	7
As a group we worked effectively together.	1	2	3	4	5	6	7
As a group we were open to learning from one another.	1	2	3	4	5	6	7
As a group our effort are well coordinated.	1	2	3	4	5	6	7

YOUR Private Opinion

Now that you have made a decision with your group we would like you to consider your own private opinion about the murderer one more time. Your group will not be informed of your personal beliefs.

1. Who do you **personally** believe is the best candidate?

☐ Candidate A ☐ Candidate B ☐ Candidate C

2. **I am confident that this candidate is the best choice.**

1	2	3	4	5	6	7
strongly disagree						strongly agree

Finally, tell us a little about yourself and what you remember about your group leader:

YOUR Personal Information

Gender: Male Female

Age: _____ years

Major:_____

Ethnicity: _____White/Caucasian
_____ Black/African American
_____ Asian, Asian American
_____ Hispanic/Latino

Your GROUP LEADER

Using the scale below, circle the ONE number that indicates the extent to which your group leader expressed each of the following emotions during the discussion today (i.e., "During the discussion he was *angry*")

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

enthusiastic	1 – 2 – 3 – 4 – 5	angry	1 – 2 – 3 – 4 – 5

Using the scale below, circle the ONE number that indicates the extent to which your group leader's babyfaceness is.

1	2	3	4	5
Not at all baby-faced	a little	moderately	quite a bit	Very baby-faced

Please notify the experimenter that you are done! Thank you!

Appendix three: The video-coder evaluation form

Name: _____

Tape Number: _____

Total group discussion time: _____ min.

Speaking time of participant A: _____ min.

Speaking time of participant B: _____ min.

Speaking time of participant C: _____ min.

Speaking time of participant D: _____ min.

Speaking time of participant E: _____ min.

Speaking time of participant F: _____ min.

Using the scale provided, circle the ONE number that best indicates the extent to which you agree with the following statements.

	strongly disagree						strongly agree
Group members are willing to share the information with each other	1	2	3	4	5	6	7
Group members compete with each other during a discussion	1	2	3	4	5	6	7

Appendix four: Task instruction

Instructions

Welcome to the group decision-making study! These instructions describe how the experiment will proceed. Please read them carefully. If you have questions at any point, please notify the experimenter waiting in the hallway.

Overview

In this study, you will be part of a group of six participants. You will engage in the Murder Mystery task with your group members. We will explain what the task is and how to complete the task. After understanding the task, you will make a decision individually first and then will make a group decision with your group members. Please read the following steps carefully.

Procedure

1. Fill out a consent form.
2. The experimenter will explain about the task and provide the task materials.
3. You will have 20 minutes to make a decision individually.
4. After that, you will have 30 minutes to discuss with your group members and make a joint decision.
5. After completing the group decision form, you will complete post-discussion questionnaire from and return it to the experimenter.

If you have any questions about these instructions, please ask the experimenter now.

If you do not have any questions, you may proceed with the task. As noted first, please fill out a consent form. The experimenter will let you know your group members and guide you to the breakout room.

Appendix five: The Murder mystery task material

A MURDER MYSTERY TASK PACKAGE

Date: _____

Session Time: _____

Room Number: _____