

**Team Moral Emotions in Response to Team Performance**

A THESIS  
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL  
OF THE UNIVERSITY OF MINNESOTA  
BY

Tiffany M. Trzebiatowski

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
Master of Arts

Advisor: Michelle Duffy, Ph.D.

May, 2011

© Tiffany M. Trzebiatowski, 2011

## **Acknowledgements**

I would like to thank Michelle Duffy for her unconditional guidance and support throughout the thesis process. She has provided me a tremendous learning opportunity that will help shape my career as an academic. She was patient, sensible, and considerate throughout the countless emails. In addition, I would like to thank KiYoung Lee for guiding me in the lab experiment as well as for providing detailed answers on my questions. Also, I would like to thank Joyce Bono and Aaron Schmidt for their patience and generosity as well as their willingness to serve on my committee. Finally, thank you Theresa Glomb for allowing me to pursue a master's thesis!

## **Abstract**

The purpose of this study was to uncover team performance (i.e., team rank and team cheating) influences on team moral emotions. Results from 47 student teams indicated that team rank was positively related to team pride and was negatively related to team shame and team guilt. Results also indicated that the relationship between team cheating and team moral emotions was moderated by the level of team perceived similarity, such that teams with high levels of perceived similarity were more likely to show team pride and less likely to show team shame and team guilt when they cheated. Conversely, teams with low levels of team perceived similarity were more likely to show team shame and team guilt when they cheated. Interestingly, in cheating situations high perceived similarity not only facilitates pride but it also triggers less shame and guilt. Implications are discussed from the perspectives of group identity and intergroup emotions theories.

Keywords: group moral emotion, team performance, group identity

# Table of Contents

## Table of Contents

<b>LIST OF TABLES .....</b>	<b>IV</b>
<b>LIST OF FIGURES .....</b>	<b>V</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>THEORETICAL BACKGROUND .....</b>	<b>5</b>
A REVIEW OF TEAM EMOTIONS.....	5
TEAM PERFORMANCE & MORAL EMOTIONS .....	13
PERCEIVED SIMILARITY AS A MODERATOR.....	14
<b>METHOD .....</b>	<b>18</b>
<b>RESULTS.....</b>	<b>26</b>
<b>DISCUSSION .....</b>	<b>29</b>
<b>REFERENCES.....</b>	<b>35</b>

### **List of Tables**

Table 1: Correlation and Descriptive Statistics .....	49
Table 2: Results of Hierarchical Regression Model for Team Moral Emotions .....	50

## List of Figures

Figure 1: Proposed Theoretical Model .....	51
Figure 2: The moderating effect of team perceived similarity on the cheating-pride relationship	52
Figure 3: The moderating effect of team perceived similarity on the cheating-shame relationship .....	53
Figure 4: The moderating effect of team perceived similarity on the cheating-guilt relationship	54

## INTRODUCTION

Moral emotions, “those emotions that are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent” (Haidt, 2003: 276), are the adhesive glue between moral standards and moral behavior (Tangney et al., 2007a). Moral emotions provide the motivational force – the power and the energy – to do well and to avoid doing bad (Kroll & Egan, 2004). In other words, moral emotions serve an important social function to reinforce and encourage socially valued behaviors that uphold a positive self-image and respect from others. As humans, we have a need for status and acceptance and moral emotions inform people of their social value (Tracy & Robins, 2007a) and help us act on our cognitions (Hardy & Van Vugt, 2006). Moral emotions are linked to a wide array of outcomes, including: empathic responsiveness (Tangney, 1991); sympathy and prosocial behavior (Batson, 1998); antisocial behavior (e.g. Tangney et al., 1992; Tangney et al., 1996b; Ferguson et al., 1997); negative emotionality, such as: fear, anger, hostility, anxiety, and sadness (Tangney, 1994; Forgas, 1994; Harder et al., 1992; O’Connor et al., 1999; Watson & Clark, 1992); a drive to work hard in achievement and task domains (Stipek, 1995; Weiner, 1985); group cohesion, commitment, and performance (e.g. Duffy & Shaw, 2000); and a desire to behave in moral, socially acceptable manners (Baumeister, Stillwell, & Heatherton, 1994; Leith & Baumeister, 1998).

Although, the majority of this research has been conducted at the individual level of analysis, a growing body of work is looking at the phenomenon of *collective or group moral self-conscious emotions* (Tangney et al., 2007a). To date the literature has revealed that people can feel collective emotions for events that occurred in the past (e.g., Wohl & Branscombe, 2005) and that they are not directly responsible for committing (Smith et al., 2007). There is also

consensus that collective moral emotions are associated with specific attitudes of reparation (e.g. Brown & Cehajic, 2008; Branscombe et al., 2004; Iyer et al., 2003; Lickel et al., 2004) as well as with increased support for future aggression (Maitner et al., 2007). Specifically, anger directed at the outgroup (and to a lesser extent at the ingroup) was shown to be the most powerful predictor across all categories of action tendencies (e.g., Smith & Mackie, 2008; Mackie et al., 2000; Kessler & Hollbach, 2005). Finally, findings have demonstrated that satisfying behavioral intentions associated with intergroup emotions fulfilled a regulatory function (Maitner et al., 2006).

While these findings are informative, several gaps exist in the literature as research has attended only to collective emotions experienced through large social identities – such as nationality. Research has also not adequately considered the experience of collective emotions as well as the role of group identity in face-to-face teams. Additionally, the focus has been on a limited range of large-scale, infrequent historical events (e.g., Gordijn, Wigboldus, & Yzerbyt, 2001; Smith et al., 2007) that participants read about rather than experience with an in-group. Finally, previous studies have not simultaneously examined the self-conscious trio: pride, shame, and guilt in reaction to both positive and negative performance behaviors. Moreover, mixed results persist for negatively valenced emotions; such as shame and guilt (Smith et al., 2007; Roccas et al., 2006) and few studies examine the role of positive emotions in groups (Tangney et al., 2007a).

In this study, I take preliminary steps towards understanding the following unsolved questions: (1) how does a team emotionally react to good and bad performance behavior and (2) does the type of team, high or low team identified as evidenced by level of perceived similarity, make a difference to the level of emotional reactions? This is important because teams are

increasingly relied on to address complex problems and make critical decisions (Pearsall & Ellis, 2011; Rousseau, Aubé, & Savoie, 2006), which are foundational to an organization's success (DeChurch & Mesmer-Magnus, 2010). Teams that engage in unethical behaviors (Pearsall & Ellis, 2011) are costly to organizations as evidenced by cases such as Enron and WorldCom (Fusaro & Miller, 2002; Kulik, O'Fallon, & Salimath, 2008; Scharff, 2005). Catching bad behavior could not only potentially save the company resources but also set appropriate cultural norms to encourage good behavior. Examining the emotional output of team decisions are critical to organizations because moral emotions act as a signal of future behavior (Tangney, Stuewig, & Mashek, 2007b) and aid in the identification of problematic situations, such as in cases where team perceived similarity unlocks a team's propensity to feel less guilt and shame following immoral acts. In essence, teams are continuously influencing the emotions of others and then the judgments and behaviors of others (Barsade, 1998). This is imperative to understand as team reactions may perpetuate unwanted behavior (Maitner et al., 2007) if the teams are not being appropriately punished for wrongdoings.

By uncovering the distinct emotions (e.g. pride, shame, and guilt) we can gain insight on how people assign values to moral events (Moll et al., 2002) as well as increase the precision and predictive power of major theoretical models, such as Intergroup Emotions Theory. By studying moral emotions researchers may gain new insights into the moral emotions core of a wide range of psychological phenomena, from aggression, and intergroup conflict, to achievement, and prosocial behavior. In addition, understanding how teams emotionally react to performance can inform practitioners about socially appropriate behavioral norms in teams.

By studying team moral emotions in a controlled setting and identifying both compositional and emergent properties that influence team moral emotions, I hope to contribute

in several ways. First, I extend intergroup emotions theory by examining the effects of team performance on team moral emotions. Second, I extend research on emergent states in teams by investigating the potential “dark side” of team perceived similarity in small teams, suggesting that it may have the unintended consequence of triggering less moral shame and guilt, which in turn could motivate future unethical behavior. In addition, I will examine the moderating role of perceived similarity on the relationship between team performance and team emotions.

Although team identification has been suggested as a moderator in several studies (e.g. Mackie et al., 2004), it has not been examined in the small group team context. To explain my predictions, Intergroup Emotions Theory (IET) will be used as a theoretical framework.

The paper starts with a literature review on the following topics: team emotions, moral emotions, and team unethical behavior and performance. Hypotheses will conclude the literature review section. The methods section will follow, which includes a description of the studied sample and procedures as well as the operationalizations of and justifications for aggregation of the studied team variables. Results from OLS regression will be both presented and discussed. Finally, I will conclude with limitations of my design and study and present future research directions. To summarize, I sought to expand existing knowledge of team effects on team moral emotions by (a) examining the effects of team performance, (b) examining how these relationships differs across levels of team perceived similarity (c) investigating this relationship using preexisting student teams that convene face-to-face, and (d) examining both positive and negative emotions. By exploring this relationship at an uncharted level of analysis, I hope to add additional insight to the team emotion literature.

## **THEORETICAL BACKGROUND**

The current study draws upon several areas of literature starting with (1) a review of team emotions and advancing to (2) the relationship between team performance and moral emotions. The review finishes by (3) proposing a moderated relationship of team perceived similarity on the main effects. Hypotheses are revealed and organized by performance, where hypothesis 1 refers to team rank and hypothesis 2 to team cheating. Throughout the review, Intergroup Emotions Theory will be evoked as a theoretical framework to understand the proposed relationships. IET draws from social identity, social categorization, and appraisal theories of emotions.

### **A Review of Team Emotions**

This review of emotions will funnel from broad to specific and will: (1) establish emotions as a team-level phenomena, (2) introduce and define the moral triad of emotions: pride, shame, and guilt, (3) lay the foundation for Intergroup Emotions Theory and (4) reveal general findings in the team-based shame, guilt, and pride literatures.

“Group-based emotions” refers to “the fact that members of social groups have more similar concerns, make more similar appraisals, and therefore experience more similar emotions (Smith, 1993) than would be expected by chance” (Fischer & Manstead, 2008: 461). Team emotion research has broadened in recent years due to an increased use of teamwork and an increased interest in affect (Kelly & Barsade, 2001). The validity of team emotion as a construct has been tested and verified both theoretically and statistically (Smith et al., 2007; Reysen & Branscombe, 2008). For example, Smith et al. (2007) demonstrated evidence of team emotions with four properties, which include: 1) team emotions have discriminant validity from individual

emotions, 2) team emotions are related to team identification, 3) team member emotions converge towards a team profile, and 4) team emotions predicted both in-group and out-group directed actions. As Smith & Mackie clarify, “emotions pertain to an identity and not to a biological individual” (2008: 436). Accordingly, these emotions can be experienced vicariously through large social memberships (e.g. United States citizen) or they can be experienced more personally in a face-to-face or small team context. This research will focus on the latter.

Moral emotions have been identified as important factors in terms of current and future behavior (Tangney, Stuewig, & Mashek, 2007b) as they play a central role in motivating and regulating almost all of people’s thoughts, feelings, and behaviors (Campos, 1995; Fischer & Tangney, 1995). They motivate and regulate in two ways, as anticipatory emotions that influence people to consider behavioral alternatives even before they engage in behavior, and as consequential emotions in the instance of actual behavior, motivating future behaviors such as altruism, reparation, or defensiveness (Tangney et al., 2007b). Thus, moral emotions provide critical feedback regarding both anticipated and actual behavior (Leary & Hoyle, 2009) and play a fundamental role in morality (Haidt, 2001) as well as a role in motivating social behavior, such as a desire to achieve, attain social status, and feel good about one’s social identity (Tracy & Robins, 2007a). Important implications of moral emotions for social processes and behaviors range from self-regulation, where people conform to rules and uphold social order (Haidt, 2001) to antisocial behavior (Tangney et al., 1992), where people engage in retaliation behaviors.

Moral or self-conscious emotions are unique in that they are induced through self-evaluation and can be either consciously or subconsciously experienced (Tangney et al., 2007a) as well as experienced collectively, as the self can and oftentimes does includes collective self-representations (Tracy & Robins, 2006b). These emotions occur when individuals attribute the

eliciting event to internal causes (Lewis, 2000; Tangney & Dearing, 2002; Weiner, 1985). Studies have shown that internal attributions for failure tend to produce guilt and shame, and internal attributions for success tend to produce pride (Tracy & Robins, 2006b; Weiner, 1985; Weinter, Graham, & Chandler, 1982). When we appraise our actions as right then we feel pride and approval whereas when we perceive our actions are wrong we feel shame and/or guilt depending on the situation. *Pride* is defined as an emotion “generated by appraisals that one is responsible for a socially valued outcome or for being a socially valued person” (Mascolo & Fischer, 1995: p. 66). Shame is defined as:

“the product of a complex set of cognitive activities: individuals’ evaluation of their actions in regard to their standards, rules, or goals and their global evaluation of the self. The phenomenological experience of a person having shame is that of a wish to hide, disappear, or die... Shame is not produced by any specific situation, but rather by the individual’s interpretation of the event” (Lewis et al., 2008:748).

Shame involves an internal evaluation of the self as “bad” in response to a situation (Lewis et al., 2008). In contrast, the moral emotion of guilt reflects perceptions of one’s specific action or behavior in relation to the outcome, rather than the self in general (Lewis et al., 2008). Specifically guilt has been defined as the emotion, which arises when:

“individuals evaluate their behavior as failure but focus on the specific features or actions of the self that led to the failure.” In contrast to shame, “individuals are pained by their failure, but this pained feeling is directed to the cause of the failure or the object of harm... guilt is not as intensely negative as shame and does not lead to confusion and to the loss of action rather it is associated with a corrective action to repair the failure (p. 748).”

In the team-based emotion literature the definitions focus on these emotions in relation to a larger social category of people. For example, Doosje et al. (1998) refers to group-based guilt as “guilt by association”. In Tangney et al.’s review on moral emotions and moral behavior, “vicarious” or “team-based” shame and guilt are “feelings experienced in response to the

transgressions and failures of other individuals” (2007a, p. 358). On the other hand, intergroup emotions are defined as “emotions that arise when people identify with a social group and respond emotionally to events or objects that impinge on that group” (Smith & Mackie, 2008). Following Smith & Mackie’s definition, moral team emotions arise as a response to an event that affects the team. For example, moral team pride is shown when the team appraises themselves as responsible for a socially valued outcome or for being a socially valued team. Moral team shame is shown when the team evaluates themselves as failing at some socially valued outcome whereas moral team guilt is shown when the team evaluates their behavior as failing to meet some socially valued outcome.

Intergroup Emotions Theory explains how a team feels emotions through social identity, social categorization, and appraisal theories of emotion. The first necessary element in feeling team level emotion is that one has to construe team membership as part of one’s identity (Tajfel & Turner, 1979; Hogg & Terry, 2000). When this team membership is salient, e.g. an ingroup’s history (Doosje et al., 1998), people experience the associated team identity and think in terms of an interchangeable team member (Smith & Mackie, 2008) rather than as a lone individual. To distinguish between whether an emotion is team or individual based, one can ask the following question posed by Smith & Mackie, “Would the emotional response be similar if the same event happened to some other ingroup member” (2008:433)?

Team emotional responses are more likely to be elicited when social comparisons and competition are involved, e.g. when relevant outgroups are present (Mackie et al., 2000). Research shows that a higher team identity leads to a stronger in-group bias (Chen and Li, 2009) and more team conformity (e.g. Smith & Terry, 2003; Hogg & Turner, 1987). Smith & Mackie suggest that the same process should apply to team emotions (2008). Social identity theory

would imply that a higher team identity should lead to more emotional conformity. This may be because highly identified members are more motivationally aligned with advancing the team's interests (Smith & Mackie, 2008). If, for example, a team's interests or goals are not met then a highly identified team would be more emotionally affected than a lower identified team.

### *Moral Emotions: A deeper look*

Although existing theory covers various aspects of ethical decision making in organizations (Tenbrunsel and Smith-Crowe, 2008), missing in that discussion is an exploration of the associated emotions (Ashkanasy & Cooper, 2008; Sekerka & Bagozzi, 2007). For example, Ashkanasy & Cooper state, "Shame does not appear in the management literature, at least in a form that identifies it as such" (2008: 259). However, in psychological literature research on the negative emotions (shame and guilt) have blossomed since the 1990's (Ashkanasy & Cooper, 2008). Pride, on the other hand, is still referred to as the neglected sibling (Tangney et al., 2007a).

Pride, shame, and guilt are part of a family of "self-conscious" emotions that are evoked by self-reflection and usually are developed later in life (Tangney et al., 2007a). In a team setting, the reflection is on the collective self and "interpretive and categorization processes that follow identify the emotion as an intergroup rather than an individual-level emotion" (Smith & Mackie, 2008: 432). Self-conscious emotions constitute a distinct category of emotional experience that differs in important ways from basic emotions (Beer & Keltner, 2004). The three emotions share similar interpersonal origins, but are also distinct from each other. Research has shown that the internal aspects of the self-conscious emotions, such as perceived antecedents, underlying attributions, facial expressions, ways of experiencing interpersonal contexts,

phenomenological features, motivations for subsequent actions are quite distinct (Lewis, 1993; Lindsay-Hartz, 1984; Tangney, 1992; Tangney et al., 1996).

Holistically, the triad moral emotions: pride, shame, and guilt are assumed to promote social standards. Shame may promote avoidance behaviors after a social transgression, guilt may promote apology and confession, and pride may promote boastfulness and other approach-oriented behaviors after a socially valued success (Keltner & Buswell, 1997; Nofle & Robins, 2006; Tangney & Dearing, 2002; Tracy & Robins, 2004b). These social goals facilitate actions centered on protecting the self and interpersonal relations. When people choose self-interest over long-term social goals, they will feel negative moral emotions of shame and guilt (Frank, 1988, 2004). People want to avoid punishments or blame for acting in self-interest and in this way moral emotions act as commitment devices by stimulating prosocial behavior (Frank, 2004).

#### *Positively Valenced Emotion: Pride*

Research on pride as a consequence of performance in the workplace is scarce in the literature (Ashkanasy & Cooper, 2008). Experiences of pride are unlike shame and guilt in that this social, self-conscious emotion (Tangney, 1999; Tracy & Robins, 2004a) is highly recognizable (Tracy & Robins, 2004b). Pride conveys information about one's social status (Fessler, 1999; Tracy & Robins, 2007a; Tracy, Shariff, & Cheng, in press) and is a social marker of one's values (Leary et al., 1995). One who effectively communicates a desire to achieve increased social status may be more likely to receive the benefits that go hand in hand with a high status. Furthermore, in a social group a member may convey high status to gain allies and facilitate cooperation and to smooth social interactions (Shariff & Tracy, 2009). Thus, it is in a team member's interest to behave in certain ways that enhance his or her place in the team hierarchy, even if pride drives one to engage in immoral acts to achieve a valued success, i.e.

winning in the face of cheating. Especially in an intergroup situation where social comparisons are salient, teams may feel collective pride if they believe that their team has succeeded at an important task (Smith & Mackie, 2008). And, the more inclusive the team that one identifies with the less morally objectionable is the pride (Chakrabarti, 1992). Thus, an individual that identifies with a more inclusive team will be less apprehensive in boasting about team accomplishments.

#### *Negatively Valenced Emotions: Shame and Guilt*

Shame and guilt are often experienced concomitantly (Smith et al., 2002; Tangney and Dearing, 2002). Researchers have discovered conditions where “team-based” shame and guilt are more probable (Tangney et al., 2007a). For example, team-based shame is more likely to emerge when a positive team identity is desired whereas team-based guilt is more likely when there is a focus on harm to an outgroup, and when a high dependence with the perpetrator is salient (Lisckel et al., 2004, 2005; Lyer et al., 2006; Schmader & Lickel, 2006). In other words, shame, as a character attribute rather than a behavioral attribute, is more likely to be experienced when a team wants to uphold a positive identity and the accompanying positive moral standards. Guilt, as a behavioral attribute, is experienced more often in competitive settings where behaviors are focused on directly harming the outgroup. In this situation, the link is so direct between actions and harm that the team feels more guilt. Teams also tend to feel more guilt when a high dependence with the perpetrator exists. For example, this may be more likely when the perpetrator is the team leader and the team is dependent on the leader’s actions. In these scenarios guilt and shame are experienced more often because of one’s team identity.

As mentioned previously, guilt has been linked to reparative and pro-social behaviors such as empathy, altruism, and care giving (e.g., Batson, 1987; Baumeister et al., 1994; Tangney

& Dearing, 2002) as well as an inclination to disclose information (Velayutham & Perera, 2004). Shame, on the other hand, is associated with the negative emotional and physical health consequences of social stigma, depression and chronic anger (Harder, 1995; H. B. Lewis, 1971) and concealment (Velayutham & Perera, 2004). It is also shown to be a core component of the narcissistic, antisocial, and borderline personality disorders (Harder, 1995). Why are the outcomes of shame and guilt so distinct? Researchers have explained this distinction using the core definitional difference: a behavior versus an attribute of a team/person (Lewis et al., 2010). Shame is personally connected to the actor whereas guilt is more removed and connected to behaviors.

Collective moral emotions have also been shown to regulate intergroup behavior (Maitner et al., 2006, 2007). Intergroup emotions have been linked to increased support for future aggression as demonstrated by Maitner et al. (2007). They found that ingroup identification increased justification appraisals – where people experienced less collective guilt when behavior was deemed as unjust or increased collective satisfaction when behavior was deemed as just. Satisfaction was defined as a “positive emotional response to obtaining some desired goal or event” (224) and extrapolated to the intergroup level. They further argued that normalized aggressive acts towards the outgroup may lead the ingroup to feel no guilt as they would not deem themselves as morally responsible agents. In another paper, they argued that if intergroup emotions are functional, then successfully carrying out an action tendency should reduce that emotion, whereas not carrying out behavior tendencies would intensify the emotion (Maitner et al., 2006). In three studies, they showed that intergroup emotions fulfilled a regulatory function where teams feel more or less emotions following certain action tendencies. For example, when a group made reparations following aggressive acts the intergroup guilt was

diminished, however if the ingroup aggressed again then intergroup guilt was exacerbated (Maitner et al., 2006). These findings have three important consequences for the current study: 1) higher team identification leads to increased positive emotions and decreased negative emotions, 2) conditions (i.e. ingroup identification, justification) alter how teams perceive and experience emotion, and 3) increased positive emotions and decreased negative emotions may lead to future unwanted behavior.

### **Team Performance & Moral Emotions**

Attribution theory explains the link between team performance and team moral emotions whereby an event is appraised according to whether it is relevant to and congruent with team goals. By attributing the cause of the event to an internal factor the team places blame or credit on themselves for the situation. The role of timing and the process of attributing team behavior to some cause is the difference between just feeling negative or positive arousal and feeling a negative or positive emotion because of a specific event that impinged on the group (Smith & Mackie, 2008).

*Team rank.* Research has shown that the self-conscious emotions arise in relation to the appropriateness of social behavior (Keltner, 1995; Lewis, 1993; Tangney, 1990, 1991, 1992; Tangney & Fischer, 1995). Pride is most strongly evoked in situations of publicly praised accomplishment (Webster et al., 2003) such as mastering a skill or receiving a high academic mark (Tangney, 1999; Tracy & Robins, 2004a). Emotions are generated based on an evaluation of how well some standard was met, i.e. a standard to win. Team moral emotions arise during ingroup experiences or intergroup events focused at an outgroup. For example, “in an intergroup situation that makes social comparisons between teams salient, people may feel collective pride if they believe that their team has succeeded in an important task. Or, feelings of collective guilt

may result if people appraise their team as having violated important moral principles” (Smith & Mackie, 2008: 431). If a team succeeds in a team task, then the team is expected to appraise the situation as a success and from this appraisal the team will feel more team pride, less team shame, and less team guilt. This is in line with my hypothesis that higher levels of task performance leads to higher team pride and lower team shame and guilt.

*Team Cheating.* If a team violated an important moral principle in the process of achieving an outcome then it is expected that a team should experience more team guilt and shame and less team pride. However, if the team judged their behavior as acceptable then these relationships may not be as apparent. Researchers concluded that unethical behavior was judged as more acceptable when injustice perceptions arose. Specifically, people felt more satisfaction and less guilt when they thought that they had been treated unfairly in situations where they engaged in unethical behavior (Lewicki, 1983; Schweitzer & Gibson, 2008). In this case, teams would be predicted to feel more team pride and less team guilt and shame. The former prediction is consistent with my hypothesis.

### **Perceived Similarity as a Moderator**

Research shows consistent findings that highly identified teams express more positive team emotion than weakly identified teams (e.g., Smith et al., 2007). However, mixed findings persist on the role of team identity in explaining negatively valenced emotions (Roccas et al., 2006) where identification was sometimes positively related (Doosje et al., 2004), sometimes negatively related (Doosje et al., 1998), and sometimes there was no overall relationship (Branscombe et al., 2004). On the one hand, a strong team identity should be associated with experiencing stronger team-based emotions and thus should be associated with feeling more

negative emotions (Roccas et al., 2006). For example, collective guilt ensued when ingroup members failed to legitimize their team's behavior (Branscombe & Doosje, 2004).

On the other hand, teams may legitimize the team's wrongdoings and feel little or no negative emotions (e.g., Doosje et al., 1998). Teams may legitimize the ingroup's behavior by reaffirming the acceptability of ingroup behavior. For example, one tactic used to reaffirm acceptability includes denying team responsibility for the acts and justification. Another method is through event reappraisal, where a team portrays an event as more positive than it actually is. Methods of reappraisal include downplaying severity of harm done by the team, focusing on the benefits of ingroup behavior, rather than the costs, and rendering themselves as incapable of repairing any damage done (Branscombe, 2004; Branscombe & Miron, 2004; Powell, Branscombe, & Schmitt 2005; Wohl et al., 2006). For example, Doosje et al. (1998) explained that high identifiers are less willing to accept team-based guilt than low identifiers as a defensive mechanism, denying any wrongdoing. This hypothesis – highly attached members experience less or no team-based guilt than low attached members– has also received support from Roccas et al., 2006. Roccas et al. (2006) describes that people who glorify their in-group can avoid feeling morally responsible for their in-group's wrongdoings because of how they interpret the event as justified.

How one perceives their ingroup may play a role in how certain actions are justified. People have a tendency to identify and connect with others who share a personal affiliation or are similar in terms of values, gender, and culture (Schaubroeck & Lam, 2004; Smith, 2000). This connection engenders a shared sense of community resources (Clayton & Opatow, 2003) with the expectation of sharing similar outcomes (Schuabroek & Lam, 2004). This may entail a stronger sense of moral obligation to team members who “are closer to us and weaker toward

those who are psychologically distant” (Opotow, 1995:351). Highly identified members strive for the greatest good of the team and try to maximize ingroup outcomes and minimize ingroup inequalities in social dilemmas (Simpson, 2006). Highly identified members may feel more obligations to protect their team identity and uphold a positive team image if it is in the team’s best interest. High identifiers would then experience more team pride and less or no team shame and guilt as a way to restore or protect a positive social identity (e.g., Branscombe et al., 1999; Maiter et al., 2007; Smith & Mackie, 2008). This focus on maintaining a positive team image will effect how highly identified teams experience team moral emotions. Teams that are highly identified want to showcase the team in the best light so these teams will experience more team pride and less or no team shame and guilt in regards to their team performance (rank and cheating).

In low identified teams, individuals may experience a lack of connection with dissimilar others (Hogg & Abrams, 1988; Reed & Aquino, 2003). In this case, individuals do not feel as comfortable explaining away immoral actions and are more likely to report negative emotions, even if it damages the team’s identity. Therefore, low identified teams are predicted to experience more team shame and team guilt in response to negatively valued actions, such as team cheating. Figure 1 illustrates the proposed theoretical relationships. Hypothesis 1 states predictions in relation to team rank and hypothesis 2 states predictions in relation to team cheating behaviors.

***Hypothesis 1: Performance Outcome: Rank***

- (a) There is a positive relationship between team performance rank and team pride.*
- (b) There is a negative relationship between team performance rank and team shame.*
- (c) There is a negative relationship between team performance rank and team guilt.*

*(d) The strength of the relationship between team performance rank and team moral emotions will vary depending on the extent of perceived similarity; the effect will be stronger when perceived similarity is higher.*

***Hypothesis 2: Performance Process: Cheating***

*(a) There is a negative relationship between cheating and team pride.*

*(b) There is a positive relationship between cheating and team shame.*

*(c) There is a positive relationship between cheating and team guilt.*

*(d) The strength of the relationship between cheating and team moral emotions will vary depending on the extent of perceived similarity; the effect on negative emotions will be stronger when perceived similarity is lower and the effect on positive emotions will be stronger when perceived similarity is higher.*

## METHOD

This methodology section will cover the following: research design, population and sample, sampling procedures, data collection procedures, measures, and data analysis.

*Research design.* A time-lagged, quasi-experiment that involved a team computer task was conducted in a laboratory setting. This design was used to assess the social effects of team performance on team moral emotions for student organization teams in the Midwest.

*Population and Sample.* The sample comprised 47 student teams at a large Midwestern university. On average each team had 3.85 members. These teams were unique in that participants were active members of student organizations in addition to being a student. The teams worked together to achieve a common mission stated by the student organization. The teams had a structure, team norms, and many had funding. The team types ranged from graduate law school teams to undergraduate fraternity teams. This variety better captured the work environment context in that it included many professions and thus more diversity.

*Sampling Procedures.* Nonprobability sampling was used in that all student organizations that were registered on the university's hub website were contacted. Specifically, one researcher contacted 780 student organizations by email and subsequently placed flyers in the mailbox of the 61 organizations that had a mailbox in the student union building. An email was sent to presidents or the point of contact listed on the university's website asking subjects to participate in a laboratory study on team decision-making. The email contained information on compensation, including a chance to win a team prize worth \$250, and requirements to participate, i.e. teams of three or four students involved in the student organization. Flyers were also placed around the union on the bulletin boards to serve as a reminder and also to capture any student teams that were not listed on the main website. Reminder emails were sent one to two

weeks after the original email. A leader from each team was instructed to register all interested teams by including in the reply message a list of team member's names and email addresses. An initial interest was garnered from 85 teams spread over 24 student organizations. Emails were sent personally to each student team, which confirmed their registration as a team and explained the two parts of the study: an online questionnaire (245 students completed) and an in-person laboratory experiment that is roughly three weeks after part I (181 students: 58 men, 107 women)<sup>1</sup>. The final sample consisted of 47 teams with an average age of 20.5 years and an average student organization tenure of 1.62 years.

*Data Collection Procedures.* Data collection began in September of 2010 and was completed by December. Each student team (all team members emails included) was personally contacted with the instructions regarding the two parts of the study. Part I (the online survey) was completed about three weeks prior to Part II of the study (the lab experiment). The online survey questionnaire contained questions about demographic characteristics, moral intent, moral disengagement, and matching questions (e.g. subject's month of birth, first letter of the street of their current address, etc.). Student teams were reminded of the lab experiment (Part II) and location a couple of days in advance.

Upon arrival, student teams were directed to one of three rooms that were located next to each other and asked to wait while other participants arrived. The experimenter entered the room and told the team that the study was designed to examine team decision-making in an online investment game. Student teams were informed that they would be competing against two other real student teams. In actuality, the two other teams were computer players with predetermined investment amounts. The experimenter distributed a consent form and paper questionnaire that

---

<sup>1</sup> 16 subjects does not fill out their gender on the online survey

contained two parts (pre-game questions and post-game questions). The team members individually filled out questions regarding team perceived similarity and their motivation to win. The experimenter reentered the room, handed out rules sheets and started a five-minute audio that went over the instructions and rules of the game. At the end, the experimenter asked for any questions in regards to the rules of the game and the participants filled out a question that assessed their understanding of the game.

The computer game started with three sample rounds where the team could visibly see all information, followed by three practice rounds where the team could not see any other team's investment information. After the team finished practicing they had five minutes to discuss and write down their investment strategy on a piece of paper. Once the five minutes expired the game started, which consisted of nine rounds. The formally expressed leader was seated in front of the computer and the other members were gathered around the computer, watching the decisions on a large screen monitor. The team was instructed to open the door of their room when they finished the game. After completing the game the team was asked to answer Part II of the paper survey. The team answered questions about how they felt (pride, shame, and guilt) and whether they followed the rules. After this the team members collected their money, filled out tickets for the raffle with the leader's information, and were debriefed on the actual nature of the experiment. Participants were first asked what they thought the study investigated to gauge whether the teams knew of the researcher's true intent. Teams were asked to keep the nature of the experiment secret. The specific nature of the task is discussed in more detail below.

The main task was a team version of an online investment game where teams rather than individuals had the task of secretly deciding an amount of money from \$10 to \$200 per round to invest into a 'public pot'. Three teams contributed each round into the 'public pot' over nine

rounds. The goal was to meet a specified quota – that changed from round to round – among the three teams while not directly knowing what amount the other teams invested. If the quota was met then the teams made double their investment whereas if the quota was not met then the team lost the money invested. At the end of each round a summary table was displayed that showed the results for the round and the overall results and ranking of each group.

The computer game was specially designed to include two buttons labeled “View group 1’s decision” and “View group 2’s decision” that if pressed would show the amount of the team’s investment. This button was not included in the practice round as the game was designed to be played without using the buttons. Furthermore, the rules specified that “Teams should not communicate with or view other participating teams’ investment decisions”. The teams were told that if any questions arose during the experiment that they should consult the rules handout. Therefore, the decision to use the button was considered as cheating because the team did not adhere to the rules.

This design was intended to mimic fraud at a public company in that existing teams in student organizations were chosen as our participants. In addition, a tournament structure was used with ranking and incentives that made the game more competitive with substantial rewards – the possibility of receiving one of four \$250 prizes- in addition to a base pay of \$15 for each team member. First place teams received six tickets, second place teams two tickets, and third place teams one ticket.

*Measures.* To collect data on the variables of interest mixed sources were used such as questionnaires and performance feedback from computer-relayed input. The measures of interest included: team performance, team moral emotions, perceived similarity, and controls.

Team Performance. A comprehensive measure of team performance should include both process and outcome measures (Brannick et al., 1997). Currently, no agreed upon measure exists to measure team performance differences. To capture the team performance construct in this context, team rank was used as an outcome measure and team cheating as a process measure.

*Team Rank:* Each team received an ordered rank – first place, second place, or third place – at the end of the investment game based on their relative performance against the two computer teams. Rank scores were recoded so that a higher score reflected higher performance where first place equals three, second place equals two, and first place equals one. This was done to increase the readability of the graphs.

*Team Cheating:* The number of times that a team pressed the “View group 1’s decision” and “View group 2’s decision” buttons. Viewing the other team’s decisions would be considered against the rules. Going against the rules would be categorized as cheating as teams who cheated had an unfair advantage. Finally, cheating is considered unethical or immoral behavior as decision makers chose to violate a set of rules as well as social norms and principles such as honesty and fairness to others (Pearsall & Ellis, 2011; Reynolds & Ceranic, 2007; Brady & Wheeler, 1996). The range of team cheating ranged from 0 to 18.

Team Emotion. After the experiment, all team members completed the *state* shame and guilt scale used in Marschall, Saftner, & Tangney (1994). This scale assessed the phenomenological aspects of shame, guilt, and pride and used the rational method based on Lewis’ (1971) theory. The scale characteristics included: pride (5 items;  $\alpha = .88$ ), shame (5 items;  $\alpha = .74$ ), and guilt (5 items;  $\alpha = .69$ ). Team members were directed to think in the present moment as showcased by the instructions that stated: “How do you feel currently, that is, right now?” Sample items for pride, shame, and guilt include: “I feel good about myself,” “I want to

sink into the floor and disappear,” and “I feel remorse, regret” respectively. The response format ranged from 1= “not feeling this way at all”, 3 = “feeling this way somewhat”, to 5 = “feeling this way very strongly”. The item scores were averaged to form total scores for each emotion. Each team member’s score was aggregated to the team level by using Chan’s direct consensus approach (1998), which consists of averaging the averages. This approach was the best choice when such compositional properties of the team are shared as the meaning of the higher-level construct is in the consensus among the lower level units (Chan, 1998). That is team moral emotions were shared and required a consensus among individuals. Direct consensus was the preferred method over referent-shift consensus because as Chan argues “the lower level attributes being assessed for consensus are not conceptually distinct though derived from the original individual-level construct” (1998: 238), i.e. there was no shift in the referent prior to consensus assessment. Research by Seger et al. (2008) showed that a simple activation of a social categorization triggered team-level emotions, even when self-report measures of current emotions are used. This study showed that questions that contained “you” have similar effects to referent-shift models where instructions tell participants to think about oneself as a team member.

Perceived Similarity. Team members completed this measure pre-experiment. Following Tepper, Moss, Duffy (2010), perceived similarity is measured by using three items from Turban and Jones’ (1988) measure of perceived similarity with team members and two additional items written and used by Liden et al. (1993). Sample items prefaced by “The group members and I are...” include: “are similar in terms of our outlook, perspective, and values,” “analyze problems in a similar way,” “think alike in terms of coming up with a similar solution for a problem,” “are alike in a number of areas,” and “see things in much of the same way.” The response format

ranged from 1 = “strongly disagree” to 7 = “strongly agree.” The item scores were averaged to form a total individual-level score of perceived similarity. Like team emotions, each team member’s average was aggregated to the team level (Chan, 1998).

Control Variables. Based on a review of the relevant literature, I included team ethnicity and team size as control variables. Team ethnicity may relate to demographic differences in self-conscious affective style (Tangney, 1990) and may relate to how teams experience moral emotions. Team size may relate to within-unit communication patterns (Duffy, Shaw, & Stark, 2000).

*Data Analysis.* I predicted and tested performance-team emotion relationships at the team level of analysis. I conceptualized and operationalized all constructs as team-level constructs and conducted hierarchical regression for the team emotion outcomes. Due to a small sample size, I flagged relationships that were under 0.10 in terms of significance. Step 1 included the control variables (ethnicity, size), Step 2 included the dependent variables (rank, team cheating) and the moderator variable entered alone (perceived similarity), and Step 3 included the interaction variables (rank\*perceived similarity and cheating\*perceived similarity).

Justification for Aggregation. Following Chan’s (1998) typology of composition models, I based my aggregation of team perceived similarity and team moral emotions on the direct consensus model. Specifically, I averaged individual team member scores within the teams to produce a team level score. To justify this aggregation, I computed two reliability scores – the intra-class correlations (ICC) – and estimated the within-team agreement to gauge consensus. ICC’s are used as the measure of reliability in the multilevel organizational literature. Specifically, ICC (1) was used to assess the degree to which raters are interchangeable (Bliese, 2000). ICC (1) values of team pride, team shame, team emotion, and team perceived similarity

are .58, .34, .35, and .23 respectively. ICC (2) is related to ICC (1) through team size and is a reliability estimate of team means compared to an individual assessment of the team mean. ICC (2) values of team pride, team shame, team emotion, and team perceived similarity are .84, .67, .67, and .54 respectively. These values were all significant and positive (Kenny & La Voie, 1985) justifying the aggregation of individual level data to the team level.

## RESULTS

The team-level descriptive statistics including means, standard deviations, correlations and coefficient alphas, when relevant, are reported in Table 1. The correlations of team rank and team moral emotions are statistically significant for all three emotions : team pride ( $r = .63, p < .01$ ), team shame ( $r = -.45, p < .01$ ), and team guilt ( $r = -.30, p < .05$ ). The correlations of team cheating and team moral emotions are not statistically significant for all three emotions : team pride ( $r = .19, n.s.$ ), team shame ( $r = -.02, n.s.$ ), and team guilt ( $r = .01, n.s.$ ). Regression results are reported in Table 2. Hypothesis 1 a, b, and c examined the direct relationship between team rank and team moral emotions. There was a statistically significant relationship between team rank and team pride ( $\beta = .59, p < .01$ ), with 45% of the unique variance in team pride explained by rank. There was also a statistically significant relationship between team rank and team shame ( $\beta = -.24, p < .01$ ) supporting hypothesis 1 (b), there is a negative relationship between team rank and team shame. Finally, there was a statistically significant relationship between team rank and team guilt ( $\beta = -.20, p < .05$ ), which support hypothesis 1 (c).

Hypothesis 1 (d) examined the moderating role of team perceived similarity on the relationship between team rank and team emotions. Perceived similarity did not moderate the relationships between team rank and team shame ( $\beta = -.11, ns$ ) nor team guilt ( $\beta = -.14, ns$ ). The interaction of team rank and perceived similarity on team pride was significant at the  $p < .10$  level ( $\beta = .30, p < .10$ ). Hypothesis 1(d) was not fully supported.

Hypothesis 2 a, b, and c examined the direct relationship between team cheating behavior and team moral emotions. First, there was no statistically significant relationship between cheating and team pride ( $\beta = -.01, n.s.$ ), team shame ( $\beta = .01, n.s.$ ), and team guilt ( $\beta = .01,$

n.s). The relationship direction predictions were accurate but not strong enough to support hypothesis 2 a, b, or c.

Hypothesis 2 (d) examined the moderating role of perceived similarity on the relationship between cheating and team moral emotions. The interaction of team cheating and perceived similarity was significantly related to all three moral emotions, team pride ( $\beta=.04, p < .05$ ), team shame ( $\beta=-.03, p < .05$ ), and team guilt ( $\beta=-.04, p < .05$ ). The interaction term explains an additional 9% in variance on team pride, 11% in variance on team shame, and 13% in variance on team guilt ( $p < .05$ ). Thus there is support for Hypothesis 2 d. The specific interaction effects of cheating and perceived similarity are discussed in more detail below.

The interaction plot for the team cheating- team pride relationship is shown in Figure 2. The simple slope differed significantly from 0 at high levels of perceived similarity but does not differ significantly from 0 at low levels of perceived similarity. Teams with higher levels of perceived similarity experienced higher team pride when team cheating is high compared to when team cheating is low. This finding supports my prediction that the strength of the relationship between cheating and team pride will be stronger for teams with higher perceived similarity as teams are trying to protect and support their team identity and team actions.

The interaction plot for the team cheating- team shame relationship is shown in Figure 3. The simple slope differed significantly from 0 at low levels of perceived similarity but did not differ significantly from 0 at high levels of perceived similarity. An examination of the interaction plot reveals that the relationship between cheating and shame was stronger for teams with lower levels of perceived similarity than it was for those with higher levels of similarity. This finding is consistent with my overall prediction that the strength of the negative relationship

will be more prominent in low identified teams when cheating is higher compared to when cheating is lower.

The interaction plot for the team cheating- team guilt relationship is shown in Figure 4. The simple slope differed significantly from 0 at low levels of perceived similarity but did not differ significantly from 0 at high levels of perceived similarity. An examination of the interaction plot reveals that teams with lower levels of perceived similarity experienced greater levels of guilt after cheating than did teams who had higher levels of perceived similarity. This pattern is well suited within my overall prediction that the strength of the negative relationship between team cheating and team guilt will be more prominent in low identified teams.

## DISCUSSION

To date, moral team emotion outcomes associated with team performance is under researched (Ashkanasy & Cooper, 2008) even though we know that organizational decisions are typically made by teams (Kozlowski & Bell, 2003) and that moral emotions are important indicators of and antecedents to a wide variety of both negative and positive outcomes (e.g. Tangney et al., 1992; Batson, 1998; Smith et al., 2007). To investigate the relationship between team performance and team moral emotions, I examined how team performance, rank and cheating behaviors, influenced team pride, team shame, and team guilt. Another piece missing in Intergroup Emotions Theory is the exploration of team identity, at a small group level, as a moderator. Building on research suggesting that team identification changes the way in which teams emotionally react to performance, I examined the moderating role of perceived similarity on team moral emotions. The significance of my study is twofold.

First, I found a significant relationship between team rank and team moral emotions. Specifically, the relationship between team rank and team pride was positive where the relationship between team rank and team shame and team rank and team guilt was negative. Teams that achieved first place had more team pride and less team shame and team guilt than teams that did not achieve first place. This supports my prediction and the notion that, in general, teams experience collective pride if they believe that their team has succeeded at an important task (Smith & Mackie, 2008). The results also suggests that teams that placed first felt less team guilt and less team shame, which speaks to the line of work that states people experience collective guilt or shame when they appraise their team as violating important moral principles. Perhaps, the pride in placing first washes away any shame and guilt that may have ensued in the

case that the team cheated and lost. Conversely, teams who performed poorly were likely to feel ashamed and guilty. An interesting question is whether guilt and shame levels were worse (or higher) for losing or cheating?

Second, I found that perceptions of team similarity interact with cheating behaviors to predict team moral emotions (i.e., pride, shame, and guilt). Specifically, the relationship between team cheating and team pride was more pronounced when team perceived similarity was high versus low, in the case that a team cheated more. This finding suggests that high team perceived similarity in small teams is linked to feeling more pride as deviant behaviors escalate. However, in the case of team shame and team guilt, the highly identified teams reported relatively low levels. This finding was consistent with findings that negative group emotions were more weakly and generally negatively related to identification, which is due in part to a type of motivated cognition (Smith & Mackie, 2008). This occurs because when team perceived similarity is high, teams legitimize negative behavior by reattributing the cause of the event as to maintain a positive team image. In contrast, when team perceived similarity is low upholding a positive team image is less favorable and the team experiences greater shame and guilt. Stated differently, the more that teams deem cheating as unjust, the more they attribute the blame for the actions to internal causes and the more they can experience the associated negative emotions.

These results are consistent with Doosje et al.'s (1998) argument that "negative group-image threatening emotions, such as guilt or shame, are likely to be experienced only by people who are willing to admit or accept that their group has done something wrong in the first place" (p. 879) as well as with Smith's finding that highly identified teams express more positive team emotion than weakly identified teams (2007). A higher group identification enabled the experience of intergroup emotions that were more likely to reward and encourage strong

identification with a particular group (Smith & Mackie, 2008). At the same time, a strong group identification leads people to reinterpret and reappraise as high identifiers want to avoid negative feelings and are more unlikely to accept a negative interpretation of their team (Doosje et al. (1998). This study extends previous research in two ways: (a) I showed that this interaction pattern extends to small teams, and (b) I demonstrated that the interactive effects observed for team identity and cheating can also apply to positive emotions, such as pride.

These results differ from those of previous studies on team moral emotions (e.g., Branscombe, 2004; Doosje et al., 2004). Specifically, previous studies have found relatively little support for the hypothesis that highly attached members experience less team-based guilt than their low attachment counterparts (Roccas et al., 2006). However, I found support that showed highly identified teams reacting less negatively to cheating behaviors. Instead, low identified teams experienced more negative moral team emotions in response to cheating. This finding provides support for the hypothesis that highly attached members experience less team-based guilt. This is important as it extends our understanding of team-level moral emotions as part of the entire picture of intergroup relations. Pettigrew (1998) mentioned that the effects of intergroup contact on affective dependent variables, in this case team moral emotions, are generally stronger than effects on measures of stereotypes. Because teams have been shown to facilitate prejudice against outgroups (Miller et al., 2004), it is crucial to fully understand how performance affects team-level moral emotions. This study contributes to the literature by examining how face-to-face team performance, team perceived similarity, and team moral emotions interact within an intergroup setting.

The results revealed several unanticipated outcomes, which included no significant main effects of cheating on team pride, team shame, and team guilt. Perhaps, teams may not have

directly reacted to cheating because there were no severe negative repercussions to cheating. In addition, there was no significant interaction of rank and perceived similarity. The distinction between positive and negative aspects of performance may account for the difference in results. It is possible that teams focus more on protecting their identity in negatively charged situations such as when team cheating is involved. Another interesting result was the different interaction patterns for team shame and team guilt in instances of low and high cheating. In low cheating, low and high identity teams were closer in the levels of guilt they experienced whereas in high cheating low and high identity teams were closer in the levels of shame they experienced. A possible explanation for this is the distinction that shame is tied to a personal characteristic whereas guilt is related to the more objective behavior (Lewis, 2008). In instances of cheating more the effects are attributed to the self. On the other hand, when teams cheat less both types of teams experience a similar level of team guilt.

The proposed design and sample are not without limitations. Several features of the study may limit the generalizability of the findings. The sample size, volunteer sample, and length of the study will be discussed in more detail. The major limitation of the study is the relatively small sample size of 47 units. A smaller sample size may not fully represent the population. In addition, small sample sizes are associated with less statistical power. The second main concern is that teams volunteered to participate in this study, which may not necessarily reflect the population. Also, random assignment is not possible as each game is designed to include the “view group button” manipulation and teams self-selected into a condition based on their team choice. Finally, this data provides a snapshot of a team’s emotional state, leaving behind an important and influential variable, time.

Future research could replicate this study in different contexts (in the field), with a different sample (work teams), and over a longer time period by using a longitudinal design. Additional research questions that are unanswered remain. As Smith & Mackie (2008) mention, time plays an interesting role in the relationship between emotional experiences and future unwanted behavior like prejudice, which has traditionally been seen as highly stable. But, this may be dependent on fleeting and quick emotional experiences that could be highly influenced by one's social identity. Other avenues of research include examining other moderators that influence the relationship between team performance and team emotions? Team self-regulation? Team motivation to win? And, how do individual differences play a role in this relationship? Studies could take on a hierarchical linear model approach and look at individual emotions as well as individual perceived similarity. Finally, it would be interesting to understand how group identity changes after experiencing negative emotions. Does an additional process occur that motivates individuals to decrease identification with a particular group as Smith & Mackie suggest (2008)?

To summarize, I predicted that team performance experiences would be strongly related to team moral emotions and that this relationship varied by a team's level of perceived similarity. I found moderate support for this idea. This study provides new insight for both researchers and practitioners interested in the social nature of emotions within teams. An increased understanding of how teams react to performance can help researchers understand the conditions in which teams experience moral emotions. Furthermore, it extends intergroup emotions theory and the line of work that suggests that people adopt positive identities associated with positive group emotions and disidentify from groups associated with negative group emotions (Kessler & Hollbach, 2005) by adding that this is true in the case of face-to-face teams and even more likely

when team identification is high. Practitioners can use these findings to better understand how teams emotionally react to performance and further understand how these emotions initiate and guide future behavior that if left untouched may encourage culturally desirable or undesirable behaviors. I hope this study will encourage researchers to continue to build on team moral emotions as a dependent variable.

## REFERENCES

- Alexander, M. G., Brewer, M. B., & Hermann, R. K. (1999). Images and affect: A functional analysis of out-group stereotypes. *Journal of Personality*
- Ashkanasy, N. M., & Cooper, C. L. (2008). *Research companion to emotion in organizations / edited by Neal M. Ashkanasy, Cary L. Cooper* Edward Elgar, Cheltenham, England
- Bamberger, P., & Biron, M. (2007). Group norms and excessive absenteeism: The role of peer referent others. *Organizational Behavior and Human Decision Processes*, 103(2), 179–196.
- Barsade, S. G. (2002). The Ripple Effect: Emotional Contagion and Its Influence on Group Behavior. *Administrative Science Quarterly*, 47(4), 644–677.
- Batson, C. D. (1987). Prosocial motivation: Is it ever truly altruistic? In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 65-122). New York: Academic Press.
- Batson, C. D. (1998). Altruism and prosocial behavior. In *The Handbook of Social Psychology*, ed. DT Gilbert, ST Fiske, G Lindzey, 2:282–316. Boston: McGraw-Hill
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, 115, 243-267.
- Beer, J. S., Heerey, E. A., Keltner, D., Scabini, D., Knight, R. T. (2003). The regulatory function of self-conscious emotion: Insights from patients with orbitofrontal damage. *Journal of personality and social psychology*, 85(4), 594.
- Brady, F. N., & Wheeler, G. E. (1996). An empirical study of ethical predispositions. *Journal of Business Ethics*, 15, 927–940. doi:10.1007/ BF00705573

- Branscombe, N. R. (2004). A social psychological process perspective on collective guilt. In N. R. Branscombe & B. Doosje (Eds.), *Collective guilt: International perspectives* (pp. 320–334). New York: Cambridge University Press.
- Branscombe, N. R., & Miron, A. M. (2004). Interpreting the ingroup's negative actions toward another group: Emotional reactions to appraised harm. In L. Z. Tiedens & C. W. Leach (Eds.), *The social life of emotions* (pp. 314–335). New York: Cambridge University Press.
- Branscombe, N. R., Slugoski, B., & Kappen, D. M. (2004). The measurement of collective guilt: What it is and what it is not. In N. R. Branscombe & B. Doosje (Eds.), *Collective guilt: International perspectives* (pp. 16–34). New York: Cambridge University Press.
- Brown, R., Cehajic, S. (2008). Dealing with the past and facing the future: Mediators of the effects of collective guilt and shame in Bosnia and Herzegovina. *European journal of social psychology*, 38(4), 669.
- Campos, J. J. (1995). Foreward. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. ix-xi). New York: Guilford.
- Capozza, D., & Oxford, R. B. (n.d.). It's About Time: Intergroup Emotions as Time-Dependent Phenomena.
- Castano, E. (2008). On the Perils of Glorifying the In-group: Intergroup Violence, In-group Glorification, and Moral Disengagement. *Social and Personality Psychology Compass*, 2(1), 154–170.
- Chakrabarti, A. (1992). Individual and Collective Pride. *can Philosophical Quarterly*, 29, 35-43.
- Chen, Y., & Li, S. X. (2009). Group identity and social preferences. *The American Economic Review*, 99(1), 431–457.

- DeChurch, L. A., & Mesmer-Magnus, J. R. (2010). The cognitive underpinnings of effective teamwork: A meta-analysis. *Journal of Applied Psychology, 95*, 32-53.
- Doosje, B., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (1998). Guilty by association: When one's group has a negative history. *Journal of Personality and Social Psychology, 75*(4), 872.
- Doosje, B. J., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (2004). Consequences of national ingroup identification for responses to immoral historical events. In N. R. Branscombe & B. J. Doosje (Eds.), *Collective guilt: International perspectives* (pp. 95–111). New York: Cambridge University Press.
- Doosje, B. E. J., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (2006). Antecedents and consequences of group-based guilt: The effects of ingroup identification. *Group processes & intergroup relations, 9*(3), 325.
- Duffy, M. K., Shaw, J. D., & Stark, E. M. (2000). Performance and satisfaction in conflicted interdependent groups: When and how does self-esteem make a difference? *The Academy of Management Journal, 43*(4), 772–782.
- Feiring, C., Taska, L., & Lewis, M. (2002). Adjustment following sexual abuse discovery: The role of shame and attributional style. *Developmental Psychology, 38*, 79-92.
- Ferguson, T. J., Eyre H. L., Stegge H., Sorenson C. B., Everton R. (1997). *The distinct roles of shame and guilt in childhood psychopathology*. Presented at Soc. Res. Child Dev., Washington, DC
- Fessler, D. M. T. (1999). Toward an understanding of the universality of second-order emotions. In A. L. Hinton (Ed.), *Biocultural approaches to the emotions: Publications of the Society for Psychological Anthropology* (pp. 75–116). New York: Cambridge University Press.

- Fischer, A. H., & Manstead, A. S. R. (2008). Social functions of emotion. *Handbook of emotions*, 456–470.
- Fischer, K. W., & Tangney, J. P. (1995). Self-conscious emotions and the affect revolution: Framework and overview. In J. P. Tangney & K. W. Fischer (Eds), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 3-24). New York: Guilford
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878–902.
- Forgas, J. P. (1994). Sad and guilty? Affective influences on the explanation of conflict in close relationships. *Journal of personality and social psychology*, 66:56–68
- Frank, R. H. (1988). *Passions within reason: The strategic role of the emotions*. New York: Norton.
- Frank, R. H. (2004). Introducing moral emotions into models of rational choice. In A. S. R. Manstead, N. Frijda & A. Fischer (Eds.), *Feelings and emotions: The Amsterdam symposium* (pp. 422- 440). Cambridge: Cambridge University Press.
- Fusaro, P. C., & Miller, R. M. (2002). *What went wrong at Enron: Everyone's guide to the largest bankruptcy in U.S. history*. Hoboken, NJ: Wiley.
- Haidt, J. (2003). The moral emotions. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences*. Oxford: Oxford University Press.(pp. 852-870).
- Harder, D. W. (1995). Shame and guilt assessment, and relationships of shame- and guilt proneness to psychopathology. In J. P. Tangney & K. W. Fischer (Eds), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 368-392). New York: Guilford.

- Harder, D. W., Cutler, L., Rockart, L. (1992). Assessment of shame and guilt and their relationships to psychopathology. *Journal of Personality Assessment*, 59:584–604
- Hardy, C.L., & Van Vugt, M. (2006). Nice guys finish first: The competitive altruism hypothesis. *Personality and Social Psychology Bulletin*, 32, 1402-1413.
- Harth, N. S., Kessler, T., & Leach, C. W. (2008). Advantaged Group's Emotional Reactions to Intergroup Inequality: The Dynamics of Pride, Guilt, and Sympathy. *Personality and Social Psychology Bulletin*, 34(1), 115 -129. doi:10.1177/0146167207309193
- Hogg, M. A., & Turner, J. C. (1987). Social identity and conformity: A theory of referent informational influence. *Current issues in European social psychology*, 2, 139–182.
- Iyer, A., Leach C. W., Crosby, F. J. (2003). White guilt and racial compensation: the benefits and limits of self-focus. *Personality and Social Psychology Bulletin*, 29:117–29
- James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology*, 69: 85-98.
- Johns, M., Schmader, T., & Lickel, B. (2005). Ashamed to be an American? The role of identification in predicting vicarious shame for anti-Arab prejudice after 9–11. *Self and Identity*, 4(4), 331–348.
- Kelly, J. R., & Barsade, S. G. (2001). Mood and Emotions in Small Groups and Work Teams\* 1. *Organizational behavior and human decision processes*, 86(1), 99–130.
- Keltner, D. (1995). Signs of appeasement: Evidence for the distinct displays of embarrassment, amusement, and shame. *Journal of Personality and Social Psychology*, 68, 441–454.
- Kessler, T., & Hollbach, S. (2005). Group-based emotions as determinants of ingroup identification. *Journal of Experimental Social Psychology*, 41(6), 677–685.
- Kenny, D. A., & La Voie, L. (1985). Separating individual and group effects. *Journal of*

*Personality and Social Psychology*, 48: 339-348.

Kulik, B. W., O'Fallon, M. J., & Salimath, M. S. (2008). Do competitive environments lead to the rise and spread of unethical behavior? Parallels from Enron. *Journal of Business Ethics*, 83, 703–723. doi:10.1007/s10551-007-9659-y

Leach, C. W., Snider, N., & Iyer, A. (2002). “Poisoning the consciences of the fortunate”: The experience of relative advantage and support for social equality. In I. Walker, & H. Smith (Eds.), *Relative deprivation: Specification, development and integration* (pp. 136–163). Cambridge: Cambridge University Press.

Leary, M. R., & Hoyle, R. H. (Eds.) (2009). *Handbook of individual differences in social behavior*. New York: Guilford.

Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518–530.

Leith, K. P., & Baumeister, R. F. (1998). Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. *Journal of Personality*, 66, 1-37.

Lewicki, R. J. (1983). Lying and Deception: A Behavioral Model, in M. H. Bazerman and R. J. Lewicki (eds.), *Negotiating in Organizations* (Sage, Beverly Hills, CA), pp. 68–90.

Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York: International Universities Press.

Lewis, M. (1993). Self-conscious emotions: Embarrassment, pride, shame, and guilt. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 353–364). New York: Guilford Press.

- Lewis, M. (2000). Self-conscious emotions: Embarrassment, pride, shame, and guilt. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed.) (pp. 623-636). New York: Guilford
- Lewis, M., Haviland-Jones, J. M., & Barrett, L. F. (2010). *Handbook of emotions*. The Guilford Press.
- Lickel, B., Schmader, T., Barquissau, M. (2004). The evocation of moral emotions in intergroup contexts: the distinction between collective guilt and collective shame. In *Collective Guilt: International Perspectives*, ed. NR Branscombe, B Doosje, pp. 35–55. New York: Cambridge Univ.
- Lickel, B., Schmader, T., Curtis, M., Scarnier, M., & Ames, D. R. (2005). Vicarious shame and guilt. *Group processes & intergroup relations*, 8(2), 145
- Lickel, B., Schmader, T., Spanovic, M. (2006). Group-conscious emotions: the implications of others' wrongdoings for identity and relationships. In *The Self-Conscious Emotions: Theory and Research*, ed. R Robins, J Tracy, JP Tangney. New York: Guilford.
- Lickel, B., Steele, R. R., & Schmader, T. (2011). Group-Based Shame and Guilt: Emerging Directions in Research. *Social and Personality Psychology Compass*, 5(3), 153–163.
- Lindsay-Hartz, J. (1984). Contrasting experiences of shame and guilt. *American Behavioral Scientist*, 27, 689-704
- Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, 79, 602–616.

- Mackie, D. M., Silver, L. A., & Smith, E. (2004). Intergroup emotion: Emotion as an intergroup phenomenon. In L. Z. Tiedens & C.W. Leach (Eds.), *The social life of emotions* (pp. 227–245). New York: Cambridge University Press.
- Mackie, D. M., & Smith, E. R. (1998). Intergroup relations: Insights from a theoretically integrative approach. *Psychological Review*, 105, 499–529.
- Mackie, D. M., & Smith, E. R. (2002). Intergroup emotions and the social self: Prejudice reconceptualized as differentiated reactions to outgroups. In J. P. Forgas & K. D. Williams (Eds.), *The social self: Cognitive, interpersonal, and intergroup perspectives* (pp. 309–326). Philadelphia: Psychology Press.
- Maitner, A. T., Mackie, D. M., & Smith, E. R. (2006). Evidence for the regulatory function of intergroup emotion: Emotional consequences of implemented or impeded intergroup action tendencies. *Journal of Experimental Social Psychology*, 42, 720–728.
- Maitner, A. T., Mackie, D. M., & Smith, E. R. (2007). Antecedents and Consequences of Satisfaction and Guilt Following Ingroup Aggression. *Group Processes & Intergroup Relations*, 10(2), 223 -237. doi:10.1177/1368430207075154
- Mascolo, M. F., & Fischer, K. W. (1995). Developmental transformations in appraisals for pride, shame, and guilt.
- Moll, J. et al. (2002). The neural correlates of moral sensitivity: A functional magnetic resonance imaging investigation of basic and moral emotions. *The Journal of neuroscience*, 22(7), 2730.
- Muldoon, O., McNamara, N., Devine, P., Trew, K., & Dowds, D. (2010). Inter and intragroup emotion and social identification: a real world study.

- Neumann, R., & Strack, F. (2000). "Mood contagion": The automatic transfer of mood between persons. *Journal of Personality and Social Psychology*, 79(2), 211.
- O'Connor, L. E. "Interpersonal guilt, shame, and psychological problems." *Journal of social and clinical psychology* 18.2 (1999):181.
- Opatow, S. 1995. Drawing the line: Social categorization, moral exclusion, and the scope of justice. In B.B. Bunker & J.Z. Rubin (Eds.), *Conflict, cooperation, and justice: Essays inspired by the work of Morton Deutsch* (pp. 347-369). San Francisco: Jossey-Bass.
- Paine, L. S. (1994). Managing for organizational integrity. *Harvard Business Review*, March-April: 106-117.
- Pearsall, M. J. & Ellis, A. P. J. (2011). Thick as thieves: The effects of ethical orientation and psychological safety on unethical team behavior. *Journal of Applied Psychology*, 96(2), 401.
- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. 1999. Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly*, 44: 1-27.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65-85.
- Powell, A. A., Branscombe, N. R., & Schmitt, M. T. (2005). Inequality as ingroup privilege or outgroup disadvantage: The impact of group focus on collective guilt and interracial attitudes. *Personality and Social Psychology Bulletin*, 31, 508–521.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31, 437-448.

- Reynolds, S. J., & Ceranic, T. (2007). The effects of moral judgment and moral identity on moral behavior: An empirical examination of the moral individual. *Journal of Applied Psychology*, 92, 1610–1624. doi: 10.1037/0021-9010.92.6.1610
- Reysen, S., & Branscombe, N. R. (2008). Belief in collective emotions as conforming to the group. *Social Influence*, 3(3), 171. doi:10.1080/15534510802247438
- Roccas, S., Klar, Y., & Liviatan, I. (2006). The paradox of group-based guilt: Modes of national identification, conflict vehemence, and reactions to the in-group's moral violations. *Journal of Personality and Social Psychology*, 91(4), 698.
- Rousseau, V., Aubé, C., & Savoie, A. (2006). Teamwork behaviors. A review and integration of frameworks. *Small Group Research*, 37, 540-570.
- Scharff, M. M. (2005). Understanding WorldCom's accounting fraud: Did groupthink play a role? *Journal of Leadership and Organizational Studies*, 11, 109–118.  
doi:10.1177/107179190501100309
- Schaubroeck, J. & Lam, S.S.K. 2004. Comparing lots before and after: Promotion rejectees invidious reactions to promotees. *Organizational Behavior and Human Decision Processes*. 94: 33-47.
- Schoenewolf, G. (1990). Emotional contagion: Behavioral induction in individuals and groups. *Modern Psychoanalysis*, 15(1), 49–61.
- Schmader T, Lickel B. 2006. Stigma and shame: emotional responses to the stereotypic actions of one's ethnic ingroup. In *Stigma and Group Inequality: Social Psychological Approaches*, ed. S Levin, C van Laar, pp. 261–85. Mahwah, NJ: Erlbaum

- Schweitzer, M. E., & Gibson, D. E. (2008). Fairness, feelings, and ethical decision-making: consequences of violating community standards of fairness. *Journal of Business Ethics*, 77(3), 287–301.
- Seger, C. R., Smith, E. R., & Mackie, D. M. (2009). Subtle activation of a social categorization triggers group-level emotions. *Journal of Experimental Social Psychology*, 45(3), 460–467.
- Sekerka, L. E. (2007). Moral courage in the workplace: Moving to and from the desire and decision to act. *Business ethics*, 16(2), 132.
- Shariff, A. F., Tracey, J. L. (2009). Knowing whose boss: Implicit perceptions of status from the nonverbal expression of pride. *Emotion*, 9(5), 631.
- Simpson, B. (2006). Social identity and cooperation in social dilemmas. *Rationality and society*, 18(4), 443.
- Smith, E. R. (1993). Social identity and social emotions: toward new conceptualizations of prejudice.
- Smith, C. A., & Lazarus, R. S. (1993). Appraisal components, core relational themes, and the emotions. *Cognition & Emotion*, 7(3), 233–269.
- Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can emotions be truly group level? Evidence regarding four conceptual criteria. *Journal of Personality and Social Psychology*, 93(3), 431.
- Smith, E. R., & Mackie, D. M. (2008). Intergroup emotions. *Handbook of emotions*, 428–439.
- Tajfel, H. (1981). Social stereotypes and social groups. *Intergroup behaviour*, 144–167.
- Tajfel, H. (1978). Intergroup behaviour: II. Group perspectives.

- Tangney, J. P. (1990). Assessing individual differences in proneness to shame and guilt: Development of the Self-Conscious Affect and Attribution Inventory. *Journal of personality and social psychology*, 59, 102–111.
- Tangney, J. P. (1991). Moral affect: the good, the bad, and the ugly. *Journal of personality and social psychology*, 61:598–607
- Tangney, J. P. (1992). Situational determinants of shame and guilt in young adulthood. *Personality and Social Psychology Bulletin*, 18:199–206
- Tangney, J. P. (1994). The mixed legacy of the superego: adaptive and maladaptive aspects of shame and guilt. In *Empirical Perspectives on Object Relations Theory*, ed. JM Masling, RF Bornstein, pp. 1–28. Washington, DC: Am. Psychol. Assoc.
- Tangney, J. P. (1999, 2005). *The self-conscious emotions: Shame, guilt, embarrassment and pride* John Wiley & Sons, Ltd. Ch26
- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York: Guilford
- Tangney, J. P., & Fischer, K. W. (1995). *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride*. New York: Guilford Press.
- Tangney, J. P., Miller, R. S., Flicker, L., Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of personality and social psychology*, 70(6), 1256.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007a). Moral emotions and moral behavior. *Annual Review of Psychology*, 58, 345–372.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007b). What's moral about the self-conscious emotions? In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 21-37). New York: Guilford Press.

- Tangney, J. P., Wagner, P. E., Hill-Barlow, D., Marschall D. E., Gramzow, R. (1996b). Relation of shame and guilt to constructive versus destructive responses to anger across the lifespan. *Journal of personality and social psychology*. 70:797–809
- Tenbrunsel, A. E., & Smith-Crowe, K. (2008). Ethical decision making: Where we've been and where we're going. *Academy of Management Annals*, 2, 545-607.  
doi:10.1080/19416520802211677 ER
- Totterdell, P. (2000). Catching moods and hitting runs: Mood linkage and subjective performance in professional sport teams. *Journal of Applied Psychology*, 85(6), 848.
- Totterdell, P., Kellett, S., Teuchmann, K., & Briner, R. B. (1998). Evidence of mood linkage in work groups. *Journal of Personality and Social Psychology*, 74(6), 1504.
- Totterdell, P., Wall, T., Holman, D., Diamond, H., & Epitropaki, O. (2004). Affect Networks: A Structural Analysis of the Relationship Between Work Ties and Job-Related Affect. *Journal of Applied Psychology*, 89(5), 854.
- Tracy, J. L. (2008). The nonverbal expression of pride: Evidence for cross-cultural recognition. *Journal of personality and social psychology*, 94(3), 516.
- Tracy, J. L., & Robins, R. W. (2004a). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry*, 15, 103-125
- Tracy, J. L., & Robins, R. W. (2004b). Show your pride: Evidence for a discrete emotion expression. *Psychological Science*, 15, 194-197
- Tracy, J. L., & Robins, R. W. (2007a). Emerging insights into the nature and function of pride. *Current Directions in Psychological Science*, 16,147–150.
- Tracy, J. L., & Robins, R. W. (2007b). The prototypical pride expression: Development of a nonverbal behavioral coding system. *Emotion*, 7,789 – 801.

Tracy, J. L., Shariff, A. F., & Cheng, J. T. (in press). *A naturalist's view of pride. Emotion.*

Turner, J. C., & Hogg, M. (n.d.). A, Oakes, PJ, Reicher, SD, & Wetherell, MS (1987).

*Rediscovering the social group: A self-categorization theory.*

Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: Cognition and social context. *Personality and social psychology bulletin*, 20, 454–454.

Velayutham, S. and Perera, M.H.B. (2004), “The influence of emotions and culture on accountability and governance”, *Corporate Governance: International Journal of Business in Society*, Vol. 4, pp. 52-64.

Watson D, Clark LA. (1992). Affects separable and inseparable: on the hierarchical arrangement of the negative affects. *Journal of personality and social psychology*. 62:489–505

Weiner, B. (1985). An attributional theory of achievement motivation and emotion.

*Psychological Review*, 92, 548-573.

Wohl, M. J. A., Branscombe, N. R., & Klar, Y. (2006). Collective guilt: Emotional reactions when one's group has done wrong or been wronged. *European Review of Social Psychology*, 17, 1–36.

Zhong, C.B. (In Press). "The Ethical Dangers of Deliberative Decision Making," *Administrative Science Quarterly*

Zhong, C.B., Ku, G., Lount, R. B., & Murnighan, J. K. (2006). Group Context, Social Identity, and Ethical Decision Making: A Preliminary Test. *Research on Managing Groups and Teams* (Vol. 8, pp. 149-175).

**Table 1: Correlation and Descriptive Statistics**

Variable	Mean	S.D.	1	2	3	4	5	6	7	8
Control										
1. Team size	3.85	.36								
2. Team ethnicity	.74	.44	.03							
Independent										
3. Team rank	2.23	.87	-.17	-.01						
4. Team cheating	8.23	7.92	.10	.04	.39**					
5. Team perceived similarity	5.03	.61	-.05	.01	.04	-.13	(.87)			
Dependent										
6. Team pride	3.71	.78	-.02	-.15	.63**	.19	.23	(.88)		
7. Team shame	1.37	.40	.10	.18	-.45**	-.02	-.07	-.80**	(.74)	
8. Team guilt	1.69	.49	-.01	.26†	-.30*	.01	-.24	-.62**	.74**	(.69)

Notes: †  $p < .10$ , \* $p < .05$ , \*\* $p < .01$ .  $N = 47$ . Team ethnicity coded 1 for all members have the same ethnicity and 0 for otherwise. Team rank coded 3 for 1<sup>st</sup> place, 2 for 2<sup>nd</sup> place, and 3 for 3<sup>rd</sup> place. Coefficient alpha reliabilities are reported in the main diagonal.

**Table 2: Results of Hierarchical Regression Model for Team Moral Emotions**

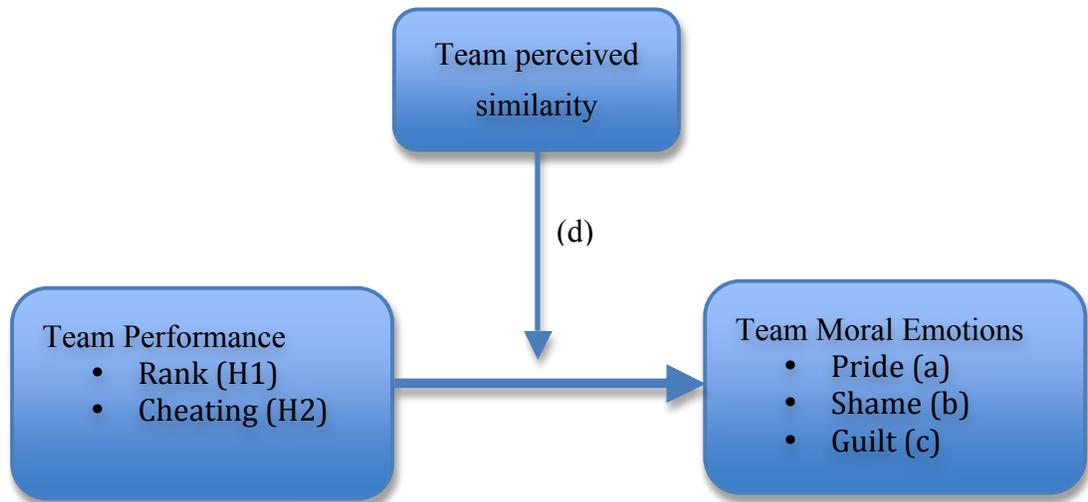
	Team Pride			Team Shame			Team Guilt		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Size	-.02	.24	.06	.11	-.01	.10	-.03	-.14	.01
Ethnicity	-.26	-.25	-.15	.16	.15	.11	.29	.29†	.23
Rank		.59**	.58**		-.24**	-.24**		-.20*	-.21*
Cheating		-.01	.01		.01	.01		.01	.01
Perceived similarity		.26†	-.30		-.02	.18		-.17	.09
Rank * Perceived similarity			.30†			-.11			-.14
Cheating * Perceived similarity			.04*			-.03*			-.04*
R-squared	.02	.46**	.55**	.04	.26**	.37**	.07	.23*	.35**
Δ R-squared		.45**	.09*		.22*	.11*		.16*	.13*

N=47. All variables are team level.

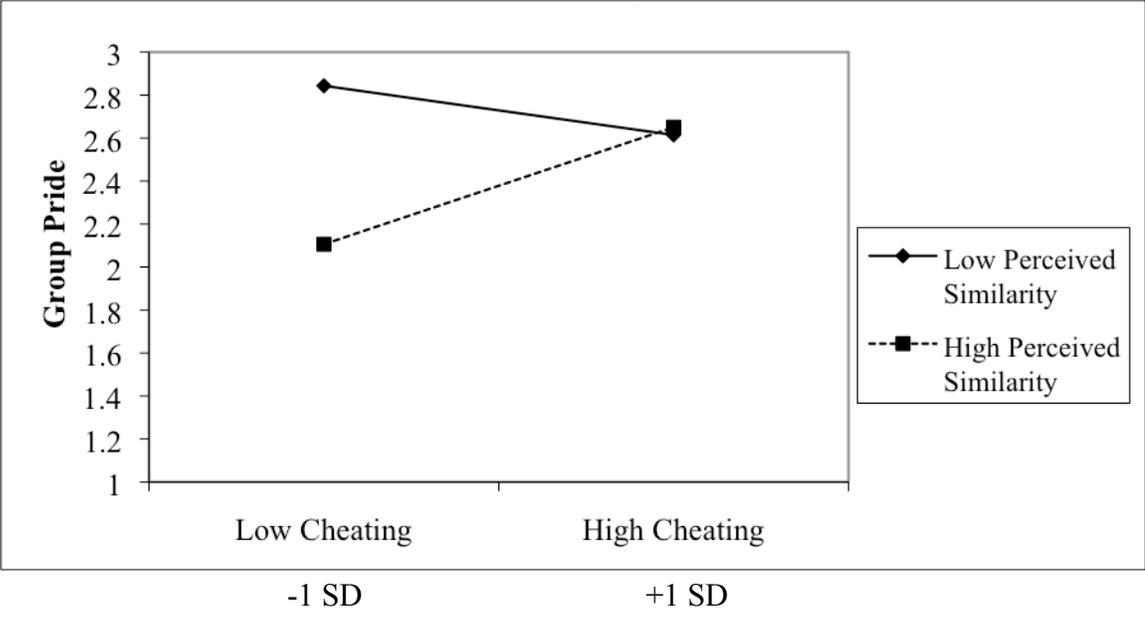
Regression coefficients are unstandardized coefficients. † p<.10 \* p<.05, \*\*p<.01

Two-tailed test

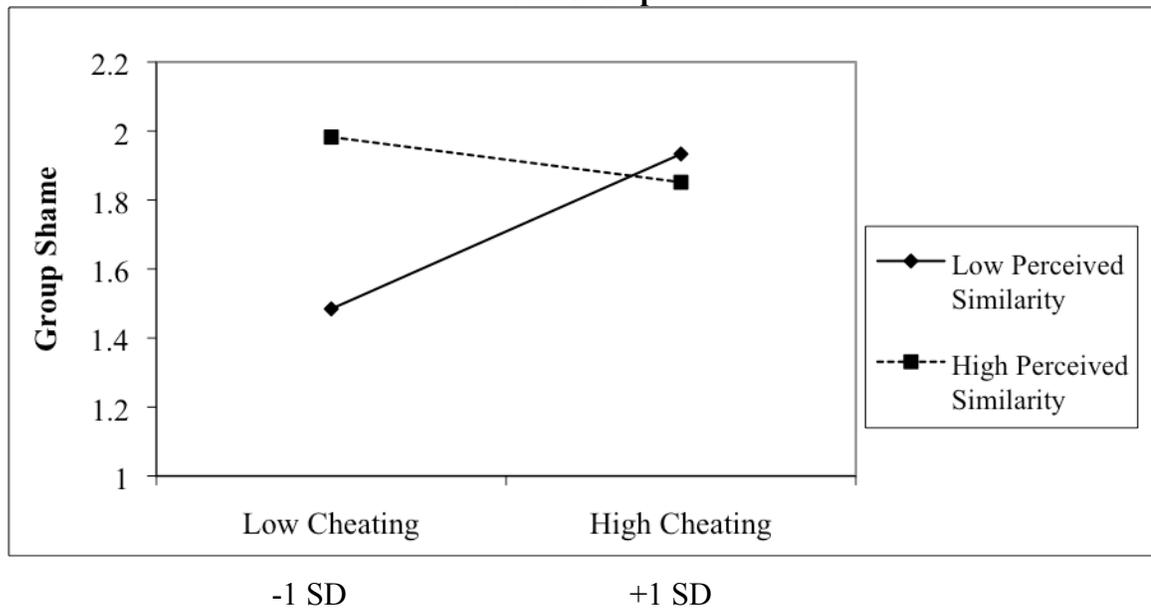
**Figure 1: Proposed Theoretical Model**



**Figure 2: The moderating effect of team perceived similarity on the cheating-pride relationship**



**Figure 3: The moderating effect of team perceived similarity on the cheating-shame relationship**



**Figure 4: The moderating effect of team perceived similarity on the cheating-guilt relationship**

