2013

A TALE OF TWO ENVYS: A SOCIAL NETWORK PERSPECTIVE ON THE CONSEQUENCES OF WORKPLACE SOCIAL COMPARISON

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DISSERTATION

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A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Business and Economics
at the University of Kentucky

By

Christopher Michael Sterling

Lexington, Kentucky

Director: Dr. Giuseppe (Joe) Labianca, Professor of Management

Lexington, Kentucky

2013

ABSTRACT OF DISSERTATION

A TALE OF TWO ENVYS: A SOCIAL NETWORK PERSPECTIVE ON THE
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My dissertation examines how individuals respond to workplace social comparisons. I measure the explicit set of referent others that individuals compare themselves against in order to evaluate their own level of performance. I examine how the social context of these comparisons impact discretionary performance related behaviors by examining how an individual's position within a social network and the structural characteristics of an individual's reference group influences the experience of discrete emotions. Specifically, I examine how malicious envy and benign envy mediate the relationship between social comparison and workplace behavior in a field setting. Results indicate that social network structure plays a significant role in motivating both productive and counterproductive responses to social comparison. Whether or not an employee responds to upward social comparisons by increasing their own work effort or engaging in deviant behavior is influenced by the experience of benign and malicious envy, which is in turn influenced by the network structure of reference groups. Furthermore, social network position plays a moderating role in the occurrence of workplace deviance by either enhancing or limiting the opportunities an employee has to engage in deviant behavior.

KEYWORDS: Social Comparison, Social Network, Envy, Workplace Deviance, Discrete Emotions

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7-17-13
Date

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For Zsuzsi

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follow my dreams but they also provided a firm foundation by showing me that through hard work, perseverance, and the support of a loving family anything can be accomplished. Finally I must thank my wife Zsuzsi Sterling-Bodnar whose unyielding support and untiring patience throughout this process made this dissertation possible. Thank you, Zsuzsi, we did it.

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CHAPTER 1: INTRODUCTION

We are driven to understand the world around us and our place in that world by comparing ourselves to others. These relative comparisons are a prevalent source of information that helps us understand the validity of our thoughts and opinions, and our own social standing relative to others. Festinger's (1954) theory on the process and consequence of social comparison recognized that individuals possess a fundamental need to compare their own abilities and opinions to the abilities and opinions of others. Comparing our own levels of ability and accomplishment to others is a pervasive practice that serves an important function of self-evaluation. This occurs within organizations as well, where an individual's perceived performance, success and status is an important aspect of his or her life, and can have a profound influence on that individual's sense of self worth. In most organizations performance is not completely objective, but is often socially constructed, reflecting the status of the individual within the organization and the access that individual has to organizational rewards, recognition, and the attention of top level decision makers (Judge & Ferris, 1993). Individuals are highly motivated to compare their own performance to the performance of peers to get a sense of how well they are doing and how they stack up in the social hierarchy of the organization. Anything that threatens an individual's status within the organization should have a strong effect on that individual's behaviors.

Given the extensive research on social comparisons in the field of social psychology it is surprising that relatively little explicit attention has been paid to social comparison in the workplace (Brown, Ferris, Heller & Keeping, 2007; Greenberg, Ashton-James, & Ashkanasy, 2007). How can we better understand an individual's

response to social comparison within the boundaries of the organization? Individuals often compete for valued resources such as job promotions, recognition, and status. Even when not directly competing with other members of the organization, these others can still serve as a threat to our sense of self-worth and self-esteem through the process of social comparison. Social comparisons, and in particular upward comparisons (comparisons to those that that out-perform us), can result in negative affective and behavioral consequences. Regardless of these potential consequences, organizations often use reward systems and recognition practices (e.g., employee-of-the-month awards) to implicitly induce upward comparisons in order to motivate employee performance (Stein, 2000). How then can we understand how employees will react to being outperformed by their peers? Will they be motivated to work harder in order to achieve their goals or will they direct their efforts at pulling down others in order to better their own social standing? Take for example a recent study published in *Science* that explains the varied possible reactions people can have after being outperformed by their peers:

> "Discomfort arising from the other outperforming us in cherished domains can be resolved by reducing the relevance of the domain to us or changing relative performance. Students in our scenario might change their major or club at the university and, ultimately their goals in life. Alternatively, they might make an effort to improve their own performance or possession. On the contrary, they might wish that the other lacks advantages, or they may even obstruct the advantaged student (with malice)." (Takashi et al, 2009: 939)

Given the variety of possible behavioral reactions to being outperformed, can we understand when these reactions will result in productive or counterproductive behavior? This dissertation will measure a variety of performance-related discretionary workplace behaviors to answer these questions. I will examine whether or not upward comparisons motivate individuals to increase their performance-related effort or engage in

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organizational citizenship behaviors (behaviors that go above and beyond their role's formal requirements in order to help others and their organization in general). This study will also examine counterproductive responses to the threat of upward comparisons, including organizational withdrawal and counterproductive workplace behaviors. I argue that the experience of emotions is an important motivating factor in determining the behavioral response to social comparisons in the workplace.

Social comparisons are strongly associated with affective responses, which can powerfully motivate behavior (van de Ven, Zeelenberg & Pieters, 2009). In general, negative affect has been associated with antisocial behaviors in organizations while positive affect is associated with prosocial behavior (Lee & Allen, 2002). Less is known about the effect of specific discrete emotions on organizational behavior, which can impact individual cognition judgment, behavior, and physiological responses differently (Lench, Flores & Bench, 2011) and can thus be useful for explaining different types of behavior (Elster, 2007). . Social comparison produces a variety of emotions and research has shown that individuals facing the same stimuli can experience not only different discrete emotions, but emotions that differ in valence (positive or negative) as well (Buunk, Collins, Taylor, Dakof & VanYperen, 1990). Understanding how discrete emotions are related to social comparison will help us understand the varied behavioral consequences of workplace social comparisons. This dissertation focuses on two specific discrete emotions that are inherent in social comparisons, benign envy and malicious envy.

Secondly, social comparisons do not occur in a social vacuum, and yet they are often studied that way in experimental settings. Organizational actors are embedded in

larger social structures and these embedded patterns of relationships can shape actor perceptions influencing how individuals perceive the threat of social comparison (Burt, 2010). For example if a group of individuals are all concerned with comparing themselves to one another, everyone is likely to be well informed about the latest progress and transgressions of each individual through third party gossip. Being constantly inundated with comparison information, especially when one is not measuring up performance-wise, could greatly impact an individual's emotional experience.

Comparisons also take place within the context of an organization. The organizational climate of justice can affect whether or not employees perceive the organization to be a fair one. As will be explained further, if individuals believe the organization's procedures are fair, they are more likely to appraise comparisons in a more favorable light, believing that they too can reach high levels of achievement; conversely if they believe the procedures are biased or unfair, they will likely believe that no matter what they do, they cannot get ahead. As I will explain and demonstrate later in this dissertation, the organizational context of justice can affect how employees appraise social comparison information resulting in different discrete emotional reactions and ultimately in their performance-related behavior. In summary, this dissertation will investigate how the comparison context, social context, and organizational context influence whether or not employees engage in productive or counterproductive workplace behavior as the result of experiencing the discrete emotions of benign or malicious envy.

Figure 1.1: Conceptual Model
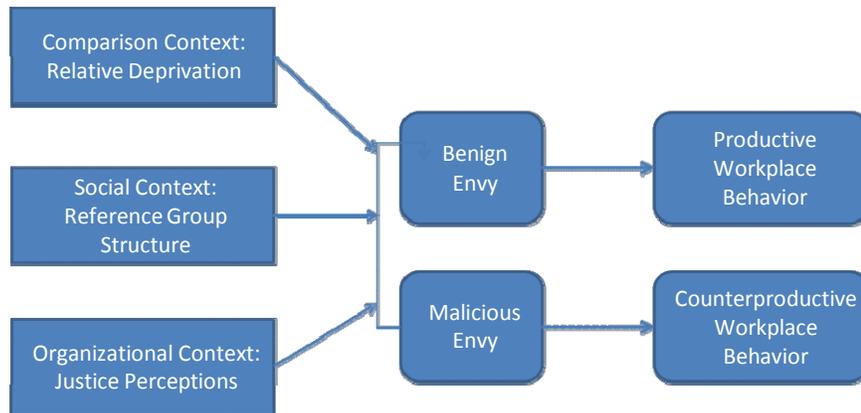
Social Comparison Perspective

Social comparison is an integral part of organizational life. Employees gain a sense of their own identity and relative worth inside an organization by comparing themselves to others. More specifically employees make sense of their own performance levels, reward levels, job assignments, and career progression through the process of social comparison. Research on social comparison processes has a rich tradition starting with the work of Festinger (1954). We know a lot about how the process of social comparison can impact moods and an individual's sense of self-worth. Although there is an abundance of research on social comparison in social psychology with insights derived from experimental studies, there has been relatively little attention paid to how social comparison processes operate in an organizational context, with the exception of studies on equity theory and organizational justice (Duffy, Shaw & Schaubroeck, 2008). Why is

it important to explicitly study the social comparison process that occurs inside organizations? Employee recognition programs show us an example of how a lack of understanding of the social comparison process within organizations can lead to negative outcomes. "Employee of the Month" programs were once the predominant tools of employee recognition practices within organizations. The hope was that recognizing the accomplishments of outstanding individuals would not only reward them for their achievements, but also motivate other employees to aspire to the same levels of success. However, more often than not these programs do not achieve the desired aims. The award winners often feel uncomfortable due to their subsequent treatment by other employees, who accuse them of "brown-nosing" or "boot licking". Rather than being motivated by the success of their peers, the non-winning employees question the award's fairness, feel undervalued and unappreciated, and act with suspicion or disdain toward the winning employees. As a result, these programs that attempt to harness the motivating power of social comparison end up producing negative feelings and negative interpersonal behavior. Correspondingly, many organizations have moved toward using recognition programs that allow employees to nominate award winners among their peers; these programs seem to be much more successful. At the heart of the problem of the old recognition systems is a lack of attention paid to employees who actually choose to compare themselves to winners, and how the direction of this comparison impacts subsequent feelings and behaviors.

Although little research has been conducted inside organizations on whom among their co-workers employees choose as comparison others—or social referents (see Shah, 1998 for a notable exception), research in social psychology has systematically addressed

this question. Individuals have a tendency to compare themselves to similar others (Festinger, 1954), or to compare their abilities with those who are slightly better than themselves (Suls & Miller, 1977). Empirical studies on the social psychology of social comparison often rely on undergraduate student samples and experimental methods. As a result, we know little about the process of choosing referent others outside of the tightly controlled laboratories or idiosyncratic college classroom settings. Even in studies that explicitly examine social comparison inside organizations, researchers often infer but do not identify the comparison other. This is one of the major critiques of equity theory which does not specify the referent other being used for comparison (Miner, 2007). Researchers have made a similar point about more contemporary studies of comparison in organizations, stating that studies tend to infer social context on the basis of group or team membership (Ancona & Caldwell, 1992; Lawrence, 2006). However referent choice theorists have argued that comparisons have differential impacts and thus we need understand the explicit nature of the comparison process by identifying specific referents (Kulik & Ambrose, 1992). This was further demonstrated by empirical work on social networks and referent choice behavior that demonstrated that individuals interacted differently with specific types of referent others (Shah, 1998). Knowing who the comparison other actually is allows us to account for the direction of the comparison. Whether an employee is making comparisons to employees that are better off in terms of performance or rewards (an upward social comparison) or whether and employee is comparing themselves to employees that are worse off in terms of performance or rewards (a downward social comparison) significantly impacts the affective and behavioral consequences of social comparison.

Traditional research on the direction of social comparisons often assumed that there may be a tendency for slight upward social comparisons (Suls & Miller, 1977). More recent research has painted a much more complex picture; individuals make upward or downward comparisons on the basis of comparison motives (Wood, 1989), affective moods (Wheeler & Miyake, 1992), and the nature of the task (Wheeler, Martin & Suls, 1997). In the workplace domain, there is some evidence to suggest that upward comparisons are more prevalent as organizations attempt to implicitly produce upward comparisons by recognizing and rewarding the highest achievers. Evidence also exists to suggest that the consequences of upward comparisons tend to be more varied and extreme than the consequences of downward comparisons. It was formerly believed that upward comparisons generally resulted in negative self-evaluations, aversive affective consequences, or destructive behaviors (Suls, Martin & Wheeler, 2002), but more recent evidence has challenged this notion by showing that negative emotions can sometimes result in increased motivation, more so than even positive emotions (van de Ven, Zeelenberg & Pieters, 2011).

It remains an open question as to when upward comparisons negatively or positively affect individuals. Social psychologists have attempted to answer this question by examining whether comparisons lead to assimilation or contrast effects. Assimilation effects occur when an individual focuses on similarities between themselves and the comparison other and believes they can reach the same level of the comparison other. Contrast effects occur when an individual focuses on discrepancies between themselves and the comparison target and believes reaching the same level of the upward comparison target unlikely (Pelham, Wachsmuth & Orson, 1995). In general, upward assimilation

leads to positive outcomes while upward contrast leads to negative outcomes (Mussweiler, Ruter & Epstude, 2004). Of the few studies that have directly examined directional comparisons in the workplace, most evidence points to the fact that workplace comparisons are more likely to elicit contrast effects due to the uncertain and competitive environments that exist in most contemporary organizational environments (Kay, Wheeler, Bargh, & Ross, 2004, Stapel & Koomen, 2005). Thus I consider situations that lead to upward comparisons in the organization of my study to also result in contrastive emotional responses such as envy.

Discrete Emotion Theory & Behavioral Trajectories

One promising avenue to explore in answering the question as to whether upward comparisons in organizations lead to productive performance behaviors or counterproductive behaviors is to examine the discrete emotional outcomes produced by social comparison situations. There are many possible emotional reactions to upward social comparisons in organizations. Smith (2000) theorized that upward comparisons could lead to several different emotions: contrastive emotional reactions such as envy, shame, and resentment; and assimilative reactions such as inspiration, optimism, or admiration. While Smith cites the context of the comparison process itself as explaining resulting emotions, it is less clear how the social and organizational context lead to different discrete negative emotions.

Although I do not observe the actual number of comparison events an individual experiences in an organization, I identify positions within the social structure that put employees at higher risk for experiencing negative comparison events. By using social

network analysis to measure social referents, we are able to capture the residue that is left over from multiple comparison events. A high level of relative deprivation should mean that there have been multiple opportunities for upward comparisons to take place within a given timeframe. We can also capture the relative deprivation between an employee and multiple referents.

The Social Context of Emotional Experience

Approaches to studying emotions inside organizations rely primarily on intra-individual processes of appraisal which can lead to different reactions for different individuals (Scherer, Shorr & Johnstone, 2001); thus the appraisal of an upward comparison event will dictate the resultant emotional response. This study argues that social networks can affect the experience of emotions for individuals. Empirical work linking social networks with the experience of emotion typically focus on the mechanism of contagion to explain how individuals adopt the emotions of those they are tied to. Much less attention is paid to how social network position or embeddedness influences how individuals define social situations, and the effect that has on the appraisal of social comparisons.

Ron Burt (2010) offers clues to how social structure affects emotional experience. The social structure within which an individual is embedded can affect how an individual defines the situation and experiences emotions. This is especially true for social comparison emotions, as the social structure determines who is seen as a peer and can affect the relative deprivation an individual feels in comparison to others. Consider an organizational event in isolation: Jim has just received a promotion. One would expect

that this event would produce a great deal of positive emotion and satisfaction for Jim. Now consider that Jim works in a department consisting of 8 people. They work closely together and are aware of each other's successes and failures. Jim is the last person to be promoted out of his department – in fact a few other individuals have received multiple promotions in the time it took Jim to receive his first. In this situation, Jim's experience of emotions is likely different from his experience when considered in isolation. The organizational event is exactly the same but its emotional impact differs when considering the social structure that Jim is part of. For this reason, this study utilizes a social network approach to examine how social structure moderates the relationship between upward comparisons and experienced emotions.

Social network analysis is used in two primary ways: 1) to identify the social referents for each employee; and 2) to investigate the role social structure has on the experience of emotions. Using social network analysis further advances calls from scholars to empirically investigate the individuals who populate an employee's reference group, thus creating the social context experienced by employees (Lawrence, 2006). By having employees explicitly define their reference groups, we can calculate a performance differential between ego (the focal individual) and his or her peers. The sum of these performance differentials represent the extent to which an individual experiences relative advantage or relative deprivation to their peers – a group of peers that has been identified by ego and thus must be an important source of self-worth and self-knowledge.

CHAPTER 2: LITERATURE REVIEW

First I will review the literature on social comparison to establish the importance of contextual effects on the process of social comparisons in general. In reviewing the literature, I establish the important and often overlooked fact that social and organizational context affect comparison outcomes. In order to understand how these contextual factors affect behavioral outcomes I will next integrate social comparison theory, social network theory, structural theories of emotion, and discrete emotion theory to propose that social comparison is a significant event in organizations that can result in discrete emotional responses. These discrete emotional responses are also partly shaped by the social structure of an individual's reference group and the organizational context of justice. These contextual factors and the amount of relative deprivation lead to different experiences of benign and malicious envy, which motivate both productive and counterproductive behavior in the workplace. Finally, I will propose that in addition to motivation, opportunity is another necessary component of certain behavioral reaction by illustrating how the social networks of individuals can constrain their actions even if they are motivated to certain kinds of behavior.

Figure 2.1 Dissertation Full Model
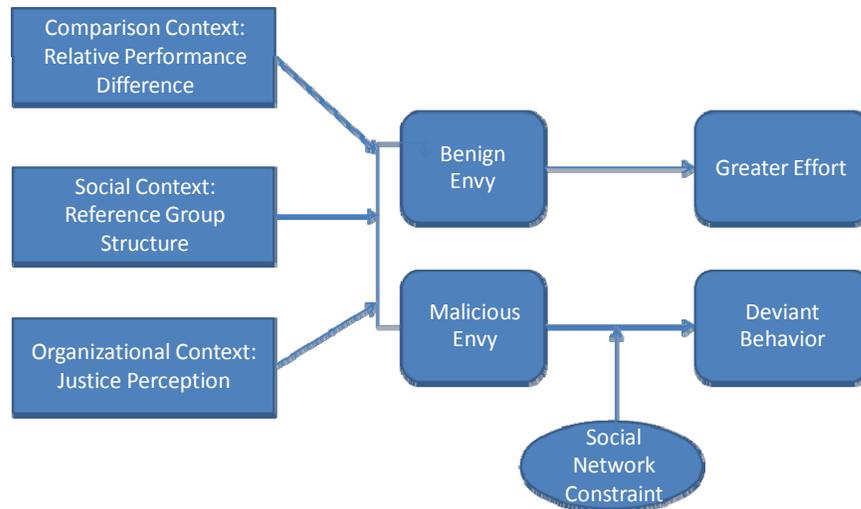
Social Comparison Theory

Social comparison theory has been developed and extended in the almost sixty years since its inception to include many different aspects of comparison to help explain who we choose to compare ourselves to and what the outcomes of these comparisons are. Theoretical and empirical research has also extended Festinger's (1954) original social comparison theory to include motives beyond self-evaluation, differences among comparison domains, and several contextual factors that impact the comparison process and its results. It is important to understand how the theory of social comparison has advanced in order to construct a more contextualized theory of workplace social comparisons to answer the question of how employees react to being outperformed by their peers.

The prevalence of social comparison research in the area of social psychology however has become so extensive that it has been suggested that social comparison theory has evolved from a theory into a research field (Buunk & Gibbons, 2007). Thus it has been recognized that social comparison is a fundamental aspect of human existence. Empirical studies have demonstrated that the surrounding environment or contextual background in which comparisons are made have a major impact on the outcome of those comparisons, which is why many scholars have recognized the importance of social context in understanding social comparisons. The workplace is an environment that should be rife with social comparisons as employees seek meaning in new complex environments, seek to understand their social status in less hierarchical organizations, and size up potential rivals that may exist in ambiguous and politically charged environments. This lack of specialized attention to workplace social comparisons is important because empirical research has demonstrated that the attitudinal, emotional, and behavioral consequences of social comparisons are highly context-dependent (Bamburger, 2008; Lam, Van der Vegt, Walter & Huang, 2011), resulting in a wide variety of behaviors. Furthermore, most of the empirical findings that support our knowledge of the basic processes and different outcomes of social comparison come from the laboratory and not from field studies. This is an important recognition because social comparisons in the laboratory are often contextually distinct from the social comparisons in our every-day lives. Experimental studies of social comparison often require participants to compare themselves to individuals with whom they have no prior relationship. The comparison is forced upon the participants – it is not clear if the domain of the comparison or the referent other provided in the experimental setting is highly relevant to the individual.

Both of these components have been shown to have different impacts on the nature of comparisons and the resultant outcomes.

This dissertation specifically examines workplace social comparisons using a field study and social network methodology to examine the actual referent others that employees choose to pay attention to in the workplace. While we do know quite a bit about people's referent choices and the impacts that different referent characteristics have on social comparison outcomes, we know relatively little about the social context of comparisons beyond the dyadic comparison relationships. Individuals do not compare themselves in a social vacuum; evidence has shown that employees can have several potential referents in the organization and these referent relationships tend to be quite stable (Kulik & Ambrose, 1992). Kulik and Ambrose propose that referent relationships in organizations should be relatively stable, citing previous empirical studies in social comparison theory that demonstrated three major factors related to referent choices: similarity, availability, and relevance. They argue that referents should be stable over time because personal characteristics primarily determine whether or not potential referents are seen to be relevant, and many of the most important personal characteristics that influence referent selection do not change, or change slowly over time (i.e. age, race, gender, tenure).

Given that there is evidence of multiple referents and some sort of patterned stability in the referent relationships, we need to go beyond a dyadic consideration of social comparison in the workplace and think instead of reference groups. However the effect of reference groups within the organization has been neglected (Lawrence, 2006). We do not know how the pattern and structure of these groups can impact the social

comparison process. Does the number of referent others an employee attends to affect

their outcomes? Can third party relationships (that is, the relationships between referent

others) also influence outcomes for the focal employees? If I am constantly hearing

gossip about the feats of a common referent from a 3rd party will the negative experience

of an upward comparison be even more intense? Research in social network theory tells

us that an individual's structural position and the structure of groups are major

components of social context and if we want a more contextualized theory of workplace

social comparisons, we cannot ignore the characteristics of an individual's reference

group. In this literature review I will build a case that these questions remain important

but unanswered. I will review the major findings of the social comparison literature

organized around a central question: What determines different outcomes of social

comparisons in the workplace? The review of social comparison theory will be organized

around a few main themes taken to answer this question starting with the nature of the

comparison process, including research on directional comparisons and contrast and

assimilation effects. Next I will examine work that explains outcomes as a function of the

context of comparisons in an effort to understand how organizational context could also

affect these outcomes. Following this, I will examine work on individual differences in

social comparison, an approach to explain different outcomes based on an individual's

traits and motivations. I will then explore research on the referent selection process,

which seeks to answer the question by examining characteristics of the referent other or

the referent relationship. Finally, I will review some of the work that explicitly studies

social comparisons in the workplace. It is my hope that this section will build a case for

examining the social context of social comparisons by directly examining the social networks of employees to understand different work related behaviors.

The Social Comparison Process

Social comparison theory examines the process by which we compare our opinions and abilities to others and the results of these comparisons (Miles, 2012). These comparisons are motivated for several different purposes including self-evaluation, self-enhancement, and self improvement (Wood, 1989). Comparisons allow individuals to assess the validity of their own attitudes and opinions, as well as the relative standing of their abilities. Following these assessments, individuals may have several different attitudinal, emotional or behavioral reactions. Traditionally research on social comparison has focused on the effects that social comparisons have on an individual's mood or self-concept, although several contemporary studies have begun to examine more distal behavioral manifestations of social comparison (Wood, 1989; Brown, et al., 2007). Empirical studies have produced several different outcomes associated with the process of social comparison, and several of these findings are conflicting and contradictory. Social comparison has been demonstrated to result in both positive and negative mood states (Gibbons & Gerrard, 1989), increased and decreased job satisfaction (Brown, et al., 2007), and both performance improvement and performance decrement (Willis, 1981; Buunk, Collins, Taylor, VanYperen, & Dakof, 1990). Given these conflicting findings, it suggests a need to understand the contingent nature of social comparison outcomes.

Social comparison theory initially explained these different outcomes on the basis of directional comparisons. Social comparison theory considered whether the direction of

the comparison was upward, towards a better-off target, or downward towards a worse-off target. Directional comparisons initially explained much of the variance in comparison outcomes, but early empirical studies primarily focused on moods as an outcome for social comparison (Wood, 1989). Upward comparisons were originally associated with primarily negative mood states while downward comparisons were originally associated with primarily positive mood states (Gibbons & Gerrard, 1989).

However, with further empirical evidence it became clear that the consequences of social comparison were not wholly dictated by the direction of the comparison. In a well-cited study, Buunk and colleagues (1990) demonstrated that cancer patients could experience either positive or negative affect when involved in an upward comparison to a patient whose health status was better off. The results in this study were more contingent on individual differences in self-esteem and perceived control than on the direction of the comparisons. Similarly, Collins (1996; 2000) demonstrated that individuals sometimes make intentional comparisons with those that are better off to improve positive feelings about the self by focusing on some characteristic they have in common with the successful other. Similarly, social comparison theorists have noted that when experiencing upwards comparison, individuals may use this information to motivate themselves and provide inspiration by basking in the reflected glory of the successful target (Taylor & Lobel, 1989; Tesser & Collins, 1988). One explanation for these

findings is that individuals can experience positive results from upward comparisons when the difference between the self and referent other is large enough to place them in separate categories (Collins, 1996). In other words, these upward comparisons cannot

involve someone with an ability level similar enough to the self to be perceived as a competitor.

Studies on the outcomes of directional social comparison have received much interest in social psychology, but relatively little attention in organizational studies (Brown et al., 2007, Michinov, 2005). Social comparison research in an organizational context typically accounts for the direction of social comparison in a uni-dimensional way, without accounting for the relative difference in the comparison category (Michinov, 2005). This dissertation focuses on a specific domain of comparison and performance that is relevant in an organizational context. It empirically examines the relative difference between an employee's performance level and the performance level of their referent others. This will enable a direct investigation of whether or not the size of an individual's relative deprivation will impact organizationally relevant behavior.

When an individual engages in a comparison to a referent other, the information obtained from the comparison is processed and forms an evaluative judgment concerning the relative standing of the individual. This evaluation can displace the individual away from the referent other, where the difference between the self and referent other is salient, resulting in a contrast effect. Conversely the evaluative judgment can involve the inclusion of the self with the referent other, which focuses on the similarity between the two resulting in assimilation effects (Mussweiler et al., 2004). The occurrence of assimilation and contrast effects dictate whether or not an individual experiences positive or negative emotional consequences from social comparisons. Because I am interested in distinguishing a benign envy reaction from a malicious envy reaction, understanding whether a comparison elicits assimilation or contrast effects is important.

Empirical research on assimilation effects in upward comparisons have shown that upward assimilation effects have existed outside of the organizational domain. Mussweiler (2003) demonstrated that contrast and assimilations effects are the result of a cognitive process that involves either similarity- or dissimilarity-testing where individuals focus on either similarities between themselves and their targets or focus on distinguishing characteristics between themselves and their target. The question becomes: "In what situations is similarity or dissimilarity testing evoked?" Thus many recent studies on the consequence of social comparison have focused on situational moderators that result in assimilation or contrast effects to explain comparison outcomes.

Although there have been relatively few studies specifically focusing on assimilation and contrast effects of social comparison in organizations, there is evidence that upward comparisons are most often associated with contrast effects in organizational contexts, and thus are more likely to be associated with negative outcomes including dissatisfaction, negative self image and higher turnover intentions (Brown et al, 2007). This has been attributed to the uncertain and competitive environments that exist in most contemporary organizational environments (Kay, Wheeler, Bargh, & Ross, 2004). When individuals compare themselves in this context, they are less likely to notice similarities between themselves and the referent other and are thus less likely to engage in similarity testing, resulting in contrast effects (Mussweiler, 2003; Stapel & Koomen, 2005). Based on these results, this dissertation will focus primarily on upward comparisons – being outperformed by referent others. However, unlike previous studies I will consider both positive and negative outcomes associated with these upward comparisons. Social comparison theorists have recently shifted attention from the cognitive process of

comparison and similarity testing to focus on individual and social contextual moderators of the social comparison process. This stream of research has focused on individual differences, referent characteristics, and environmental context as keys to understanding the outcomes of the social comparison process.

Individual Differences in Social Comparison

Some researchers have focused on individual differences as the source for differential reactions during social comparisons, and they have traditionally focused on differences in self-esteem. Individuals' self-esteem is viewed as mitigating the negative consequences of social comparisons. Individuals higher in self-esteem have been shown to make more upward comparisons and experience less negative affect when subject to these comparisons (Aspinwall & Taylor, 1993). It has also been shown that individuals higher in self-esteem are more likely to experience assimilation effects with both upward and downward comparisons; thus high self-esteem individuals experience more negative affect when comparing downward and more positive affect when comparing upward. More recently-published studies, however, have shown the contingent nature of self-esteem. When individuals are situated in a social environment they believed to be unfair or unjust, self-esteem had quite the opposite effect. High self-esteem individuals in this case suffered more aversive reactions to upward comparisons and were more likely to engage in retaliatory behavior (Cohen-Charash & Mueller, 2007). Similar findings have been associated with individuals in situations that result in less control over their own outcomes.

More recently, other individual differences in social comparison have been explored. Research has shown that individuals may differ in their tendency to engage in social comparisons. Gibbons and Buunk (1999) have developed an individual difference measure, social comparison orientation (SCO), to characterize individuals that are, by disposition, more likely to engage in comparisons and care more deeply about results of these relative comparisons. In general, individuals high in social comparison orientation have been shown to experience more negative outcomes from social comparisons, including higher levels of negative affect (Buunk, Ybema, Givvons & Ipenburg, 2001); however, these negative effects are mostly associated with downward comparisons. High SCO individuals tend to be empathetic, sensitive, and concerned that the misfortune that occurs to their peers can also easily happen to them; however, the relationship between SCO and upward comparisons is much more unclear. In several studies SCO moderated different outcomes associated with downward comparison but showed no relationship to outcomes associated with upward comparisons (Buunk, Zurriaga, Gonzalez-Roma & Subirats, 2003). On the other hand, a few studies did indicate that individuals higher in SCO experienced more negative emotions from upward comparisons than individuals lower in SCO (Buunk, Zurriaga, Piero, Nauta & Gosalvez, 2005).

The result of the contingent nature of both self-esteem and social comparison orientation has led to the realization among social comparison theorists that there is not a simple clear-cut relationship between individual differences in social comparison and the outcomes associated with upward comparisons. Instead, there is a complex interplay between individual differences and situational factors that determine comparison outcomes (e.g., situations that influence and individuals sense of perceived control and

perceived fairness) (Buunk & Gibbons, 2007). Additionally, there is some debate as to whether or not the frequency with which an individual engages in social comparisons is the result of a trait-like predisposition, or the result of being situated in a social context that makes comparisons more or less likely (Burt, 2010). Because of the fundamental impact that social context has on the outcome of the social comparison process, this dissertation will focus on contextual drivers in an effort to construct a more contextualized theory of social comparison in organizations.

One criticism of the study of social comparison is that the importance of social context has been underemphasized when studying different outcomes of the comparison process. Social context can shape the way people acquire social information and affect the importance that individuals place on comparison information and relative standing (Wood, 1996). The social context of social comparisons has been approached primarily in one of two ways – by examining the environment in which comparisons take place or by examining the dyadic relationship between an individual and their referent. The three most commonly studied social settings that involve social comparisons are environments characterized by individual control and autonomy, fairness, and group context. Variability in these factors relates to variability in the outcomes of social comparisons. When an individual perceives that their environment offers them little opportunity or control to perform similarly to their upward comparisons referents, these individuals are more likely to experience negative affect and decreased self-esteem when comparing themselves to better off others (Neighbors & Knee, 2003).

The Social Context of Social Comparisons

Social comparisons do not occur in a social vacuum, but occur within a climate of socially compared fairness and justice. Equity theory has a rich legacy within organizational studies (Adams, 1965) and although separate from social comparison theory, is quite related in its focus. The basis of equity theory was to explore the relationship between unfairness and job dissatisfaction. Equity theory proposes that individuals compare themselves to others in organizations in terms of the inputs they provide and the outcomes they receive in assessing the fairness of their exchange relationships with the organization. Perceived inequity could result in a number of outcomes including dissatisfaction, anger, or guilt (Miner, 2007). While equity theory is decidedly comparative, it has been criticized for its lack of specificity regarding the inputs and outputs used for comparison, the determinant of outcomes of inequity, and the identification of referents involved in making the comparison of inputs and outputs (Mitchell, 1997).

Equity theory was most often applied to studies of pay satisfaction and later extended to the study of perceptions of distributive justice, and was not specifically applied to the question of how employees would react to being outperformed by their peers. The application of equity theory would suggest that employees would only suffer negative consequences if they perceived inequity, that the better performing employees were comparatively over-rewarded, however this application of equity theory would ignore the often socially-constructed nature of performance appraisals in organizations. Management often determines the definition of performance, and it seems the process by which one is defined as a good or bad performer would be important in this context. In

fact this is why studies of procedural justice in organizations suggest that individuals can handle inequity in pay and other outcomes as long as the process by which organizational decisions are made are deemed fair (Brockner & Wiesenfeld, 1996). Perceptions of fairness similarly have the ability to exacerbate or mitigate negative consequences associated with comparisons. A study by Cohen-Charash and Mueller (2007) demonstrates that when workers believe that a referent's good fortune was undeserved, those workers were more likely to harm that referent employee. This perceived unfairness was measured as a characteristic of the referent, however, and not of the organization. This dissertation, in contrast, examines how the social context of procedural justice impacts the consequences of workplace social comparisons.

Group context is another aspect of the social environment that has been shown to affect the consequences of comparisons. Contrast and assimilation effects have been shown to vary by whether or not a referent was a member of an in-group or an out-group, with contrast effects most associated with out-group members and assimilation effects most associated with in-group members (Blanton, Crocker & Miller, 2000). Buunk and colleagues (2005) showed that groups characterized by a high level of competition are more likely to experience contrast effects and thus negative outcomes from social comparisons. Lam and colleagues (2011) showed that highly cooperative team goals can mitigate some of the negative harming behavior associated with upwards comparisons. Although the Lam study (2011) provides some evidence that not all organizational settings are associated with contrast effects, several other studies have shown that contrast effects are indeed prominent in organizations if they are not characterized by

highly interdependent and cooperative goal structures. This dissertation assumes that contrast effects are more likely in the organizations included in the empirical study. Social comparison theorists are increasingly discovering the importance of social context in relationship to comparison outcomes.

One overlooked area of social context that should be important is the social structure of workplace comparisons. Social network theory recognizes that employees are embedded in a web of relationships within their organization and that the pattern of these relationships has a profound effect on how the individual experiences the workplace. A subset of studies within social comparison theory examines how referent choices affect comparison outcomes. These referent choice studies come closest to examining the impact of social structure, but stop at the dyadic level by limiting their focus to the convergence of characteristics between comparer and referent. These studies have shown that similarity between the comparer and the referent other is more likely to lead to similarity testing and thus assimilation effects. The domain of similarity is somewhat unclear, but is usually associated with whether or not the similarity exists in a domain that would make the outcome attainable or unattainable to the comparer (Lockwood & Kunda, 1997; Mussweiler, et al, 2004). Psychological closeness between the comparer and the referent other is another interpersonal attribute shown to invoke a selective accessibility mechanism making similarity testing more likely (Mussweiler, 2003) and thus leading to assimilation effects. What constitutes psychological closeness has also been debated and the outcomes associated with psychological closeness are unclear. On the one hand psychological closeness that occurs in the presence of familiarity and similarity between individuals has been associated with assimilation effects and thus

positive outcomes from upward comparisons, but when comparers are outperformed by friends on a highly self-relevant task, they have been shown to experience higher negative affect than when they are outperformed by strangers, an outcome that cannot be attributed to assimilation effects (Tesser, Millar & Moore, 1988). Thus we cannot clearly attribute different social comparison outcome to a dyadic relationship between comparer and referent.

It is important to point out that the comparison of performance in organizations is a highly relevant and important comparison dimension to most employees and most employees are reasonably well informed about the performance of fellow employees (Molleman, Nauta & Buunk, 2007; Lam et al., 2011). Contrary to the way most empirical data on social comparison outcomes is gathered (e.g., by forcing comparisons to a novel unknown referent or having individuals reminisce about a single comparison event), performance comparison referents tend to be stable over time and comparers typically have more than one referent (Kulik & Ambrose, 1992). These referent choices are embedded with the social networks of the organization, suggesting that the performance comparison referent is a stable relationship that provides important social information to employees (Shah, 1998). Shah's study focused on antecedents to referent choices within organizations and empirically demonstrated that employees compare themselves to multiple other referents in order to get a sense of their own relative performance level. This study did not explore the consequences of having different patterns of referents on organizational behavior, which is the focus of this dissertation.

Indeed the focus of this dissertation will be on performance comparison reference groups, the collection of others that an individual uses to make performance based

comparisons. The concept of organizational reference groups was introduced by Barbara Lawrence (2006), who suggested the importance of explicitly identifying those individuals at work that employees devote specific effort and attention to in understanding their social environment. She additionally points out that most organizational scholars assume or infer who an individual is aware of at work on the basis of group membership. More recent studies in social comparison support the notion that it truly is a handful of individuals to whom we consciously devote attention that shape our resultant experiences from social comparisons – a phenomenon referred to as the "local dominance effect" (Zell & Alicke, 2010). Empirical work has demonstrated that individuals rely heavily upon a small group of proximate and available individuals when evaluating their relative status or performance. This holds even in the presence of multiple sources of comparison information, such as objective standards and average performance levels of larger collectives. For example, in a study by Zell and Alicke (2009), students were given a verbal reasoning test and received manipulated feedback scores. The feedback included the students' relative standing in a small group with which they took the test or the entire school. The results showed that student self-evaluations were more affected by their relative standing in the local group than their relative standing in the school at large.

Similar evidence has been shown on studies of the "frog-pond" effect. These studies look at how the self-evaluations of students are impacted by their relative class ranking and the relative ranking of the school or class. The results consistently show that high-performing students at low-ranked schools feel considerably better about themselves and experience more positive emotion compared to low-performing students at high-

ranked schools (Marsh, 1987; Marsh & Hau, 2003; Zell & Alicke, 2009). In sum, the results for studies on the local dominance effect and the frog-pond effect demonstrate the importance of specifically identifying the group of people that employees are using as a reference group if one wishes to understand the reaction to their social comparisons. This is the approach that I will take in this dissertation.

While identifying the reference group is essential, we also know virtually nothing about how the structure of these reference groups will affect the comparison process. These reference groups can vary widely in terms of size. Do the number of referent others an individual has impact the outcomes of the comparison process? These reference groups can also vary on the density of comparison relationships within the group. Does it matter if an employee's referents also compare themselves with one another? Social Network Theory tells us that the size and structure of relationships in a group are an important component of social context shaping group climate and impacting individual experience within the group. Examining the structural aspects of comparison reference groups will help to create a more contextualized theory of social comparison at the workplace and it is my assertion that this will help us better understand the varied consequences of workplace comparisons.

The Mediating Role of Emotion

In reviewing the literature on social comparison theory, I have attempted to establish the premise that social contextual factors are important and under-studied drivers of workplace social comparison consequences. In order to construct a social model of workplace social comparisons, it is necessary to consider how the social context

of social comparisons impact organizationally relevant behavior. For this purpose I have chosen to focus on important performance-related behaviors that go beyond the fulfillment of the task performance role. I will consider several types of behavior including counterproductive workplace behavior, organizational citizenship behavior, and effort based performance. These seemingly distinct and separate behaviors have been unified under several different organizational constructs including voluntary workplace behaviors, extra-role behaviors, and discretionary behaviors (Spector & Fox, 2002). Consistent with these classifications is the notion that these behaviors go beyond the call of typical task fulfillment, require a good deal of effort and attention, as well as being highly motivated activities. What seems to be consistent in this line of inquiry is that emotions play a significant role in the enactment of voluntary workplace behaviors. I take the position that emotions are the key link between workplace social comparisons and exhibiting voluntary workplace behavior.

Envy in the Workplace

Which specific emotions are related to workplace social comparisons? Tesser (1991) specifically characterized social comparison-based emotions in his work on the self-evaluation maintenance model. Tesser specified several distinct discrete emotions that could result from social comparisons, and these emotions are considered to be particularly strong for motivating action because of the relevance and importance people place on comparative information when the comparison domain is important (Smith, 2000). Richard Smith (2000) classified several possible discrete emotional reactions to social comparisons in the workplace on the basis of comparison direction and

contrast/assimilation effect. Envy is the social comparison-based emotion that is most likely to occur with an upward comparison and the presence of a contrast effect. Empirical studies focusing on the consequences of workplace envy suggest a primarily destructive pattern (Duffy, Shaw & Schaubroeck, 2008). Workplace envy has been shown to erode the quality of workplace relationships (Duffy & Shaw, 2000), decrease positive workplace attitudes (Vecchio, 2000), and increase antisocial behavior (Vecchio, 2007).

Some recent work however has focused on the positive and adaptive outcomes associated with envy such as emulation, desire to learn, and increased motivation to succeed (van de Ven, Zeelenberg, & Pieters, 2009). There is some debate as to why there have been contradictory findings on the behavioral consequences of envy. According to one theoretical view, envy is a singular emotion characterized by pain in reaction to another's good fortune. Differing reactions to envy occur because of the influence of relationships, organizational climate, and beliefs about the self (Tai, Narayanan, & McAllister, 2012). Another view contends that although benign and malicious envy may share an initial experience of pain, they are in fact separate emotional experiences that lead to distinct behavioral trajectories. Empirical evidence has shown that malicious envy and benign envy not only lead to different behaviors but that their experiential content is quite distinct, producing different feelings, evaluations, and goals (van de Ven, et al., 2009). These two views of envy are not necessarily contradictory. An individual may experience an initial painful physiological reaction to the good fortune of another, but this initial emotional experience is subject to cognitive processing and reasoning (Smith & Kirby, 2000). Not only do initial evaluations and cognition affect emotional experience,

but emotional events are further subject to reappraisal, which can affect their intensity and duration (Verduyn, Mechelen, & Tuerlinckx, 2011).

One challenge to understanding the effect that workplace envy has on voluntary workplace behaviors is to develop a simple assessment instrument that captures the full emotional experience of employees. Typical measures of envy (c.f. Cohen-Charash, 2009; Vecchio, 2000) tend to emphasize the destructive and hostile component of envy, which focuses on malicious envy (Smith & Kim, 2007). This emphasis conceptualizes envy as pain, and would necessitate the inclusion of several situational variables including the nature of relationships and the organizational climate in order to make predictions on the occurrence of productive or counterproductive reactions to envy. In contrast, this study attempts to separate out the experience of malicious from benign envy.

Thus far benign and malicious envy have been measured by using elicitation techniques, asking an individual to recall a time in which they felt particularly envious. Using recall to elicit feelings of envy typically forces participants to focus on one particularly intense experience of envy involving a comparison with one other individual. This eliminates many instances for study as employees experience many events in the workplace that could elicit envy as they compete for scarce resources and promotions, are subject to numerous performance comparisons, and experience different qualities of leader member exchange. Thus it is my contention that a cross-sectional measure of benign and malicious envy that taps into how often the employee experiences each type of emotion will help us better understand how envy relates to broader patterns of

voluntary workplace behavior. Accordingly, I have developed separate scales for measuring benign and malicious envy for this dissertation.

The Social Context of Emotional Experience

This literature review has already established the important role that social context can play in the social comparison process. In order to understand how social comparisons elicit different experiences of envy, it is important to understand how emotions are shaped by social context. Approaches to studying emotions inside organizations rely primarily on intra-individual processes of appraisal, where emotions are thought to be generated by an individual's store of representations of facts, cognitive schemas, and behavioral skills (Frijda, 2008). At its basic level, appraisal theories of emotion argue that emotions are generated by our evaluation of events and this in turn can lead to different reactions for different individuals (Scherer, Shorr & Johnstone, 2001), thus the individual's appraisal of an upward comparison event will dictate the resultant emotional response. In contrast, this study argues that social structure is a significant factor in determining how we emotionally appraise social comparisons (Burt, 2010). This line of reasoning is consistent with sociological approaches to emotion that recognize that social context can affect how we define situations as well as our commonly accepted emotional rules of expression, and can thus influence the experience of emotions for individuals. This study uses a social network approach to identify how social structure can affect the experience of emotions – and in particular, envy – for individuals.

Opportunity and Behavior

Thus far I have considered only how the social context might motivate voluntary behaviors (e.g., productive or counterproductive behavior) in organizations through discrete emotional responses such as envy. However, this emotional motivation alone may not be sufficient cause for engaging in voluntary workplace behavior. The relationships an individual has and the social context of the organization may impact the *opportunity* individuals have for engaging in voluntary workplace behavior. Engaging in pro-social and antisocial behavior in the organization requires social interaction and should thus be more subject to the constraints and opportunities that arise from being embedded in a web of social relationships. A social network perspective was applied to unethical behavior in organizations (Brass, Butterfield & Skaggs, 1998) and it was proposed that social networks constrain an individual's actions through the creation and enforcement of norms and the ability to monitor individuals for counter-normative behavior. This suggests that even if an individual is motivated to engage in negative voluntary workplace behavior, they must have the opportunity to do so. This also applies to more positively-focused voluntary workplace behavior. An employee might be unable to improve their performance effort or increase citizenship behaviors if they lack the social connections to provide them necessary resources or opportunities to lend social support. Typically studies on organizational behavior focus on either motivation (as do most individual difference studies) or opportunity (as do most social network studies). In this dissertation I will test whether the social structure of the organization will affect social comparison behavioral outcomes in two ways: through motivation (by shaping the

emotional experience of the actor), and through opportunity (by constraining an individual's ability to engage in certain types of voluntary workplace behaviors).

In sum, this dissertation uses a motivation-opportunity framework to understand the consequences of workplace social comparisons on extra-role behavior, arguing that discrete emotions act as motivational forces. These forces are formed by a complicated interplay between social comparisons and the structure of referent groups existing in a broader climate of justice. Furthermore, social structure acts as an opportunity conduit, amplifying or diminishing the consequence of emotional motivation on behavioral reactions to the comparisons.

Conclusion

The literature reviewed in this chapter has identified several areas where a more contextualized theory of workplace social comparisons can contribute to our understanding of how individuals will react to being outperformed by their peers in organizations. These contributions hopefully extend social comparison theory, affective events theory, the theory of discrete emotions, and how social networks shape emotional experience. It was acknowledged that social context plays an important role in influencing the social comparison process for an individual. Social comparison theory will be extended to add more specificity to the exact nature of comparisons in the workplace.

First, this dissertation will show the importance of explicitly identifying referent others in the workplace. Individuals tend to compare themselves to a relatively stable set of multiple individuals; thus it is important to examine how the structure of these

reference groups vary among individuals and affect their emotional experiences. Secondly, this dissertation will explicitly measure the amount of relative deprivation an individual experiences based on their comparisons. This approach will show how the relative distance, in terms of performance differences, between an individual and their entire set of referent others will shape their social comparison-based emotional experience. Traditionally social comparison theory has considered comparison in a primarily dyadic way, as a comparison between two individuals. The direction of comparison upward or downward has largely been experimentally manipulated and treated as a categorical variable. This dissertation adds essential specificity to social comparison theory, revealing the importance of knowing the specific set of others an individual compares themselves to and the relative performance difference between the individual and these referents. By acknowledging that workplace social comparisons take place among a group of referent others we can examine how the social structure of these groups ultimately affects emotional and behavioral outcomes. This dissertation also integrates discrete emotion theory by examining how the same workplace comparison difference can trigger different discrete emotional responses when the social context surrounding these social comparisons differs.

The study of envy has traditionally considered envy to be a primarily emotion with predominantly negative behavioral consequences. This dissertation provides empirical support for the existence of two qualitatively different types of envy and demonstrates their important role in motivating different types of organizational behavior. For the purposes of this dissertation, a scale has also been developed to distinguish between benign and workplace envy.

This dissertation seeks to extend social network theory in its relation to emotions and voluntary workplace behavior. This dissertation shows that structure can also have a direct effect on emotional experience by shaping the access and opportunity individuals have for eliciting social comparison information. Lastly, this dissertation shows that social networks can influence organizational behavior through both motivation and opportunity – motivation being influenced by structural effects on emotion elicitation, and opportunity being influenced by the constraining and monitoring effects different network structures can impose on individuals.

CHAPTER 3: THEORY AND HYPOTHESES

The literature review suggests that the social context of workplace social comparisons will have a significant impact on the behavioral consequences of these comparisons. I suggest that the structure of comparison relationships will shape emotional experience and that these emotions will motivate specific types of organizational behavior. Reference group structure will alter an individual's access to potentially harmful comparison – information which will in turn impact the amount of benign and malicious envy an individual experiences at the workplace. These two different types of envy will in turn motivate workplace behavior including workplace deviance, performance related effort, organizational citizenship behavior, and workplace withdrawal. The social networks within which an individual is embedded, which shape the opportunity individuals have for engaging in discretionary workplace behavior, moderate the relationship between the motivating forces of discrete emotional experience.

Therefore in this dissertation I examine the following: (1) the distinction between benign and malicious envy in the workplace; (2) how the social structure of comparison relationships impact the experience of malicious and benign envy; (3) the relationship between different types of envy and productive as well as counterproductive forms of discretionary workplace behavior; (4) whether different types of envy mediate the relationship between reference group structure and discretionary workplace behavior; (5) how the structure of the overall communication network moderate the relationship between different types of envy and discretionary workplace behavior.

Distinguishing between two types of envy

Empirical studies focusing on the consequences of workplace envy suggest a primarily destructive pattern (Duffy, Shaw & Schaubroeck, 2008), workplace envy has been shown to erode the quality of workplace relationships (Duffy & Shaw, 2000), decrease positive workplace attitudes (Vecchio, 2000), and increase antisocial behavior (Vecchio,2007). However some recent work has focused on the positive and adaptive outcomes associated with envy such as emulation, desire to learn and increased motivation to succeed (van de Ven, Zeelenberg, & Pieters, 2009). There is some debate as to why there have been contradictory findings on the behavioral consequences of envy. I contend that one important difference determining whether or not an individual reacts positively or negatively to social comparisons is contingent upon whether or not they experience benign or malicious envy from the comparison.

The High Road: Benign Envy and positive voluntary behaviors

Benign envy results from an upward comparison, a comparison made when the individual lacks an achievement, possession or quality of the envied target. While benign envy may still be a painful experience and threatening to the self, it differs from malicious envy as it is not associated with hostility or ill will. Instead, empirical results show that benign envy is associated with motivational gain and a desire for self- improvement (van de Ven, Zeelenberg & Pieters, 2011). While benign envy is associated with at least some sort of initial pain or ego threat it is still a more positive experience than malicious envy. Though a more positive experience than malicious envy, benign envy differs from positive emotions resulting from upward comparisons such as

admiration. Admiration may also lack the hostility associated with envious upward social comparisons, but does not result in improved motivation for self-improvement.

Benign envy seems to result in an increased focused on the self as opposed to a focus on the other that occurs with malicious envy. Empirical results show that the experience of benign envy was a far less frustrating experience than malicious envy. There was far less personal dislike and individuals were not motivated to harm or punish the other. Instead benign envy was associated with greater feelings of inspiration and a desire to focus on reaching one's goals (van de Ven et al., 2009). Further experimental evidence demonstrates that after experiencing benign envy, students had a desire to study more and actually performed better on a task designed to measure intelligence and creativity (van de Ven et al., 2011).

I seek to extend these findings by examining the consequences of benign envy in a field setting. Because of the upward motivation and desire for self-improvement that benign envy produces, I expect employees to engage in positive voluntary workplace behavior- including increased effort and more organizational citizenship behaviors. Several scholars have shown that work performance is a critical focus for comparison in organizations and that information concerning performance is often available and relevant, whether it be through company newsletters, awards ceremonies, objective performance evaluations, or third party gossip (Barr & Conlon, 1994; Molleman, Nauta & Buunk, 2007; Lam et al. 2011). Thus I believe that that the most direct route for individual self-improvement is to improve both in-role and extra-role performance. An employee can "close the gap" by being a high performer or a helpful and good corporate citizen.

Hypothesis 1: Benign envy will be positively related to greater work effort.

Hypothesis 2: Benign envy will be positively related to organizational citizenship behavior.

The Low Road: Malicious envy and negative voluntary behaviors

        Malicious envy is also the result of upward comparison, but differs from benign envy by producing desire to pull down the better performing other rather than a desire to pull one's self up (van de Ven, et al., 2009). Malicious envy most closely resembles envy as it has been traditionally studied and is associated with feelings of hostility and ill will (Smith & Kim, 2007). Malicious envy is a much more frustrating and negative experience than benign envy, although the desire to close the gap between self and envied target is still present. While benign envy is associated with an increased focus on the self, malicious envy tends to sharpen the focus on the envied other. This "other focus" has been demonstrated in a series of experiments that show that envious individuals tend to more accurately recall information about their envied peers than the control group (Hill, DelPriore & Vaughan, 2011). These studies also showed that this redirection of attention to the other can deplete self-regulatory resources making it more difficult for individuals to reinterpret potentially harmful comparison information in a positive light. In addition to possible self-regulatory depletion the experience of malicious envy is associated with feelings of dislike toward the envied target, increased thoughts of injustice and unfairness, and a desire to take away from the envied individual (van de Ven, et al., 2009). These feelings of dislike and sense of injustice coupled with a decrease in self-regulatory resources enable individuals experiencing malicious envy to morally disengage from potentially anti-social behavior, feeling justified because of perceived

injustice. This increases the probability that maliciously envious individuals will engage in actions harmful actions (Duffy et al., 2012), "evening the score" not through self improvement, but through undermining, hindering, or embarrassing envied others. A few studies have shown that envy can result in behavior specifically targeted at the envied other such as interpersonal harming and social undermining (Lam et al., 2011; Duffy, et al., 2012).

Malicious envy not only results in feelings of interpersonal dislike but also results in thoughts of injustice and the notion that others are undeserving of their success. The organization may become a target of malicious envier's retribution. Employees typically expect a fair workplace, one that is free of bias when it comes to handing out organizational rewards, and this constitutes a major dimension in an employee's psychological contract (Coyle-Shapiro, 2002). However when an employee perceives organizational unfairness they are often motivated to punish the organization for psychological contract violation. Feelings of injustice or unfairness are most often associated with malicious envy (van de Ven et al., 2009). Therefore we expect that malicious envy will result in broader workplace deviance, a measure of deviant behavior that includes both interpersonal and organizationally directed deviance (Bennett, Robinson, 2000).

Hypothesis 3: Malicious envy will be positively related to workplace deviance.

While an employee who experiences malicious envy may be motivated to engage in workplace deviance they may be unable to do so. Organizational researchers have demonstrated that employees need both motivation and discretion to engage in behavior

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that deviates from norms (Scott, Colquitt & Paddock, 2009). Individuals who engage in workplace deviance may be subject to sanctions or punishment from their peers and the organization, and thus may not be able to act upon their motivations. These individuals are still subject to the experience of malicious envy, which is both unpleasant and threatening to an individual's identity and sense of self-worth. Faced with ego threatening upward comparisons, individuals may choose to withdraw physically or psychologically from the workplace in order to limit the amount of upward comparisons they are subject too. Vecchio (2000) found that individuals experiencing envy in the workplace had higher propensities to quit. Similarly we believe that employees experiencing malicious envy may seek out alternative forms of employment.

Hypothesis 4: Malicious envy will be positively related to turnover intentions.

Context of Comparisons

I do not imply, in this dissertation, to be the first to acknowledge the importance of context in determining whether or not social comparisons will result in envy. Alicke and Zell (2008) propose that several situational factors of social comparison should increase the experience of envy including relational closeness with the target, similarity with the target, and status differences between the individual and the target. These proposed situational factors are connected primarily to the context the comparison itself. As such the focus has been placed upon the nature of the relationship between an individual and a specific referent other to which they compare themselves. This focus

coincides with a primarily experimental approach used to study the social comparison process and has yielded many interesting and important insights into the process itself.

We know, however, that individuals often compare themselves to multiple referent others and these comparisons tend to be quite stable over time. Because of this stable pattern of comparison relationships, a social network perspective should give further insight into how social context influences the relationship between workplace comparisons and envy. In addition to investigating the social context of comparisons, a field study of workplace comparisons allows that the investigation of organizational context can also influence the outcome of social comparisons. Although there have been few studies on the effects of organizational context there is some evidence that perceptions of competitiveness and goal interdependence can impact how individuals react to upward comparisons (Stapel & Koomen, 2005). Perceptions of fairness and deservedness have been strongly linked to negative reactions and malicious envy, thus this dissertation will examine whether or not perceptions of justice within the organization influence comparison outcomes. Considering both the social context and organizational context of social comparisons will increase our understanding of how situational factors influence the comparison process and will increase our understanding of how comparisons will specifically affect behavior inside an organization, a place where comparisons should commonplace. There is still little specific theory or evidence of whether or not comparisons offer potential for motivating factors or should be managed to decrease the potential for deviance. In the following sections I will explain how both social context and organizational context may influence the outcomes of workplace comparisons.

Performance Reference Group

Central to understanding the social context of social comparisons is the concept of reference group. Reference groups have a well established history in the area of sociology and the term reference group is often associated with the work of Merton and Rossi (1968). Reference groups are groups that serve as reference points for individual evaluations. They are the standards individuals use when comparing and evaluating the self. The standards of comparisons can be manifold as individuals will compare their own attitudes, role performance, income, and behavior to others. More recently Barbara Lawrence (2006) extends the notion of reference groups to specifically fit the context of organizations. Organizational reference groups are sets of individuals within the workplace environment that other individuals are aware of and pay attention to at work (Lawrence, 2006). Consideration of organizational reference groups as a distinct entity is an important contribution given that organizational scholars have tended to infer whom employees use as a basis of comparison based on proximity and group affiliation. By specifically identifying the constituents of the organizational reference group, the referent others, researchers can identify specifically who employees are aware of and pay attention to.

Identifying specific referent others is important to understanding individual reactions to workplace comparisons. This is not to suggest that only conscious comparisons affect our behaviors – in fact there is a growing recognition that individuals also engage in implicit social comparison and these unconscious comparisons can affect an individual's feelings about others (Mussweiler & Ruter, 2003). The question of

whether or not conscious or unconscious comparisons have a greater effect on emotional experience and subsequent behavior is an interesting empirical question and one that is not dealt with in this dissertation. At its most basic level I am assuming that an individual experiences many events in the workplace, such as the promotion of a peer, a manager praising someone else's work, an employee bragging about their new bonus, and third party gossip about the good fortune of another. Each of these events has the potential for evoking an envious reaction in an employee, however if the employee already devotes attention to a specific individual who is outperforming them they are at higher risk of experiencing one of these negative events and the event may hold greater weight given the salience of the referent other. This perspective is supported by the work of Shah (1998) who adopted a social network approach to examine the referent selection process in organizations. Shah (1998) directly identified those referents that employees compared themselves to when assessing their own level of performance. Her study showed that employees were significantly more likely to monitor performance referents and solicit information about them from 3rd parties than they were likely to do with other employees that were not identified as performance referents. Thus it stands to reason that employees will be much better informed about their performance referents and at higher risk of experiencing negative emotions when outperformed by them.

In this dissertation I adopt Shah's (1998) approach for directly measuring an employee's performance referent and integrate her approach with Lawrence's conception of an organizational reference group. I focus on a specific type of organizational reference group, a performance reference group. By integrating these two approaches I hope to provide two extensions of previous work:

1) Shah's focus was placed upon the referent choice and the ways in which individuals seek information about their referents. In other words Shah examined whom employees choose as referents and how they gather information about them. I on the other hand focus on the consequences of the referent choices: how do employees react when they know with whom they compare themselves?

2) Using the concept of a performance reference group allows me to look beyond the comparison dyad that is predominantly used in experimental studies of the comparison process. Employees tend to compare themselves with multiple stable and salient referent others and identifying them will allow us to better understand how characteristics of this reference group may influence employee reactions to comparisons.

Relative Performance Difference

There is some evidence that individuals possess the ability to minimize and control their experience of envy. Research has shown that individuals attempt to control their experience of envy in two different ways. "Primary control" refers to the situation when the individual believes they have the ability to decrease the gap between the comparer and the target. For example, if an employee is outperformed by a peer in the first quarter of a sales competition, but believes she has the capability to be the top performing salesperson in the subsequent quarter, their experience of envy may not be as strong. Individuals have been shown to resort to methods of "secondary control" to manage the experience of envy by reinterpreting comparison events in ways that are less ego deflating (Alicke & Zell, 2008).

It has been argued that whether or not an individual believes it is possible to reach the comparison standard is the key determinant of whether assimilative or contrastive reactions occur (Smith, 2000). When individuals focus on differences between themselves and the comparison target (contrast effect) they are more likely to experience negative thoughts and emotions from upward comparisons (Mussweiler, Ruter & Epstude, 2004). Malicious envy is experienced when control potential is lower and benign envy is experienced when control potential is higher (van de Ven, Zeelenberg & Pieters, 2011). Therefore, the size of the relative performance difference should relate differently to different emotions. Performance is a domain that has been shown to be an important comparison domain inside organizations, thus being a high level performer should in and of itself should be an object of envy for a significant number of employees. Relative performance can also serve as a proxy for other organizational rewards. Employees that are perceived as high performers in organizations tend to receive a majority of desired job assignments: quicker promotions, better bonuses, higher salaries and more attention from their superiors.

Additionally, I consider the relative performance difference between an individual and their entire reference group. A larger deficiency in performance relative to the performance reference group should be more severe than a performance deficiency when compared to an individual. Not measuring up to several employees should also decrease the employee's belief in attaining better relative performance in the future. Having several referent ties to better performing employees or having a tie to an employee who vastly exceeds the employee's own performance level is likely to hamper the individual's belief for attaining the same level of achievement making it more likely they will

experience malicious envy. Conversely when an individual's performance difference is lower they may still maintain the belief that they will be able to attain relatively higher levels of performance in the future.

Hypothesis 5. The relative performance difference between an individual and their referent group will be positively related to malicious envy.

Hypothesis 6. The relative performance difference between an individual and their referent group will be negatively related to benign envy.

Performance Reference Group Structure

A social network approach to studying workplace social comparisons is based on the recognition that dyadic comparison relationships do not occur in isolation, rather that the number of referents an individual has and the relationship between those referents creates the social context of comparisons in the workplace. Social network theory recognizes that individuals are embedded within patterns of relationships in organization, and this pattern of relationships possesses an underlying structure that shapes an employee's social context or experience of the organization, creating different opportunities and constraints based on an individual's position within the social network (Kilduff & Brass, 2010). I apply this perspective to examine the structure of an individual's performance reference group. Social network studies typically separate the content of the ties and explore the structural patterns of distinct relationship types. For example, many studies examine the structure of an employee's advice network, friendship network, and communication network separately. Performance reference groups are thus derived from the network of comparison relationships. In network nomenclature, I examine the ego network structure of an employee's performance

referent group. Each employee has their own reference group consisting of their direct ties to referent others and the ties amongst these referent others.

Social comparison is primarily an interpersonal information-based process (Festinger, 1954; Garcia & Tor, 2009). Indeed, Shah (1998) demonstrated that employees were more likely to seek out information about their referent others through direct communication, observation, monitoring, and third party gossip than they were about other employees with whom they did not directly compare themselves. It has been demonstrated that the domain of work performance is a critical focus of comparison in organizations, where information is often available and relevant (Barr & Conlon, 1994; Molleman, Nauta, & Buunk, 2007; Lam et al. 2011). Furthermore these comparisons are not transitory in nature. Individuals tend to compare themselves with a certain few specific others over time and these comparison relationships become quite stable inside organizations (Kulik & Ambrose, 1992). Examining the structure of these reference groups is a proxy for information flow (Burt, 2010). Following the work of Shah (1998) I assume in this dissertation that if a performance referent relationship exists, the focal employee is likely to receive comparison information about the referent other whether it be through direct inquiry, monitoring, or third party gossip.

The salience and availability of comparison information are important factors determining how individuals react to social comparisons (Mussweiler, 2004). Upward comparison information is often threatening to an individual's identity and sense of self worth, and the experience of envy is a particularly painful emotional experience (Tai et al., 2012). As such we possess both primary and secondary methods of controlling the experience of envy (Rothbaum, Weisz, & Snyder, 1982). Primary control entails closing

the distance between self and the outperforming referent while secondary control entails

reinterpreting comparison information, possibly by rearranging one's values. For

example, in the case of our focus on performance comparison an outperformed employee

may attempt to decrease the value they place on being identified as a high performer.

Another form of secondary control entails shifting comparison referents or less actively

seeking comparison information (Gibbons, Benbow & Gerrard, 1994). I propose that two

elements of reference group structure will impede the ease with which an employee can

engage in secondary control thus increasing the experience of envy, reference group size

and reference group density.

Reference Group Size

Reference group size is simply the number of referent others an individual pays

attention to. This is a measure of ego network centrality for an individual's performance

reference group. The larger the number of performance referents an individual has, the

more opportunity the individual has to shift the focus of their attention if they are being

outperformed by a particular referent. For example, if Bob compares his performance

only to Melissa and Terry, and is repeatedly outperformed by the two, it would be much

harder to reinterpret the resulting comparison information. However, if Bob is repeatedly

outperformed by Melissa and Terry but also compares himself to Tom, Jerry and Ted, he

will be better able to switch his comparison focus to the lower-performing Jerry and Ted,

which will be less threatening to his own sense of self worth.

There is also evidence from the study of competition, social facilitation, and

rivalry suggesting that focusing on a relatively fewer number of individuals may actually

heighten the psychological stakes of that competition. In a study of the psychology of rivalry Kilduff, Elfenbein & Staw, 2011) researchers demonstrate that having one or two rivals narrows an individual's focus and raises the psychological stakes of competition. Individuals are more able to focus intense attention to the performance of their rivals, which increases their need to overcome them. Similarly studies on the phenomenon of the N effect (Garcia & Tor, 2009) shows that increasing the number of competitors in a competitive field had demotivating effects. In another study researchers show that focused attention and scrutiny given to the performance of rivals not only raises the stakes of competition but leads to antisocial behavior perpetrated against the rival (Kilduff, Galinsky, Gallo & James, 2012). Similarly we may expect that the intense scrutiny given to a relatively few number of performance rivals and the increased need to overcome them may make it difficult to acknowledge that their referents may in fact deserve their high level of achievement. Feeling that a referent does not deserve their relative success is a key component separating the experience of malicious envy from benign envy. Thus, I would predict that having fewer performance referents would be more likely to result in feelings of malicious envy. On the other hand having several different performance referents will make it easier to control feelings of malicious envy through secondary control, and having a larger pool of referents should make it easier to experience positive comparison information. As long as an employee is able to outperform some portion of their reference group they may believe that achieving high levels of performance are more attainable and would thus be more likely to experience benign envy.

Hypothesis 7: Reference group size will be negatively related to malicious envy.

Hypothesis 8: Reference group size will be positively related to benign envy.

Reference Group Closure

Network closure is the extent to which individuals within a network are connected (Burt, 2005). A closed ego network is typically a dense structure where the alters connected to ego are also connected to each other. In other words, there exists a high proportion of third party relationships in a dense ego network. Because of the close relationship between closure and density I will use the terms interchangeably. Closure in a performance reference group indicates that the comparison referents of ego also compare themselves to one another. This creates a dense structure of comparison relationships where everyone is concerned with comparing their performance with everyone else.

Closure is a structural mechanism that increases the amount of information that exists among network members and increases the stability of relationships within the network (Burt, 2010). Members of closed networks tend to focus on similar things and be well informed about one another. Individuals in closed networks have a high degree of overlap in their social relationships, which reinforces the importance paid to common activity otherwise known as "social foci" (Feld, 1981). Thus, in performance reference groups the common focus of attention is placed on relative performance in dense reference groups, meaning that everyone is concerned with how everyone else is performing within the group. The importance of reputation is increased in dense networks in part because of the common social foci, but also because individuals are more visible

in dense networks. Visibility comes from the high degree of social overlap. The people you know tend to know one another, which increases the flow of communication through third party gossip. Ron Burt (2005) has demonstrated with his work on the "bandwidth hypothesis", which states that an individual's network ties act as a broadcasting system providing an additional source of information through third-party stories and gossip, that individuals in dense networks should be better informed about their direct ties than individuals in sparse networks. Thus, because of the high degree of structural overlap in dense networks not only will an individual know about the performance of their referents through direct observation and inquiry, they are more likely to hear information about them through 3rd party gossip.

In addition to increasing the availability of information about network members, network closure tends to stabilize relationships in networks. Feld (1997) argued that high levels of structural embeddedness, the degree of overlap in relationships among network members, tend to stabilize networks. He attributes this stabilizing effect to the fact that structural embeddedness is outside the control of individuals further demonstrates that structural embeddedness is more stable than other properties of relationships. Similarly Ron Burt (2010) demonstrates that tie decay, the rate at which relationships dissolve over time, decreases as closure increases within a network. Burt explains that because individuals tend to be well informed of the actions of others within closed network, social obligations arise that make it more difficult to break ties. Thus, if an individual has a very dense performance reference group, everyone within the reference group is likely aware of and attends to the performance of others. It is therefore likely that the performance of

others is a common topic of third party gossip as referent group members seek to stay informed of their relative standing compared to others.

Individuals that experience consistent threat from their social comparisons will try to limit the amount and level of their social comparison activity in an effort to protect themselves from ego threat (Gibbons, Frederick, Benbow, Persson, Gerrard & Meg, 1994). Most of this type of research is drawn from academic settings where it is easier to avoid the comparison other and shift comparison referents. Individuals inside organizations are more constrained in their behavior as workflow or work place proximity may demand that individuals are faced with painful referent others on a daily basis. Duffy Shaw & Schaubroek (2008) argue that the nature of organizations take the control of social comparisons out of the hands of individuals. "Organizational envy is readily shaped by management as they control the selection of referents for comparison and various stimuli" (e.g. performance evaluation, compensation, accolades) (Duffy et al., 2008: 170). I argue that the stability and enhanced transmission of information inherent in dense comparison reference groups would make it even more difficult for employees to switch referents, or to ignore/reinterpret potentially harmful comparison information. Employees embedded in dense performance reference groups will be inundated with comparison information that will be difficult to escape, diminishing the sense of control an individual has on their relative standing within the group. Individuals with sparse performance reference groups will have much greater control on secondary control measures and may feel less pressure to maintain a strong reputation within the group.

Hypothesis 9: Reference group closure will be positively related to the experience of malicious envy.

Hypothesis 10: Reference group closure will be negatively related to the experience of benign envy.

Organizational Context of Justice

The importance of context within the comparison process is not limited to the social context produced from informal social networks. Comparisons also take place within a broader context of organizational justice. Employees make judgments and attributions about work events based on their experience of justice within the organization. Low levels of perceived justice have been shown to lead to low levels of job satisfaction, commitment, and the evaluation of the quality of leadership (Colquitt et al., 2001). Perceptions of organizational justice should play an important role in predicting an employee's experience of envy. Richard Smith (2004) proposed that both low perceived situational control and a feeling that an upward comparison referent other does not deserve their level of achievement are necessary to produce envy. Although his study did not distinguish between benign and malicious envy, Smith was referring to the traditional construal of envy as a negative and potentially destructive emotion. More recently, in a series of experiments, scholars have shown that upward comparisons trigger benign envy only when participants believe that self-improvement is attainable. Otherwise they are likely to experience malicious envy when faced with upward comparisons (van de Ven, Zeelenberg & Pieters, 2011). A study examining envy in an organizational context showed that employees with high self-esteem were more likely to harm envied coworkers when they believed the employee in question unfairly gained their advantage (Cohen-Charash & Mueller, 2007).

Procedural Justice is defined as the fairness associated with the process of decision making used to allocate rewards in an organization. If an employee believes that the procedures are fair and unbiased and believe that they have sufficient voice in questioning the fairness of these procedures they will maintain high levels of perceived organizational justice. I chose to investigate the effect of procedural justice because employees have been shown to be able to tolerate inequitable distributions of rewards as long as they believe the procedures and policies in place to decide the distribution of rewards is fair and just (Skarlicki & Folger, 1997).

If an employee is outperformed by a peer and is thus subject to upward comparison events the experience of envy may be mitigated by high levels of perceived procedural justice. Employees in this situation will be more likely to judge the policies and procedures in place that allowed for their referent's high level of achievement to be fair and subsequently they will be more likely to judge that their upward referent deserves their high level of achievement. Additionally, high levels of perceived procedural justice have been associated with employee voice and control (Lind, Kanfer & Earley, 1990), making it more likely that the employee will believe that higher levels of performance are attainable for themselves as well.

Hypothesis 11. Procedural Justice perceptions will be negatively related to malicious envy.

Hypothesis 12. Procedural Justice perceptions will be positively related to benign envy.

The Mediating Role of Benign and Malicious Envy

To this point in the dissertation I have discussed the central role that different types of envy play in determining employee reaction to social comparisons. In doing so I

have separately predicted that benign envy will be associated with productive workplace behavior and malicious envy will be associated counterproductive behavior. I have also predicted that the context in which social comparisons take place, including social and organizational contexts, will determine whether or not an individual experiences benign or malicious envy. In a sense, my approach to understand the different reactions to social comparison suggest a mediation approach where benign and malicious envy mediate the relationship between the social and organizational context of comparison and productive or counterproductive responses, respectively. I expect to find significant indirect effects where the social context variables (reference group performance difference, reference group size, reference group closure and organizational context variable (procedural justice)) will significantly impact benign and malicious envy, which will in turn significantly relate to performance effort and workplace deviance respectively.

Hypothesis 13. Reference group structure and organizational justice will have an indirect effect on performance effort through the experience of benign envy.

Hypothesis 14. Reference group structure and organizational justice will have a significant indirect effect on workplace deviance through the experience of malicious envy.

Social Structure and the Opportunity to Engage in Voluntary Workplace Behaviors

Motivation alone may not be sufficient cause for engaging in voluntary workplace behavior. The relationships an individual has and the social context of the organization may impact the opportunity individuals have for engaging in certain types of behavior in the organization. Increasing work effort and withdrawing from the organization are more individually focused efforts and thus may be more directly affected by an individual's motivation with the social structure providing little constraint on its enactment. Engaging

in prosocial and antisocial behavior in the organization requires social interaction and should thus be more subject to the constraints and opportunities that arise from being embedded in a web of social relationships. For example, an employee must possess sufficient motivation to engage in deviant behavior (a negative voluntary work behavior), however even if an employee were motivated to act in a deviant manner she may still refrain from negative behavior if she fears she will be caught and be subjected to group sanctions or punishment.

A social network perspective goes beyond the relationship dyad to take into account third party relationships including the presence and absence of ties among individuals in an organization. Examining the structure of these relationships reveal positions within networks of informal relationships that can provide constraints or opportunities to individuals. If an individual has a relationship to two other individuals within an organization that are themselves not connected, this is a structural hole. The extent to which an individual's connections are connected to one another is known as constraint and is thus a good measure of an individual's structural holes (Burt, 1992). An individual with the highest level of constraint occupies a structural position that is embedded in a dense local structure, meaning that everyone the individual has a relationship with will also have relationships with one another. Individuals with high levels of constraint are subject to higher levels of surveillance as mutual friends or acquaintances can monitor their behavior. If this individual were to act in a deviant manner, it would be quickly communicated through this dense web of relationships, subjecting the offending individual to sanctions from the group (Brass, Butterfield, & Skaggs, 1998). Individuals that occupy structural holes and have low levels of constraint

should have a greater opportunity to engage in deviant behavior without being subject to sanctions. If an employee offends one of their network ties, this person is much less likely to communicate this to another of the employee's network ties because of the lack of third party relationships. The experience of malicious envy motivates employees to engage in workplace deviance and these behavioral intentions are more likely to result in actual deviant behavior if the employee has the opportunity to escape the scrutiny and sanctions that are associated with engaging in behavior that deviates from the norm.

Thus far I have discussed a particular relationship within the organization that of comparison referent; however, employees maintain several types of relationships within an organization and are thus embedded in several types of informal networks. A vast majority of relationships are communication-based and a good measure of an individual's aggregate relationship portfolio is to examine the overall communication network. The amount of constraint in an employee's communication network is a good indication of the visibility and the ability of others to monitor their behavior. Thus, employees with a high level of constraint will more likely face sanctions for engaging in antisocial behavior such as workplace deviance, and as such may be less willing to engage in such behavior even if they are motivated to do so through the experience of envy. Remember, envy is not a knee-jerk reaction automatically producing a behavioral response – rather it is an action tendency.

Hypothesis 15. An employee's level of constraint in the overall communication network will moderate the relationship between malicious envy and workplace deviance such that the positive relationship between malicious envy and workplace deviance will be decreased.

CHAPTER 4: METHOD

Setting

Data were collected at a centralized administrative unit of a large healthcare organization. These employees worked in the areas of human resources (HR), licensing and credentialing, billing, accounting, marketing, and finance. While they worked in different functional areas, they were co-located within the same office building. Their work is somewhat interdependent within each departmental area, although there is also some workflow between the departments. In interviews with the Director of HR and Chief Operations Officer, both noted that the climate of the organization was one built on teamwork and cooperation, and could not be characterized as competitive. Many of the factors that have been linked to increased competitiveness in organizations (Vecchio, 2000) were absent here: there is little inherent competition built in to the structure of the organization, the organization does not utilize tournament based pay or reward systems, and forced ranking systems were also not used for performance appraisals. The lack of competitiveness among employees makes this setting a conservative test for examining the potential negative consequences of workplace interpersonal comparison, including negative emotions and deviant behavior. Organizations characterized by a high degree of competitiveness and work interdependence have also demonstrated higher levels of negative outcomes such as negative emotions and conflict. Thus if I am able to find significant negative consequences of workplace comparisons in this setting, it suggests that these consequences are less likely to be attributed to the nature of the organization itself.

Procedure

Before data collection began a series of preliminary ethnographic interviews were conducted within the administrative unit of the health care organization. These interviews were conducted with a stratified sample of employees from various hierarchical levels within the organization, including the aforementioned interviews with the Director of Human Resources and the Chief Operations Officer. The purpose of these interviews was to understand the nature of work being done within the various units of the organization, understand the general climate of the organization, learn organizationally specific language to employ in future survey development, and begin to build trust and rapport by introducing the study. In exchange for gaining access to this organization, I conducted a general network analysis of communication-based relationships and assessed how the structure of both intra-departmental and inter-departmental communication ties related to employee satisfaction, turnover intentions, and organizational commitment. I also provided general recommendations for improving the efficiency of communication networks throughout this unit within the organization. After these preliminary interviews, I met with large groups of employees to explain the study procedures and provided a very general overview of the study purpose and the report I would be giving back to the organizational managers. I made great efforts to distinguish between my dissertation and the report I would be providing for the company and focused on the confidentiality assurance process. I also explained that I would not be reporting back to the company any results regarding sensitive questions, including emotions and counterproductive behavior. In these introductory sessions, I also

explained my independence from upper level management emphasizing that I was not being paid for the project and the collection of data was for research purposes only.

All data were collected on-site using electronic surveys administered on laptop computers provided by the researchers. The participants completed the survey in small groups of eight in a large board room after a short presentation was provided reiterating the Institutional Review Board stipulations, the informed consent process, and detailing how participant confidentiality was protected. To alleviate response burden, electronic surveys were administered in 2 separate rounds. The first survey contained all sociometric questions as well as the workplace deviance scale and work effort scale. The second survey contained the remainder of the psychometric questions pertaining to workplace attitudes, perceptions and emotions. Nearly all of the participants finished the surveys within 15-20 minutes during both administrations. To encourage a high response rate, management allowed all participants to dress casually on the days they completed the surveys. My initial response rate was 77% (109 first round responses from a total of 142 employees); of these 109 employees, four did not complete the second round psychometric surveys, yielding 105 total usable responses (74% final response rate).

Measures

Dependent Variables

Deviant Behavior was measured using the Workplace Deviance Scale (Robinson & Bennett, 2000). Adopting the approach used in previous research (Lee & Allen, 2002) I used 27 items from the original workplace deviance scale. Items were self-reported using a 7 point Likert scale ranging from "Never" to "Always." The workplace deviance

scale has at times been used as two separate scales: interpersonal deviance and organizational deviance, but because these two dimensions are so highly correlated, it is common to aggregate across these two factors. The proposed underlying two- factor structure was not present in the data collected for my dissertation and like previous researchers (Lee & Allen, 2002; Judge, Scott & Iles, 2006) I chose to use the scale as a measure of overall deviance. Also similar to Lee & Allen, I dropped items that had too little variance, with more than 90% responding "never" to the item. I dropped the following items from the analysis: "Falsified a receipt to get reimbursed for more money than you spent on business expenses," "Use an illegal drug or consume alcohol on the job," "Drag out work in order to get overtime," "Played a mean prank on someone at work," and "Publicly embarrassed someone at work." This approach resulted in a 22-item scale with high reliability ($\alpha =$ .90). Sample items include: "Made fun of someone at work," "Said something hurtful at work," and "Acted rudely to someone at work."

Work Effort was measured using the Work Effort Scale (Wright, Kacmar, McMahan, & DeLeeuw, 1995; Kacmar, Zivnuska & White, 2007). The work effort scale measures the degree of effort an employee is willing to put forth for their job. I chose this as a measure of performance because effort is one area of performance under complete control of the individual employee and reflects the level of motivation an employee possesses for improvement. The original scale included 8 items, and I used a sub-scale of 4 items that dealt only with "self-initiated effort." Participants were asked to indicate on a 7 point Likert Scale ranging from "completely disagree" to "completely agree" the extent to which they engaged in the following behaviors in the last few months: "Try to do things better at work than I have in the past," "Tried to do more than

was asked of me," "Tried to work harder," and "Tried to get more things done on time." This scale demonstrated very high reliability ($\alpha = .94$.)

Intention to Turnover is measured using the Turnover Intentions Scale from the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins, and Klesh, 1979; $\alpha = .94$).

Organizational Citizenship Behavior was measured using a 9 item scale (Turnley, Bolino, Lester & Bloodgood, 2003; $\alpha = .677$). Past studies of organizational citizenship behavior (OCB) have at times differentiated between interpersonally-directed and organizationally-directed citizenship behaviors (Williams & Anderson 1991). However in this dissertation I am predicting that employees' upward comparisons and experiences of benign envy will motivated them to engage in OCBs for impression management purposes in order to improve their perceived contribution to the organization. OCB scholars have distinguished between a prosocial motive and an impression management motive for engaging in OCB (Bolino, 1999). Further empirical studies have demonstrated that employees with high impression management motives are more likely to engage in both affiliative (interpersonally directed) citizenship behaviors and organizationally directed citizenship behaviors. Furthermore the results show that these individuals do not distinguish between the two (Grant & Mayer, 2009). Because an impression management motive could motivate both types of organizational citizenship behaviors, I use a one-factor measure of organizational citizenship behavior. This aggregate measure possesses adequate reliability ($\alpha = .67$).

Mediators

Benign Envy was measured with the Benign Envy scale (Sterling, Smith & van de Ven, 2013). This scale is based primarily on the work of van de Ven and colleagues (2009) to capture the experiential nature of benign envy, including cognitions, behavioral intentions and motivational goals. The approach used to measure both benign and malicious envy is based on a discrete emotion approach grounded in affective events theory (Weiss & Cropanzano, 1996; Lazarus & Cohen-Charash, 2001). The essence of this approach recognizes that discrete emotional reactions have distinct phenomenal structures, including the experience of different thoughts, feelings, and behavioral motivations. In constructing the envy measures, I also adopt the position put forth by Melwani, Mueller & Overbeck (2012) which distinguishes the measurement of discrete emotions from moods, more general emotional experiences, and emotional traits. Discrete emotions are elicited by specific events or stimuli, that being comparisons in the case of socio-comparative emotions such as envy. Discrete emotions are also less diffuse and more intense than moods and general measures of positive or negative affect. Thus the approach I am using to capture discrete emotions involve a survey bounded in time for the purpose of recalling the extent to which the specific emotion has been experienced. Discrete emotions by their nature possess different behavioral trajectories or propensities to act, these propensities motivate action sooner rather than later, but are not automatic responses to comparison stimuli. Instead by measuring the extent to which discrete emotions are experienced over the period of a few months, during a period of time we can better capture the strength of the motivation to act in a particular fashion that is consistent with specific emotion trajectories (Elster, 2007).

Five items were developed using a 7-point Likert scale ranging from "Never" to "Always." Participants were asked to indicate the extent to which they have experienced the following feelings in the past 3 months: "When I compare myself to successful people at this company it is hard for me to feel resentful", "I am motivated to try harder to achieve my own goals when comparing myself with others at this company that are doing well," "When I compare myself to someone at this company that is successful I hope they continue their success," "When compare myself with someone successful at this company I feel inspired to do more to get ahead," "When I am envious of people I compare myself to, I cannot say I dislike them." Reliability for the scale was good ($\alpha = .73$).

Malicious Envy was measured using the four-item Malicious Envy Scale (Sterling, Smith, van de Ven, 2013). Item responses were developed using a 7-point Likert scale ranging from "Never" to "Always." Participants were asked to indicate the extent to which they have experienced the following feelings in the past 3 months: "I feel very frustrated by the success of others at this company when I compare myself to them," "At times I may wish that successful people that I compare myself to will experience some type of setback," "I may wish I could do something to take down a notch those successful people I compare myself to at this company, even if I would never actually do that," "Sometimes people feel envious because they lack the advantages, superior accomplishment and talents enjoyed by others, and secretly wish the other person would lose this advantage, I've felt this way often in the past few months," Reliability for this scale was strong ($\alpha = .82$).

Moderators

Constraint was measured using a sociometric approach defined by Burt's level of constraint in an individual's communication network. Individuals whose personal networks are highly constrained are more likely to be subject to strong group norms, and their actions tend to be at higher risk for group monitoring and sanctioning due to the fact that information can flow more rapidly through densely connected common third party ties. Previous work has hypothesized that networks characterized by high levels of constraint should discourage unethical behavior in individuals (Brass, Butterfield & Skaggs, 1998), but to my knowledge this has yet to be tested empirically. I test this proposition here, by examining the impact that opportunity structure has on emotionally motivated deviance.

First I use a whole network approach to determine the communication network within the administrative unit of the healthcare organization. Each employee was presented with a full roster of employees broken down by the three major functional areas to ease response burden. Employees were asked: "Please indicate which colleagues you routinely communicate with concerning matters that regard work." This sociometric question was adapted from the work of Gargiulo and Benassi (2000) to measure communication networks in the workplace. The responses were recorded as "yes" (1) or "no" (0).

The answers to this question were then used to create a 109x109 matrix of communication ties. Next a constraint score was calculated using Burt's (1992) constraint measure for each employee using UCINET (Borgatti et al., 2002). Burt's

constraint measures the extent to which an individual's network ties are concentrated in a single group of interconnected colleagues (Burt, 2010). Constraint is defined as follows:

constraint = $\quad\quad\quad\quad\quad\quad$ ^{2} ,

Where $\quad$ is the proportion of *i*'s ties invested in j, $\quad$ is the proportion of *i*'s ties invested in *q*, and $\quad$ is the proportion of *j's* ties invested with q.

Independent Variables

Several measures of social network context were derived from the construct of reference group. A reference group is defined by ego's nomination of referent others and the referent relationships that exist between these alters. The reference group is used to calculate three separate independent variables in the dissertation model: relative performance difference, reference group size, and reference group closure. Referent others are defined by ego answering the following sociometric question: "Most people compare themselves from time to time with others. This is especially true in the workplace as individuals compare themselves to others to get a sense of how well they are doing. With whom do you compare yourself when assessing your own performance?" This question is taken from Shah (1998). Each employee was given a full roster organized by function from which they could nominate their referent other(s) with a yes (1) or no (0) response. \he answers were used to create a 109x109 matrix of performance referent ties. Next, an ego network was extracted for each individual employee using E-Net, a software program designed to specifically analyze ego-network data (Borgatti, 2006). For this ego network extraction, the personal network was defined by direct outgoing ties. Thus, alters within ego's network were defined only if ego

indicated a referent relationship. The ego network also included ties between ego's alters, if an alter indicated a performance referent relationship to another alter. These ties within the reference group were not symmetrized to capture the perceptual nature of referent others. Presumably the actions of a referent other will affect an individual only if that individual maintains awareness of a referent other and seeks out comparison-based information pertaining to them. Social comparisons can also affect individuals at a subconscious level, but I would argue that an individual is more at risk for experiencing negative emotions when they experience an upward comparison event from an individual to whom they maintain awareness of and devote a substantial amount of attention to. Shah (1998) empirically demonstrated that individuals indicating a referent relationship were indeed significantly more likely to monitor that individual and seek information about that individual through third party gossip.

Performance Difference was measured as the difference in performance ratings between ego and the average performance of the reference group alters. Each direct supervisor rated the performance of their subordinates using a one-item measure based on the performance measure developed by Cross and Cummings (2004). Supervisors were asked "Overall how well is this employee performing" and these ratings were provided on a 7-point scale ranging from "Completely Ineffective" to "Completely Effective." Once performance scores were obtained for each employee, they were matched with the performance comparison network. After extracting each ego network and creating each performance reference group an ego network composition routine was run using matched performance scores on E-Net (Borgatti, 2006). This resulted in an average performance score for each reference group, excluding ego's score. Ego's performance score was then

subtracted from the average of the reference group. Thus a positive number indicates that ego's performance was better on average than their reference group and a negative number indicates ego's performance was worse on average than their reference group. The lower the score the more chances ego has to experience an upward comparison event as their higher performing colleagues are likely to receive more managerial attention and praise, better job assignments and better organizational rewards.

Reference Group Size was measured as the number of performance referent others indicated by ego. This measure was obtained by calculating out-degree centrality for each employee in the performance comparison referent network. An illustration of the possible differences in reference group size is shown in Figure 4.1.

Figure 4.1: Reference group size

Smaller Reference Group

Larger Reference Group
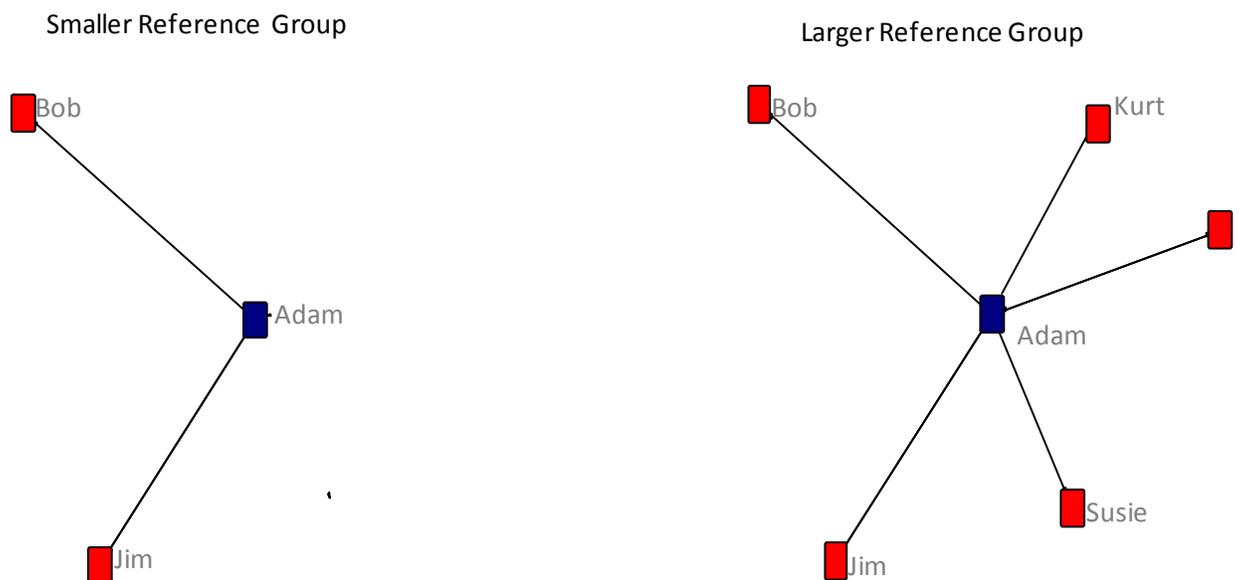
Reference Group Closure is a structural measure of each employee's ego network and thus takes into account the relationships between alters within the ego network of performance comparison referents. Reference group closure is measured using the average degree score of each ego network. Average degree is the average number of

performance comparison referent relationships each alter has in the ego network.

Average degree is the same as the ego network density*(n-1). Because reference group

size is also included as an independent variable and measured simultaneously in the

hierarchical regression model, I chose to use average degree as a measure of reference

group closure to diminish potential multicollinearity in the model. Illustrative examples

of reference group closure are provided in Figure 4.2.

Figure 4.2: Reference group closure
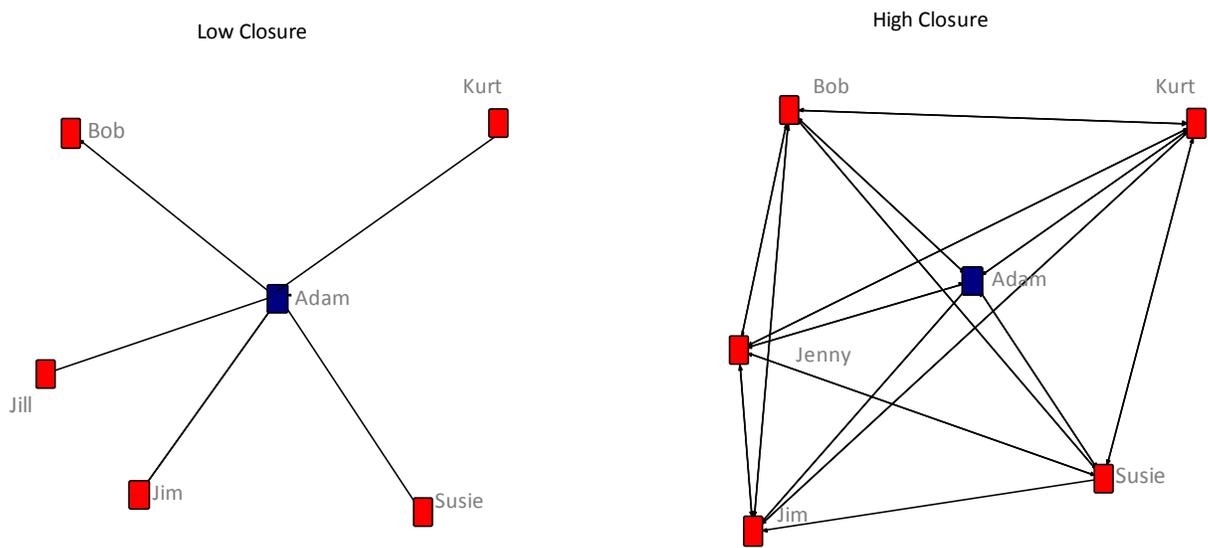
Procedural Justice is measured using the procedural justice dimension of the

Organizational Justice Scale (Colquitt, 2001). Procedural justice was included in the

model to capture employees' sense of fairness in the policies and procedures used to

distribute organizational rewards. As such this measure is used as a proxy for an

employee's perception of attainability, their idea of whether or not the organization is an

even playing field. If employees perceive high levels of procedural justice, they are more

likely to believe that high levels of performance and greater organizational rewards are

attainable. Procedural justice was measured using self-reports on a 7 item, 7 point Likert scale, with responses ranging from "Completely Disagree" to "Completely Agree." Sample items include: "My work procedures are free from bias," "I have been able to express my views and feelings regarding work procedures." This scale demonstrated a high level of reliability ($\alpha = .82$).

Control Variables

I controlled for *gender* (coded 1 for women, 0 for men) to account for potential gender differences in my dependent variables as scholars have shown that women are less likely to engage in deviant behavior toward their peers (Pearson & Porath, 2004). I also controlled for *rank* (coded 1 as supervisor) as higher status members of the organization are more likely to engage in incivility toward their lower status members (Pearson & Porath, 2004). I also controlled for organizational *tenure* (measured as months in the organization) as scholars have found that those who behave uncivilly toward others tend to have spent two or more years longer in the organization than their targets have (Pearson & Porath, 2004).

For models predicting deviant behavior I also controlled for the deviant behavior of others within the focal employee's immediate surroundings. I constructed this variable by taking the communication network and matching it with employee self ratings of workplace deviance. I then extracted ego networks for each employee and ran an ego network composition analysis using E-Net (Borgatti, 2006) returning the average deviance score of the alters in an employee's communication network. This measure was used to control for potential social learning and contagion effects as scholars have shown

that employees are likely to adopt the deviant behavior of those surrounding them (Robinson & O'Leary-Kelly, 1998).

Finally I controlled for *job satisfaction* using the 3 item overall job satisfaction index of the Michigan Organizational Assessment Scale (Cammann, Fichman, Jenkins & Klesh, 1979). Items include: "In general, I like working here," "In general, I don't like my job (reverse coded)," "All in all, I am satisfied with my job." This scale demonstrated high reliability ($\alpha = .84$). Job satisfaction has been shown to relate strongly to workplace deviance (Bennett & Robinson, 2003; Judge, Scott & Ilies, 2006).

Other Variables

I constructed an additional variable for post-hoc analysis purposes. In order to test the assumption that reference group closure increases the experience of malicious envy through increased communication about the performance of referents I created a multiplex network combining the performance comparison referent network with the communication network. I performed the following steps in order to assess communication density within the reference group: 1) I symmetrized the communication network, 2) I then performed a matrix algebra routine, cell-wise multiplication within UCINET VI to calculate a new multiplex relationship (both communicates with and compares himself to); 3) I then extracted ego networks from this new multiplex network, defined by outdegree, and calculated the size of the ego network, using E-Net (Borgatti, 2006); 4) I then divided this number by the original reference group size x (n-1), to calculate the *communication density* within the reference group.

Analysis

Three separate sets of models were used to analyze the dissertation data. The first model investigates the outcomes of benign and malicious envy without accounting for reference group structure to determine the predictive validity of benign and malicious envy, respectively. The second model investigates benign and malicious envy as outcomes predicted by the context of social comparisons, using both social and organizational context as explanatory variables. The third model is an omnibus test of relationships investigating the mediating effects of benign and malicious envy using a Sobel test of mediation and a hierarchical regression to test moderation with the entire set of variables. All hypotheses are at the node level of analysis.

I first used UCINET IV and E-Net to calculate ego network level attributes. After collecting all individual level characteristics and ego network attributes I ran hierarchical OLS regression to test the significance of direct and moderation effects. To test mediation effects I employed a Sobel test using the interactive calculation tool for mediation tests (Preacher & Leonardelli, 2013).

Descriptive statistics and bivariate correlations for all variables used in the dissertation are presented in Table 4.1. The conceptual model for this dissertation is presented in Figure 4.3

Table 4.1: Descriptive Statistics and Bivariate Correlation Matrix

		N	M	SO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Gender	105	0.86	0.35															
2	Tenure	105	79.27	77.40	.022														
3	Procedural Justice	105	4.84	0.92	-.152	.022													
4	Job Satisfaction	105	5.32	1.08	-.090	-.106	.621"												
5	SocialRewards Satisfaction	105	5.08	1.17	-.082	.112	.660"'	.675"											
6	InteractionalJustice	105	5.64	1.27	-.041	.043	.561"'	.538"	.573"										
7	Ben_Envy	105	5.12	0.85	-.025	-.022	.408"	.362"	.420"	.291'									
8	Malicious Envy	105	2.22	1.00	-.027	-.142	-.295"	-.198'	-.311'	-.222'	-.468"								
9	Performance Dfference	93	-0.11	1.27	-.083	.188	.209'	.249'	.180	.342"	.161	-.242'							
10	Reference Group Size	105	3.33	2.64	-.010	.004	.027	-.052	.148	-.100	.193'	-.109	-.245'						
11	Reference Group aosure	105	0.88	1.02	-.013	.100	.135	.134	.264"	.054	.105	.010	-.087	.646""					
12	Deviant Behavior of Ties	105	1.68	0.30	-.073	.165	.233'	.063	.068	.098	.062	-.070	.120	.024	.124				
13	Workplace Deviance	105	1.70	0.47	-.103	-.111	-.259""	-.281"	-.218'	-.241'	-.114	.367"	-.070	.135	.167	-.024			
14	Organizational atizenship Behavior	105	5.39	0.77	.028	.100	.170	.066	.137	.283"	.207'	-.228'	.170	-.042	.033	.024	-.276"		
15	Intention to Turnover	105	3.44	1.21	.000	-.039	-.369""	-.687"	-.519"	-.449"	-.155	.215'	-.238'	.001	-.113	.047	.283""	-.053	
16	Performance EJfort	105	5.88	0.98	.004	.092	.340"	.209'	.206'	.188	.294"	-.163	.115	.004	-.010	.111	-.231"	.318"	-.059

• Correlation significant at .D5 level l2·tailed)

•• Correlation significant at .01 level j2-tailed)

Figure 4.3: Whole Conceptual Model
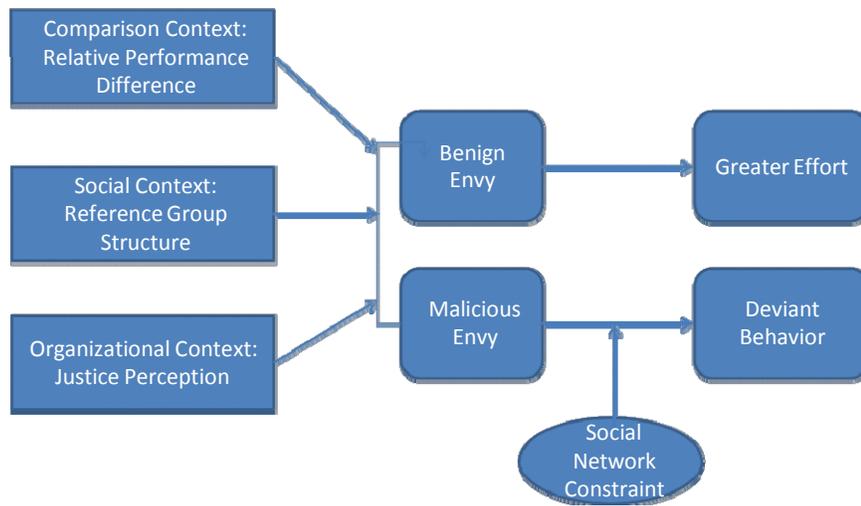
CHAPTER 5: RESULTS

Results Model 1

The first set of models examines the behavioral outcomes associated with the experience of benign and malicious envy in the organization. This part of the overall model is presented first in order to establish the predictive validity of these two constructs. This section reports results on hypotheses 1-4. Three separate hierarchical models (4 if interaction term is included) are included for these set of hypotheses: 1) model with control variables only; 2) model including benign and malicious envy; 3) model including reference structure variables; and 4) model including moderation variable. The portion of the conceptual model tested with the first set of analyses is shown below in Figure 5.1.

Figure 5.1: Model 1
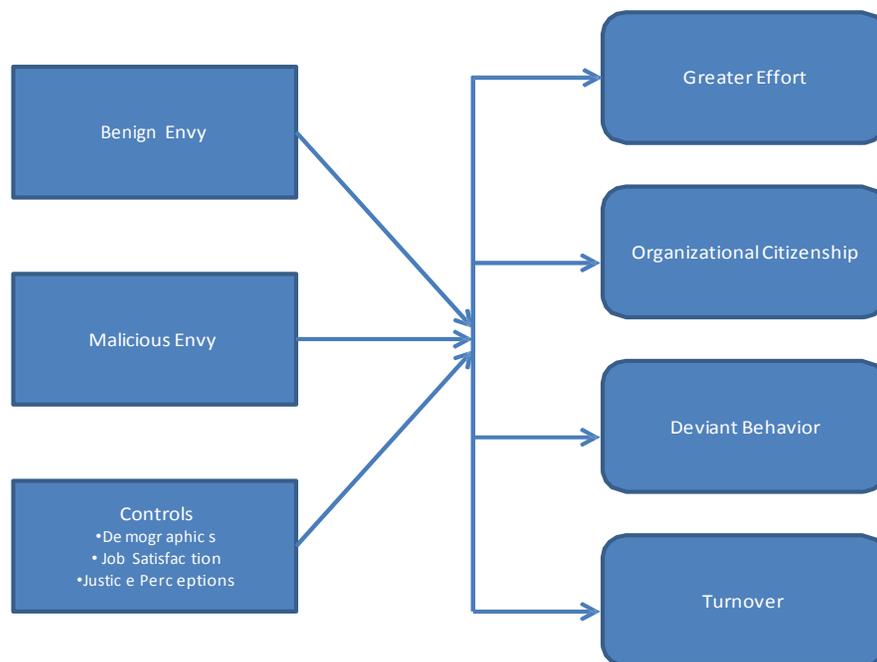
Hypothesis1. The first hypothesis states that "Benign envy will be positively related to greater work effort.*" A marginally significant relationship in the hypothesized direction was found using a two-tailed significance test (Table 5.1 Model 1B: β = .235, t= 1.823, p=.07). This marginally significant relationship held with the inclusion of reference group structure variables in the model. These results suggest partial support of hypothesis 1. Although not hypothesized malicious envy did not have a significant relationship with greater work effort, but the direction of the relationship was the same as that of benign envy.

Hypothesis 2. The hypothesized relationship between benign envy and organizational citizenship behavior was not significant (β = .105, t= 1.01, p > .10). Similarly the relationship between malicious envy and citizenship behavior was not significant, but the direction of the relationship was negative.

Hypothesis 3. The hypothesized relationship between malicious envy and workplace deviance was significant (β = .355, t= 3.334, p < .01). Furthermore this significant relationship remains with the inclusion of the reference group structure variable. Again we see a distinction between malicious and benign envy, given that benign envy demonstrates a positive but non-significant relationship to workplace deviance (β = .166, t= 1.49, p > .10). However this relationship is approaching significance.

Hypothesis 4. The hypothesized relationship between malicious envy and intention to turnover was found to be marginally significant using a two-tailed significance test (Table 5.4, Model 4B: β = .160, t= 1.96, p = .53) suggesting support for this hypothesis. Interestingly benign envy also had a marginally significant positive

relationship to intention to turnover (Table 5.4, Model 4B: β = .157, t= 1.854, p = .07). Although benign and malicious envy are distinct and have a moderately negative correlation, with benign envy associated with more positive outcomes, and malicious envy associated with more negative outcomes, they both stem from an unpleasant and painful upward comparison. These results suggest that both benign and malicious envy are unpleasant emotional experiences and individuals will seek to avoid them if possible.

Table 5.1: Results for Hypothesis 1

Variable	Performance Effort		
	Model 1	Model 2	Model 3
Gender	.086	.081	.084
Tenure	.091	.100	.113
Manager	.125	.124	.127
Procedural Justice	.336**	.286*	.292*
Job Satisfaction	.009	-.024	-.011
Benign Envy		.205 †	.208 †
Malicious Envy		.044	.057
Performance Difference			.003
Reference Group Closure			-.101
Reference Group Size			.029
R-Square	.140	.170	.177
ΔR-Square	.140	.030	.007
Adjusted R -Square	.097	.110	.089

Note. Standardized coefficients are reported. ΔR   -Square report changes from the previous model.

* p < .05. ** p <.01 † p < .1

Table 5.2: Results for hypothesis 2

Variable	Organizational Citizenship Behavior		
	Model 1	Model 2	Model 3
Gender	.041	.028	.028
Tenure	.070	.062	.039
Procedural Justice	.100	.051	.050
Job Satisfaction	-.142	-.141	-.177
Social Reward Satisfaction	-.016	-.072	-.060
Interactional Justice	.311*	.306*	.283*
Benign Envy		.117	.133
Malicious Envy		-.132	-.144
Performance Difference			.034
Reference Group Closure			.119
Reference Group Size			-.126
R-Square	.102	.138	.148
∆R-Square	.102	.036	.011
Adjusted R -Square	.047	.066	.048

Note. Standardized coefficients are reported. ∆R -Square report changes from the previous model.

* $p < .05$. ** $p < .01$ † $p < .1$

Table 5.3: Results for hypotheses 3, 15

Variable	Workplace Deviance			
	Model 1	Model 2	Model 3	Model 4
Gender	-.163	-.137	-.136	-.113
Tenure	-.139	-.083	-.129	-.169
Manager	-.090	-.044	-.054	-.056
Procedural Justice	-.146	-.103	-.111	-.105
Job Satisfaction	-.217†	-.224†	-.270*	-.273*
Deviant Behavior of Ties	.037	.032	.005	-.007
Constraint		-.025	-.035	.031
Benign Envy		.166	.141	.156
Malicious Envy		.355**	.348**	.353**
Reference Group Performance Difference			.118	.127
Reference Group Closure			.219	.194
Reference Group Size			.000	.046
Malicious Envy x Constraint				-.185*
R-Square	.108	.200	.240	.273
∆R-Square	.108**	.092*	.040†	.033*
Adjusted R -Square	.053	.133	.150	.178

Note. Standardized coefficients are reported. ∆R -Square report changes from the previous model.

* $p < .05$. ** $p < .01$ † $p < .1$

Table 5.4: Results for hypothesis 4

Variable	Turnover Intentions		
	Model 1	Model 2	Model 3
Gender	-.029	-.019	-.024
Tenure	-.117	-.092	-.084
Procedural Justice	.085	.102	.103
Manager	.108	.102	.104
Job Satisfaction	-.774**	-.793**	-.795**
Benign Envy		.157 †	.174*
Malicious Envy		.160 †	.148 †
Performance Difference			-.057
Reference Group Closure			.014
Reference Group Size			-.082
R-Square	.502	.528	.534
ΔR-Square	.502*	.025 †	.006
Adjusted R -Square	.477	.494	.484

Note. Standardized coefficients are reported. ΔR Square report changes from the previous model.

* p < .05. ** p <.01 † p < .1

Results: Model 2

After establishing the usefulness and distinctiveness of benign and malicious envy as separate constructs related to both positive and negative organizational behavior, these results deal with the antecedents to these emotional experiences, including comparison context, social network context, and organizational context. The portion of the conceptual model tested with the first set of analyses is shown below in Figure 5.2.

Figure 5.2: Model 2
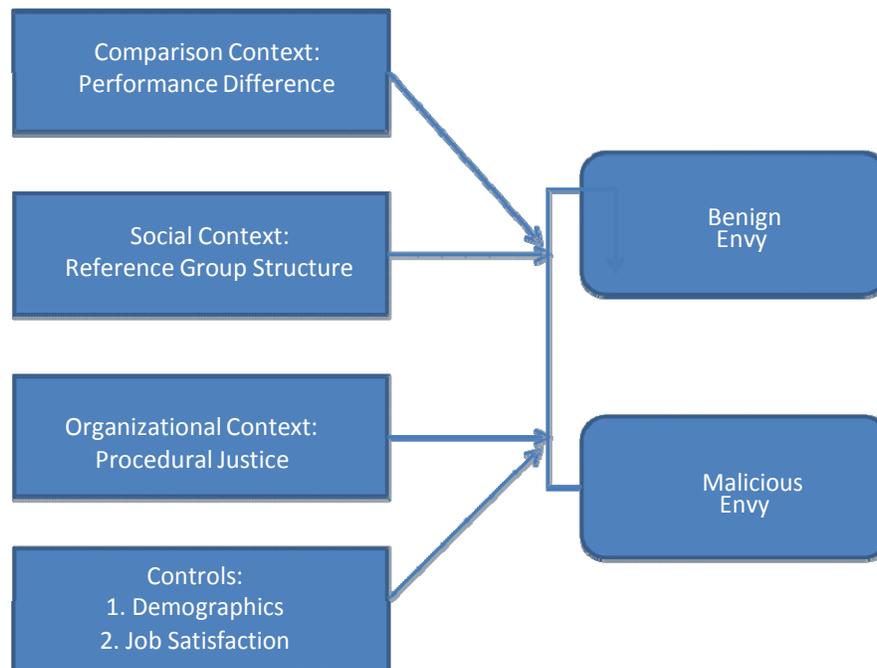
Hypothesis 5. The hypothesized negative relationship between relative performance difference and malicious envy was found to be marginally significant using a two-tailed significance test (Table 5.5, Model 5B: β = -.173, t=- 1.747, p = .08). Performance difference is measured by subtracting ego's performance score from the average of their reference group, thus a positive number would indicate ego as a better performer (downward comparison) and a negative number would indicate ego as a worse performer (upward comparison). The results demonstrate that the size of the upward comparison does have some effect – the greater the relative deprivation of performance, the greater the incidence of workplace deviance.

Hypothesis 6. The hypothesized positive relationship between relative performance difference and benign envy was not significant (Table 5.6, Model 6B: β =

.112, t= 1.161, p = .25). Although the result was not significant, the hypothesized

direction was correct and opposite to that of malicious envy.

 Hypothesis 7. The hypothesized negative relationship between reference group

size and malicious envy is significant (Table 5.5, Model 5B: β = -.31, t= 2.49, p <.05).

The results indicate that the number of referent others to whom an employee compares

herself is inversely related to the amount of malicious envy experienced by that

individual.

 Hypothesis 8. The hypothesized positive relationship between reference group

size and benign envy is significant (Table 5.6, Model 6B: β = -.324, t= 2.69, p <.01).

These results indicate that benign and malicious envy have opposite relationships with

reference group size. The number of referent others an employee compares herself is

positively related to the experience of benign envy.

 Hypothesis 9. The hypothesized positive relationship between reference group

closure and malicious envy is significant (Table 5.5, Model 5B: β = .253, t= 2.041, p

<.05). These results indicate that as reference group closure increases, everyone within a

reference group is also comparing their level of performance with everyone else, and the

experience of malicious envy also increases.

 Hypothesis 10. The hypothesized negative relationship between reference group

closure and benign envy is not significant (Table 5.6, Model 6B: β = -.158, t= -1.313, p =

.192). Although the result was not significant, the hypothesized direction was correct and

the direction of the relationship was opposite to that of malicious envy.

 Hypothesis 11. The hypothesized negative relationship between procedural justice

perceptions and malicious envy is significant (Table 5.5, Model 5B: β = -.245, t= -2.036,

p <.05). The results show that when employees perceive higher levels of fairness within their organization they are less likely to experience malicious envy.

Hypothesis 12. The hypothesized positive relationship between procedural justice perceptions and benign envy is significant (Table 5.6, Model 6B: β = .278, t= 2.402, p < .05). The results show that when employees perceive higher levels of fairness within their organization they are more likely to experience benign envy.

Table 5.5: Results for hypothesis 5,7,9,11

Variable	Malicious Envy	
	Model 1	Model 2
Gender	-.080	-.115
Tenure	-.172†	-.142
Manager	-.147	-.135
Job Satisfaction	-.216*	-.074
Procedural Justice		-.243*
Performance Difference		-.173†
Reference Group Closure		.253*
Reference Group Size		-.310*
R-Square	.088	.201
ΔR-Square	.088†	.113*
Adjusted R-Square	.051	.134

Note. Standardized coefficients are reported. ΔR-Square report changes from the previous model.
* p < .05. ** p <.01 † p < .1

Table 5.6: Results for hypothesis 6,8,10,12

Variable	Benign Envy	
	Model 1	Model 2
Gender	.019	.054
Tenure	.018	-.012
Manager	.043	.033
Job Satisfaction	.364**	.202 †
Procedural Justice		.278*
Performance Difference		.112
Reference Group Closure		-.158
Reference Group Size		324**
		.
R-Square	.133	.250
ΔR-Square	.133**	.117**
Adjusted R -Square	.099	.188

Note. Standardized coefficients are reported. ΔR- Square report changes from the previous model.

* p < .05. ** p <.01 † p < .1

Results Model 3

The final set of analyses investigates the mediating role of benign and malicious envy as motivation for behavior. Additionally the role of opportunity is examined by determining the moderating role network structure has on the relationship between malicious envy and workplace deviance, thus jointly investigating the role of motivation and opportunity. Mediation is tested using a Sobel test (Sobel, 1982) and moderation is tested using the full regression model. All significance tests are two-tailed. The analyses performed in Part 3 test the entire conceptual model (see figure 4.3).

The Sobel test measures whether the indirect effect of the independent variable on the dependent variable through the mediator is significantly different from zero. The Sobel test provides a specialized t test for measuring whether the mediation effect is statistically significant. The Sobel test calculation is listed below (MacKinnon & Dwyer,

1994). Where *a* is the unstandardized regression coefficient for the association between the independent variable and the mediator, *sa* is the standard error of *a*, *b* is the unstandardized regression coefficient for the association between the mediator and the dependent variable when the independent variable is also included as an independent variable in the regression, *sb* is the standard error of *b*.

_____

Hypotheses 13-14. This set of hypotheses tests whether or not malicious and benign envy mediate the effects of reference group size, reference group closure, and procedural justice on workplace deviance and work effort.   The results of the Sobel test (see table 5.7) show that malicious envy does significantly mediate (2-tailed test results are shown in parentheses) the relationship between reference group closure ($z=1.73$, $p= .08$), reference group size ($z= -1.97$, $p= .048$), procedural justice ($z=-1.78$, $p=.075$) and workplace deviance. These results show that the impact of reference group structure and justice perceptions on workplace deviance are mediated through the experience of malicious envy. These provide further evidence from the earlier piecemeal models which demonstrated separately in distinct models that reference group structure and procedural justice significantly impacted malicious envy, and in turn malicious envy had a significant impact on workplace deviance.

The results of the Sobel test (see table 5.7) for hypothesis 14 show that benign envy does not significantly mediate the relationship between reference group closure ($z=-1.06$, $p= .29$), reference group size ($z= -1.49$, $p= .13$), procedural justice ($z=1.44$, $p=.15$) and workplace deviance. Although the mediation results are not significant the coefficients are in the expected direction and the p values are approaching significance.

These findings make sense given that early models demonstrated that benign envy has only a modest marginally significant relationship to increased work effort.

Table 5.7: Sobel Test Results for Hypotheses 13 & 14

Independent Variable	Mediator	Dependent Variable	a	sa	b	sb	test statistic	std error	p-value
Reference Group Closure	Malicious Envy	Worlplace Deviance	0.254	0.124	0.162	0.05	1.73	0.023	0.08
Reference Group Size	Malicious Envy	Worlplace Deviance	-0.311	0.125	0.162	0.05	-1.97	0.025	0.048
Procedural Justice	Malicious Envy	Worlplace Deviance	-0.264	0.129	0.162	0.05	-1.78	0.024	0.075
Reference Group Closure	Benign Envy	Work Effort	-0.135	0.103	0.239	0.133	-1.06	0.03	0.29
Reference Group Size	Benign Envy	Work Effort	0.276	0.103	0.239	0.133	1.49	0.044	0.135
Procedural Justice	Benign Envy	Work Effort	0.256	0.107	0.239	0.133	1.44	0.043	0.15

Hypothesis 15. Constraint communication network significantly moderates the relationship between malicious envy and workplace deviance such that the positive relationship between malicious envy and workplace deviance will be decreased with higher levels of constraint. (Table 5.3, Model 3D: β = -.185, t=-1.97, p = .05). I plotted the interaction (see Figure 5.3) to help with interpretation. As can be seen individuals that are highly constrained do not significantly differ in their workplace deviant behavior regardless of whether the experience low or high levels of malicious envy. Individuals that are not as constrained by their networks are significantly more likely to engage in workplace deviance when they experience higher levels of malicious envy.

Figure 5.3: Interaction Graph: Malicious Envy & Network Constraint
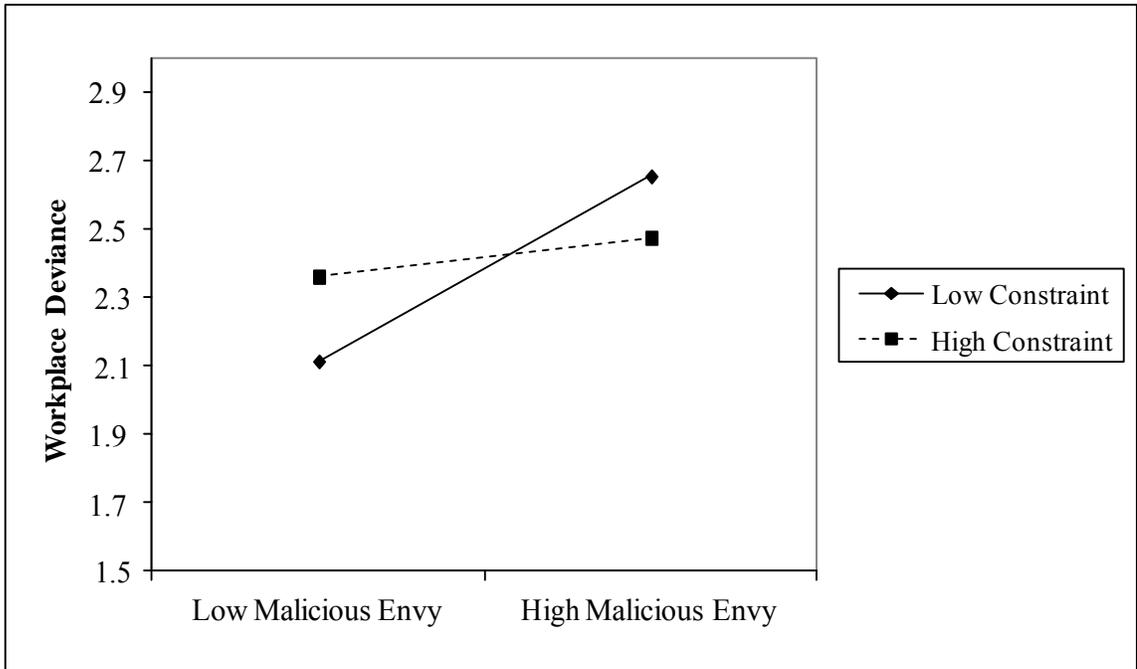
Post Hoc Analysis

I performed a post hoc test to demonstrate that reference group closure increases the amount of communication within the reference group which leads to feelings of malicious envy. In order to conduct the mediation test I followed the following steps: First I symmetrized the communication network. Next, I performed cell-wise matrix multiplication of the communication and referent networks. The result of this procedure was the construction of a multiplex relationship defined as communicated with and compared myself to. I then constructed an ego network analysis of this new network in E-net measuring network size. Next, I divided the size of the multiplex ego network by the size of the original reference group and multiplied this number by n-1, giving me the communication density within the reference group. Finally to test for mediation effect I utilized a Sobel test (Preacher & Leonardelli, 2013). The result of the Sobel test shows

that communication density within the reference group does significantly mediate the

relationship between reference group closure and malicious envy (z1.95, p.05).

CHAPTER 6: DISCUSSION

The purpose of this dissertation was to add a more contextualized perspective to the theory of social comparison within the workplace. This approach was taken in order to better understand why employees react differently to being outperformed by their peers; are they motivated to work harder and become a better organizational citizen in order to get ahead, or instead are they motivated to pull others down in an attempt to even the score? In order to answer this question, a theory of workplace comparison must consider how comparison context, social context, and organizational context contribute to the emotional and behavioral reactions of employees. The comparison context is explored by specifically identifying reference groups. I then examined the extent of the relative deprivation of these employees by comparing their performance levels with the average of their reference group. The social context was examined by exploring the social network structure of these referent relationships, which included considering third party relationships and whether an individual's referent others also compare themselves to one another. Reference group size and reference group closure are two structural characteristics that significantly impact workplace comparisons. Finally I examined these comparisons within a broader organizational context of justice by examining whether or not an employee's perception of procedural fairness within the organization affects their emotional response to the comparisons.

I argued that the above contextual factors shape an individual's emotional experience, influencing the extent to which employee's experience benign or malicious envy. These two different types of envy affect an individual's motivation differently; benign envy motivates employees to engage in more productive behavior to improve

individual performance while malicious envy motivates more anti-social/deviant behavior in an attempt to even the score with others. Consistent with a motivation-opportunity framework, I also investigate how social networks create different opportunities for engaging in deviant behavior. Individuals embedded in dense communication networks are more constrained and are less likely to be able to act on their negative emotional experience to engage in deviant behavior. In the remainder of the discussion section, I will provide an overview of the empirical results, discuss the theoretical and managerial implications of this research, acknowledge the current study's limitations, and identify potentially fruitful areas for future research.

Overview and Interpretation of Results

Model 1 tested the outcomes associated with benign and malicious envy.   This model was chosen to discriminate between the two constructs and identify their differing pattern of association with discretionary workplace behavior. Benign envy had a marginally significant positive relationship with work effort (Hypothesis 1) but was not significantly related to organizational citizenship behavior (Hypothesis 2). On the other hand malicious envy demonstrated a significantly positive relationship with workplace deviance (Hypothesis 3) and a marginally significant positive relationship with turnover intentions (Hypothesis 4). These results provide evidence that the benign and malicious envy can have different motivational effects. The experience of benign envy can have positive effects in that it motivates individuals to exert greater effort at work. On the other hand malicious envy is likely to lead to workplace deviance or withdrawal. Although the relationship was not hypothesized, benign envy was also marginally

significantly and positively related to turnover intentions (Table 4, Model 4B: $\beta = .157$, t $= 1.854$, $p = .07$). Taken together these results suggest that the use of envy in the workplace as a motivational tool should be taken with caution. While it is true that benign envy may motivate employees to work harder, benign envy might also be associated with workplace withdrawal. Thus it is very important to understand what factors lead to benign or malicious envy, which is investigated in Model 2.

These results also indicate a distinction between benign and malicious envy. There has been some debate about the nature of envy and whether it is a singular emotional experience of pain at another's good fortune (Tai, Narayanan, & McAllister, 2012), an emotion comprised of multiple components (Cohen-Charash, 2009), or whether benign and malicious envy are two qualitatively different types of envy (van de Ven, Zeelenberg & Rik, 2009). I argue that the results of this dissertation support the latter conclusion. On the one hand, benign and malicious envy are moderately and negatively correlated with one another (Table 4.1: r (105) $= -.47$, $p < .05$). Despite the negative correlation between the two measures, Model 1 also demonstrates that each construct has different patterns of predictive validity. All regression models were run with both variables in the model and while benign envy was moderately and significantly related to work effort, malicious envy showed no significant relationship. Additionally malicious envy was significantly related to workplace deviance, while benign envy showed a non-significant relationship. Finally both malicious envy and benign envy demonstrated a positive, marginally significant relationship with turnover intentions. This suggests that despite the moderate negative correlation between the two types of envy, these measures might not be simply the inverse of the same construct, with malicious envy capturing an

individual who experiences envy and benign envy capturing an individual who does not

experience envy, but rather a positive emotion such as hope. The fact that both types of

envy are positively associated with the intention to turnover, supports the work of van de

Ven and colleagues (2009), who argue that although the two types of envy differ in their

experience and outcomes, they are both still unpleasant and painful emotions. Because

both experiences of envy are comprised of comparison-based information that reflects

negatively on one's relative standing, these individuals are motivated to prevent these

emotional experiences. Individuals experiencing benign envy are motivated to work

harder to improve their relative standing, while individuals experiencing malicious envy

instead turn their attention to improving their relative standing by pulling other

individuals down. In both cases some individuals may instead react by withdrawing from

the situation, in this case by seeking out new employment. Given the different outcomes

associated with both types of envy it is thus important to understand which contextual

factors will be associated with benign and malicious envy, respectively.

Model 2 tests the contextual antecedents to the experience of malicious and

benign envy. If an employee has a relatively higher number of referent others

(Hypothesis 8) and perceives higher levels of procedural justice (Hypothesis 12), they

will be significantly more likely to experience benign envy. Conversely malicious envy

had a marginally significant negative relationship with relative performance difference

(Hypothesis 5) and was significantly related to reference group size (Hypothesis 7),

reference group closure (Hypothesis 9), and perceptions of procedural justice (Hypothesis

11). Thus if an employee has relatively fewer referent others, if these referent others are

embedded in dense reference groups where everyone is comparing themselves to each

other, and if employees perceive low levels of procedural justice, they will be more likely to experience malicious envy. These results demonstrate the importance of social context in determining whether or not an employee experiences benign or malicious envy. Benign envy was not significantly related to relative performance difference (Hypothesis 6) or reference group closure (Hypothesis 10), but is significantly related to reference group size (Hypothesis 8) and perceptions of procedural justice (Hypothesis 12). Thus when employees have several referent others and perceive high levels of procedural justice in the organization they are significantly more likely to experience benign envy.

Two primary factors account for the impact that context has on the experience of malicious envy and benign envy: attainability and exposure. Past research has demonstrated that when individuals have more control over the outcome of a situation they are more likely to experience benign envy and when they have less control over the outcome of the situation they are more likely to experience malicious envy (van de Ven, Zeelenberg & Pieters, 2011). Thus both the size of the relative performance difference and the amount of procedural justice experienced by the employee should impact their emotional experience. If an individual's performance level is vastly exceeded by that of their referent others, it is unlikely they will believe that they can achieve similarly high levels of performance, the amount of relative deprivation may be too great and the employee is unlikely to believe that increased effort will narrow the performance gap. Instead these individuals will likely turn to less legitimate and unsanctioned paths to even the social standing. Similarly, if individuals perceive that the organization is not a level playing field and certain individuals enjoy undeserved success while other individuals have unequal access to lucrative opportunities, employees perceiving low levels of

procedural justice will also believe it unlikely that their legitimate efforts will be rewarded turning instead to deviant behavior to even the score. This finding is reminiscent of Merton's (1938) classic anomie theory of deviance which links social structure, relative deprivation and the occurrence of deviant behavior. Merton argues that because of inequitable distribution within the social structure, certain groups experience relative deprivation and lack the institutionalized means to achieve desired goals. This creates a strain, promoting individual rule-breaking behavior. I contend that if an employee believes they are incapable of legitimately increasing their social standing by working harder, they will be more likely to engage in deviant behavior.

In addition to attainability, I argue that exposure is an additional mechanism that will transform social comparison information into the experience of malicious envy. As social comparison is primarily an information-based process (Festinger, 1954) an individual's exposure to negative comparison information is likely to affect their emotional experience. Individuals possess a "secondary control" capacity to alleviate envious feelings through reinterpretation or deflection (Alicke & Zell, 2008). However if individuals are constantly exposed to comparison-based information, it should become much harder for them to ignore or reinterpret it in a more positive fashion. Additionally, having a relatively few number of referent others could actually increase the exposure an individual has to negative comparison information. This exposure may not necessarily be related to the amount of information, but the weight of comparison information could be increased. Having fewer referents could intensify the scrutiny with which an individual observes their referent others. For example, studies on the social facilitation of competition and rivalry show that having fewer competitors will actually result in a

greater focus on them and increase the psychological stakes of competition (Garcia & Tor, 2009; Kilduff, et al., 2011). Having a greater number of referents allows employees to switch attention when comparisons become too ego-threatening.

Similarly reference group closure should also increase my exposure to comparison information. In a dense reference group, everyone with whom I compare myself will also compare themselves to one another. In this case everyone shares a common social focus and the topic of third party gossip is likely to involve the achievements of those in the group (Ellwardt, Labianca, & Wittek, 2012). Thus comparison information in this type of reference group may be inescapable. I may try to limit my interaction with a colleague because of their high level of achievement, striving not to constantly be reminded of my own relative inferiority, but if I am embedded in a dense reference group where everyone with whom I compare is making the same comparisons, I am at much higher risk of hearing about this colleague's most recent achievements.

Many of the arguments I've made assume that individuals do indeed communicate directly with their referent other. If it were the case that individuals merely observe referent others to gather evaluative comparison information, reference group structure would be less likely to matter. However, I performed a post-hoc analysis to demonstrate the mediating role of communication between high levels of reference group closure and the experience of malicious envy. The results showed that when there is a higher degree of closure within the reference group, there is also significantly more communication within the reference group, and this mediated the ultimate experience of malicious envy. Although I did not directly measure the content of these

communications, previous studies have demonstrated the central role of gossip in the gathering of social comparison information (Wert & Salovey, 2004; Grosser, Kidwell & Labianca, 2010).

Model 2 results for benign envy were not as clear cut. The relationship between relative performance difference and reference group closure were not significantly related to benign envy. However, reference group size and perceptions of procedural justice were significantly related to benign envy. Employees with larger reference groups and greater perceptions of procedural justice were more likely to experience benign envy. It is as yet unclear as to why reference group closure is significantly related to the experience of malicious envy and not benign envy. One possibility is that reference group size is more strongly related to the "secondary control" mechanisms discussed by Alicke and Zell (2008). It is perhaps easier to construe or reinterpret comparison information if the individual has multiple potential referents to switch attention between. With multiple referent others, perhaps an individual might be more likely to utilize "compensatory self-inflation," which involves attending to peripheral dimensions in which the individual outshines the referent other instead of the focal performance domain (Baumeister & Jones, 1978). Perhaps the more individuals an employee considers as referent, the greater the chance that the employee exceeds any particular referent along some dimension. While secondary control will not eliminate the experience of envy, it might diminish its effect and more importantly restore a sense of balance in the relationship. The feeling of undeservedness which is so acute with the experience of malicious envy may be alleviated if an individual can emphasize their own superiority in other domains. This is an interesting question and requires further examination. Finally

feelings of undeservedness and the belief of attainability seem inexorably tied to employee perceptions of justice. Whether or not an employ takes the high road and works harder or the low road and undermines other is strongly linked to perceptions of procedural justice.

I also investigated the mediating role of benign and malicious envy as well as the moderating role that the broader social network structure plays in the enactment of workplace deviance. The first set of results in Model 3 (Hypothesis 13) show that malicious envy significantly (at the one-tailed test level) mediates the relationship between reference group closure, reference group size, and procedural justice on the one hand and workplace deviance on the other. The second set of results (Hypothesis 14) show that benign envy does not significantly mediate the relationship between reference group closure, reference group size, and procedural justice and workplace deviance. These non-findings are not unexpected, given the marginally significant relationship between benign envy and work effort. Taken together these results suggest a clearer path between workplace deviance and malicious envy than between work effort and benign envy. Perhaps then, attempting to utilize envy as a motivational tool for improving performance might be an imperfect approach and one that should only be undertaken in the right circumstances – that is, when employees perceive high levels of fairness within the organization, individuals are not densely embedded, and employees have more rather than fewer referents. As workplace deviance has been shown to detract from overall workplace effectiveness (Dunlop & Lee, 2004) and relate negatively to supervisor ratings of performance (Rotundo & Sackett, 2002), perhaps the best way to utilize envy in the

workplace is to manipulate organizational conditions to ensure that malicious envy does not take root.

The final analysis investigates the moderating role of constraint (or the lack of structural holes) in the communication network on the relationship between malicious envy and workplace deviance. Constraint in the communication network does significantly moderate the positive relationship between malicious envy and workplace deviance (Hypothesis 15). This finding suggests that individuals need both motivation and opportunity to engage in behavior that deviates from organizational norms. Individuals that are more highly constrained in the communication network might be more likely to be monitored and observed and thus potentially sanctioned for deviant behavior. Therefore they might be less likely to behave in a deviant manner even if they are motivated to do so. This suggests that the negative effects of malicious envy can be buffered by increasing the embeddedness of general communication-based relationships in the organization. Interestingly the findings indicate that different types of closure (i.e., closure in the reference network vs. in the communication network) seem to work as opposing forces on the outcome of deviant behavior. Closure might work in two opposing ways, depending on the relational content of the ties: 1) closure within reference groups operates by what Burt refers to as the bandwidth effect (Burt, 2005) where everyone within the referent network is informed about one another and likely to hear comparison information about another referent through third party gossip. This third party gossip acts similarly to a broadcasting system constantly exposing individuals to comparison-based information. The results of this dissertation suggest that individuals will experience higher amounts of malicious envy due to their inability to escape and

reinterpret comparison information. In this case malicious envy increases the propensity

of an individual to act in a deviant manner. Closure can, however, have a countervailing

effect if we consider the communication network, which is broader than the reference

network in the sense that it occurs much more frequently and across a wider range of

individuals. Closure in the communication network increases the exposure individuals

have to being monitored by others within the organization and the potential negative

reputation effect if caught and sanctioned (Brass, Butterfield & Skaggs, 1998). In this

case individuals will have less opportunity to act deviantly without being sanctioned and

they may put forth greater effort at controlling potentially harmful behavior. More

research is needed to understand the overlap between reference relationships and other

relationships within organizations. The results suggest that small isolated reference

groups in otherwise sparsely connected departments as might happen, for example, in a

sales department, might be a recipe for disaster. Encouraging competition between a few

individuals in a department with little connectivity and little trust may result in increased

malicious envy without the opposing force of constraint to control deviant behavior.

Theoretical Contributions

First, this dissertation contributes a layer of contextualization to social

comparison. Comparison context, social context, and organizational context play

important roles in producing emotional experience and behavioral consequences from

workplace comparisons. This is especially true for the dark side of comparisons leading

to malicious envy and workplace deviance. This focus on context also demonstrated the

importance of specifying referents within the comparison process in order to understand

varying outcomes. The dissertation provides empirical evidence for the importance of recognizing reference groups within organizations, thus supporting the work of Lawrence (2008). Furthermore the focus on context has demonstrated the importance of both specifically identify referent others and the important role that emotional experience plays in determining comparison outcomes. This extends the previous perspective of research on comparisons in the workplace under the rubric of equity theory (Adams, 1965). Equity theory does not account for specific reference relationships, assuming that all coworkers can be equally used as referents. According to this approach employees observe the outcomes of others relative to their own outcomes and weigh this against the ratio of inputs provided by each individual involved in the comparison. If this ratio reflects unfavorably upon an individual he or she will experience inequity and be motivated to alter inputs or change outcomes. However equity theory has been criticized for not being explicit enough in predicting when different reactions to inequity will occur (Miner, 2007). I would also add that an Equity Theory approach does not account for the difficulty or cost associated with gathering information about potential referent others. Referent choice studies account for this difficulty, demonstrating that individuals will often choose referent others on the basis of similarity, availability and relevance (Kulik & Ambrose, 1992). Shah (1998) also demonstrated that individuals were significantly more likely to monitor the behavior of coworkers they selected as specific referents than those they did not select as referents. As such I would argue that equity theory's approach is overly rational, portraying individuals as performing a rational calculation every time they are exposed to a comparison event, carefully weighing the ratio between one and another's outputs respective to specific and widely varying inputs. Instead I would argue

that this occurs through the referent selection process. We choose people that are relevant and similar enough that we could also achieve what they achieve. We devote time and attention to monitoring them and are thus better informed when they succeed and experience stronger emotional reactions when they do so, which motivates our behavior.

Secondly this dissertation has contributed to the literature on the consequences of discrete emotions in the workplace. Traditionally emotions have been aggregated in order to investigate their importance in the workplace. For example, a very popular approach has been to examine how positive or negative emotions in general, such as positive or negative affect, relate to organizational consequences (Lazarus, Cohen-Charash, 2001). This dissertation shows that by examining discrete emotions, even emotions that have previously not been separated and that both contain some form of negative valence, we can understand widely varying behavior as a reaction to similar organizational circumstances. This dissertation contributes to the work on the emotion of envy by specifying a survey instrument that can be used to measure the experience of envy in organizations. The concepts of benign and malicious envy have thus far been measured using elicitation techniques (cf. van de Ven, et al., 2009) which limits the investigation of envy to the laboratory or by having participants recall one particularly poignant experience of the emotion. The benign and malicious envy scales allow us to capture the experience of envy over an extended time period. This dissertation also contributes to our understanding about the influence of social networks on emotional experience. Traditionally, social networks have been related to affect or emotions through processes of social contagion or social influence, which are driven more by

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exchange than structure. This dissertation shows that structure can also have a direct effect on emotional experience by shaping the access and opportunity individuals have to being exposed to social comparison information. Thus socio-comparative emotions such as envy contain a "structural imprint" where the structure of reference groups impacts the degree to which one experiences the emotion.

Finally this dissertation adds to our understanding of deviant behavior in the workplace by incorporating a motivation- opportunity framework. Previous research has proposed that behavior in organizations that violate norms requires both motivation and discretion (Scott, Colquitt & Padock, 2009). In the previously mentioned study, discretion is determined by one's organizational role but I also consider the discretion one has through their position in an informal network of relationships. In the case of network constraint, individuals have less freedom or latitude to engage in deviant behavior without being sanctioned, thus shaping their opportunity structure.

Typically the study of deviant behavior is focused on individual motivation investigating how a perceived injustice, high levels of stress, negative affectivity, goal frustration, violation of a psychological contract and social learning (Griffin & O-Leary-Kelly, 2004). This is the approach taken with most psychometric studies of deviant behavior. Conversely social network studies of deviance focus on opportunity, recognizing that individual behavior can be constrained by ones position in a network of embedded relationships due to the fact that they can be more easily monitored and sanctioned for violating group norms (Brass et al., 1998). I integrate these two approaches in this dissertation and explore both motivation and opportunity concurrently. Furthermore I demonstrate how social networks can both motivate deviant behavior

through exposure to comparison information, and provide opportunities to engage in deviance if one is less constrained by their relationships.

Managerial Implications

The findings of this dissertation suggest a few implications for managers. Organizational envy is largely shaped and influenced by managerial procedures that control the referent selection process as managers enact compensation systems and employee recognition systems (Duffy, 2008). Although envy has largely been considered to have destructive consequences in organizations (Duffy & Shaw, 2000) some scholars have suggested that envy may also have the potential to increase individual motivation and performance (Schaubroek & Lam, 2004). By separately investigating benign and malicious envy, this dissertation shows that indeed both outcomes can occur. However the use of envy as a motivational tool must be taken with caution, lest the organization unwittingly undermines itself by creating situations allowing malicious envy and resultant deviant behavior to thrive.

One consistent finding in this dissertation was the importance of procedural justice in influencing both benign and malicious envy. Thus if a manager is seeking to utilize benign envy by increasing the level of competition in their work group they must ensure that employees perceive the process to be fair. Making sure that rules that govern rewards and promotions are transparent and clear. Furthermore, managers should attend to leader member exchange. A manager must attend to their relationships within the workplace, if employees are able to discern a clear in-group out-group distinction members of the out-group are likely to perceive the organization as unfair which may in

turn lead to feelings of malicious envy. On the other hand if employees believe that the organizational procedures are fair and unbiased, introducing some kind of competitive rewards system may have positive motivational effects; however, I would advise against over-reliance on competitive rewards schemes as studies have shown increased levels of competition and interdependency in reward systems can lead to destructive forms of envy.

Managers may also utilize employee recognition systems to control the type of envy that occurs in their organization. Managers should avoid recognition systems such as "employee of the month" schemes because these systems infrequently recognize high performing individuals. Likewise, company newsletters recognize and praise "organizational superstars" – a handful of very high performers in an effort to have other employees emulate their success. From what the results of this dissertation suggest about the effects of comparison context and reference group size, this could be the wrong approach as employee of the month programs offer limited choices for referent others which could influence reference group size. Additionally focusing on organizational superstars may create a potential referent other that vastly exceeds the performance potential of an individual, diminishing feelings of attainability and resulting in higher levels of malicious envy. Furthermore these types of programs may also have counterproductive results for the reward winners as studies have shown that individuals may pay an "envy tax" and be subject to the undermining behavior of other coworkers (Vecchio, 2007). As a result envied individuals often become more sensitive to the feelings of others (van de Ven, Zeelenberg & Pieters, 2010) which could lead to

behaviors such as "rate busting" as high performers attempt to avoid the negative

consequences of envy by coming back down to an average level of performance.

Managers can also influence the referent selection process through the use of

temporary team assignments or cross-training. When managers assign individuals to cross

functional and temporary teams picking the same handful of individuals, even if they are

the highest performers, could have destructive long-term consequences. Instead managers

should attempt to use these types of assignments to give employees the chance to interact

and be interdependent with multiple individuals. This should increase the pool of

potential referent others which may lead to larger reference groups and decrease the

amount of closure within the reference groups. Finally if managers are able to recognize

very competitive behavior between individuals that are located in close proximity, an

office redesign may help motivate these individuals to choose new referent others as the

cost for monitoring the performance behavior of their former referents will be greatly

increased by the increased physical distance between them.

Limitations

This dissertation is limited by several factors. First I utilize cross-sectional data

which does not capture the dynamic nature of comparison processes in organizations.

Although researchers have proposed that performance referent relationship is relatively

stable barring some major organizational change (Kulik & Ambrose, 1992), further

research is needed to explore how and why referent relationships and reference groups

change over time.

Secondly this paper uses a scale to measure benign and malicious that has not undergone the full scale validation process. Although there is good evidence pertaining to the overall usefulness of this scale including reliability and predictive validity, further work could be done to establish the validity of this scale including a nomological network analysis and further tests of discriminant validity.

Additionally this paper uses self-reported items (with the exception of supervisor-rated performance for the relative performance measure). Employees provided self-reports of work-related attitudes, emotions, relationships, and effort-related behavior. Thus brings up concerns of potential common rater bias. However several steps were taken to minimize the effects of common rater bias. First potential social desirability was managed by conducting several group meetings to include nearly everyone taking the survey. During these group meetings employees were encouraged to ask questions about the project and the process of ensuring confidentiality was carefully explained. Data were collected on-site and fully administered by the research team using researcher supplied laptops to further reassure employees about their responses' confidentiality. Second, great effort was take to eliminate item context effects; thus separate measures were mixed together to eliminate grouping effects. Finally independent variables and dependent variables were collected on different days. In an effort to eliminate response burden and control common method bias two shorter surveys were used to collect the data. Social network measures and dependent variables were collected on the first day while work related attitudes and emotions were surveyed separately on the second day. This approach has been demonstrated to be effective at remedying the effect of common method bias (Podsakoff, MacKenszie, Lee & Podsakoff, 2003). Finally I performed a

post hoc-test to examine the potential effects of common method bias by conducting

Harman's single factor test. To conduct the test I performed a factor analysis of all items

used in my predictive model, I then fit a one factor solution to these items the results

indicated that a one factor solution explained only 21.4% of the variance in the model and

14 factors were identified with an Eigen value greater than 1. Although there is no hard

and fast rule, if one factor explains less than 50% of the variance in your items, common

method bias is not a problem in the model.

Future Research

One avenue for future research is to explore the dynamic nature of referent

relationships and reference groups. New advances in social network research show that

there are important individual differences that can determine the stability of relationships

and networks over time (Sasovova, Mehra, Borgatti & Schippers 2010). Similarly an

investigation of how reference groups change over time should be taken. Researchers

have proposed that referent relationships should be relatively stable (Kulick & Ambrose,

1992) but certain organizational shocks or changes could impact referent choice, an

interesting multi-level analysis would be to investigate how different organizational

changes impact referent choice among organizational members.

The present study should also be extended to include multiple domains of

comparison. Comparison is a domain-specific process and we may compare ourselves to

different individuals in different domains. In this dissertation I have only investigate the

performance domain. But people make comparisons on several potential domains such

as personal characteristics, popularity, attitudes and beliefs, and the receipt of

organizational rewards (Buunk & Gibbons, 2007). The investigation of the multiplex

nature of referent relationships may yield additional insight into the contextual effects of

comparison; for example, it might be that the failures or successes of multiplex referents

have a more heavily weighted impact on individuals. Similarly the referent relationships I

collected in this dissertation were dichotomous; collecting data on valued referent

relationships may reveal that certain referent relationships are more important than

others. Who is considered a particularly important referent would be a fruitful avenue of

study in and of itself. The present dissertation also accounts only for the process of

conscious social comparison by having employees identify specific referent others. Future

studies should explore both explicit and implicit social comparison concurrently.

Although this dissertation has demonstrated the importance of structural

characteristics of social reference groups, I did not investigate the composition of these

reference groups. Does it matter who these comparison groups are comprised of and how

similar the referent others are to the individual in question? Such questions are left to

future studies.

Conclusion

The results of this dissertation provide support for the need of a more contextual

perspective of social comparisons in the workplace. By examining the interplay between

informal social context and organizational context we may be better able to understand

what drives individual behavior in organizations. Additionally the results suggest that the

study of emotions in the workplace is an important avenue for understanding individual

behavior and by specifically investigating different discrete emotions we may be able to

glean further insights about emotionally motivated behavior in the workplace. Social network theory and analysis offers a unique perspective and set of methods for exploring different socio-comparative emotions in the workplace. The importance of the emotions on human behavior is undeniable but we rarely investigate their affects in the workplace. Finally the concept of a distinct social reference group that influences employee behavior is an important one and perhaps a question we should be asking more often in order to understand why organizational members behave the way they do is: "With whom do they compare themselves?

REFERENCES

Adams, S. J. 1965. Inequity in Social Exchanges. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology: 267-299. New York: Academic Press.

Ancona, D. G. & Caldwell, D. F. 1992. Bridging the boundary: External activity and performance in organizational teams. Administrative Science Quarterly: 634-665.

Aspinwall, L. G. & Taylor, S. E. 1993. Effects of social comparison direction, threat, and self-esteem on affect, self-evaluation, and expected success. Journal of Personality and Social Psychology, 64(5): 708.

Bamberger, P. 2008. From the editors beyond contextualization: Using context theories to narrow the micro-macro gap in management research. Academy of Management Journal, 51(5): 839-846.

Barr, S. H. & Conlon, E. J. 1994. Effects of distribution of feedback in work groups. Academy of Management Journal, 37(3): 641-655.

Baumeister, R. F. & Jones, E. E. 1978. When self-presentation is constrained by the target's knowledge: Consistency and compensation. Journal of Personality and Social Psychology, 36(6): 608.

Bennett, R. J. & Robinson, S. L. 2000. Development of a measure of workplace deviance. Journal of Applied Psychology, 85(3): 349.

Bennett, R. J. & Robinson, S. L. 2003. The past, present, and future of workplace deviance research. In J. Greenberg (Ed.), Organizational Behavior: The State of the Science: 247-281. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Blanton, H., Crocker, J., & Miller, D. T. 2000. The effects of in-group versus out-group social comparison on self-esteem in the context of a negative stereotype. Journal of Experimental Social Psychology, 36(5): 519-530.

Bolino, M. C. 1999. Citizenship and impression management: good soldiers or good actors? Academy of Management Review, 24(1): 82-98.

Borgatti, S.P. 2006 E-Network Software for Ego-Network Analysis. Lexington, KY: Analytic Technologies.

Borgatti, S.P., Everett, M.G. & Freeman, L.C. 2002. Ucinet for Windows: Software for Social Network Analysis. Harvard, MA: Analytic Technologies.

Brass, D. J., Butterfield, K. D., & Skaggs, B. C. 1998. Relationships and unethical behavior: A social network perspective. Academy of Management Review, 23(1):

14-31.

Brockner, J. & Wiesenfeld, B. M. 1996. An integrative framework for explaining reactions to decisions: interactive effects of outcomes and procedures. Psychological Bulletin, 120(2): 189.

Brown, D. J., Ferris, D. L., Heller, D., & Keeping, L. M. 2007. Antecedents and consequences of the frequency of upward and downward social comparisons at work. Organizational Behavior and Human Decision Processes, 102(1): 59-75.

Burt, R. S. 2004. Structural holes and good ideas. American Journal of Sociology, 110(2): 349-399.

Burt, R. S. 2005. Brokerage & Closure: An Introduction to Social Capital. New York: Oxford University Press.

Burt, R. S. 2010. Neighbor networks: Competitive advantage local and personal. New York: Oxford University Press.

Buunk, B. P., Collins, R. L., Taylor, S. E., VanYperen, N. W., & Dakof, G. A. 1990. The affective consequences of social comparison: either direction has its ups and downs. Journal of Personality and Social Psychology, 59(6): 1238.

Buunk, B. P., Ybema, J. F., Gibbons, F. X., & Ipenburg, M. 2001. The affective consequences of social comparison as related to professional burnout and social comparison orientation. European Journal of Social Psychology, 31(4): 337-351.

Buunk, B. P., Zurriaga, R., Gonzalez-Roma, V., & Subirats, M. 2003. Engaging in upward and downward comparisons as a determinant of relative deprivation at work: A longitudinal study. Journal of Vocational Behavior, 62(2): 370-388.

Buunk, B. P., Zurriaga, R., Peiro, J. M., Nauta, A., & Gosalvez, I. 2005. Social comparisons at work as related to a cooperative social climate and to individual differences in social comparison orientation. Applied Psychology, 54(1): 61-80.

Buunk, A. P. & Gibbons, F. X. 2007. Social comparison: The end of a theory and the emergence of a field. Organizational Behavior and Human Decision Processes, 102(1): 3-21.

Cammann, C. & Fichman, M. J. 1979. The Michigan organizational assessment questionnaire.

Cohen-Charash, Y. & Mueller, J. S. 2007. Does perceived unfairness exacerbate or mitigate interpersonal counterproductive work behaviors related to envy? Journal of Applied Psychology, 92(3): 666.

Collins, R. L. 1996. For better or worse: The impact of upward social comparison on self-evaluations. Psychological bulletin, 119(1): 51.

Collins, R. L. 2000. Among the better ones: Upward assimilation in social comparison. In J. Suls & L. Wheeler (Eds.), Handbook of Social Comparison: Theory and Research: 159-171. Dordrecht, Netherlands: Kluwer Academic Publishers.

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., & Ng, K. Y. 2001. Justice at the millennium: a meta-analytic review of 25 years of organizational justice research. Journal of Applied Psychology, 86(3): 425.

Coyle-Shapiro, J. 2002. A psychological contract perspective on organizational citizenship behavior. Journal of Organizational Behavior, 23(8): 927-946.

Cross, R. & Cummings, J. N. 2004. Tie and network correlates of individual performance in knowledge-intensive work. Academy of management journal, 47(6): 928-937.

Duffy, M. K. & Shaw, J. D. 2000. The Salieri syndrome consequences of envy in groups. Small group research, 31(1): 3-23.

Duffy, M. K., Shaw, J. D., & Schaubroeck, J. M. 2008. Envy in organizational life. In R.

Smith, R. (Ed.) 2008. Envy: Theory and Research. New York: Oxford University Press.

Duffy, M. K., Scott, K. L., Shaw, J. D., Tepper, B. J., & Aquino, K. 2012. A social context model of envy and social undermining. Academy of Management Journal, 55(3): 643-666.

Dunlop, P. D. & Lee, K. 2004. Workplace deviance, organizational citizenship behavior, and business unit performance: The bad apples do spoil the whole barrel. Journal of Organizational Behavior, 25(1): 67-80.

Ellwardt, L., Labianca, G. J., & Wittek, R. 2012. Who are the objects of positive and negative gossip at work?: A social network perspective on workplace gossip. Social Networks, 34(2): 193-205.

Elster, J. 2007. Explaining social behavior: More nuts and bolts for the social sciences: Cambridge University Press.

Feld, S. L. 1981. The focused organization of social ties. American journal of sociology: 1015-1035.

Festinger, L. 1954. A theory of social comparison processes. Human Relations, 7(2): 117-140.

Frijda, N. H. 2010. The Psychologists' Point of View. In M. Lewis & J. Haviland-Jones

& L. Feldman Barrett (Eds.), <u>Handbook of Emotions</u>, Vol. 3: 68-87. New York: The Guilford Press.

Garcia, S. M. & Tor, A. 2009. The N-Effect More Competitors, Less Competition. <u>Psychological Science</u>, 20(7): 871-877.

Gargiulo, M. & Benassi, M. 2000. Trapped in your own net? Network cohesion, structural holes, and the adaptation of social capital. <u>Organization Science</u>, 11(2): 183-196.

Gibbons, F. X. & Gerrard, M. 1989. Effects of upward and downward social comparison on mood states. <u>Journal of Social and Clinical Psychology</u>, 8(1): 14-31.

Gibbons, F. X., Benbow, C. P., & Gerrard, M. 1994. From top dog to bottom half: Social comparison strategies in response to poor performance. <u>Journal of Personality and Social Psychology</u>, 67(4): 638.

Gibbons, F. X. & Buunk, B. P. 1999. Individual differences in social comparison: development of a scale of social comparison orientation. <u>Journal of Personality and Social Psychology</u>, 76(1): 129.

Grant, A. M. & Mayer, D. M. 2009. Good soldiers and good actors: prosocial and impression management motives as interactive predictors of affiliative citizenship behaviors. <u>Journal of Applied Psychology</u>, 94(4): 900.

Greenberg, J., Ashton-James, C. E., & Ashkanasy, N. M. 2007. Social comparison processes in organizations. <u>Organizational Behavior and Human Decision Processes</u>, 102(1): 22-41.

Griffin, R. & O'Leary-Kelly, A. 2004. <u>The Dark Side of Organizational Behavior</u>. San Francisco: Jossey-Bass.

Grosser, T. J., Lopez-Kidwell, V., & Labianca, G. A social network analysis of positive and negative gossip in organizational life. <u>Group & Organization Management</u>, 35(2): 177-212.

Hill, S. E., DelPriore, D. J., & Vaughan, P. W. 2011. The cognitive consequences of envy: Attention, memory, and self-regulatory depletion. <u>Journal of Personality and Social Psychology</u>, 101(4): 653.

Hochschild, A. R. 1983. <u>The managed heart: Commercialization of human feeling.</u> Berkeley: University of California Press.

Judge, T. A. & Ferris, G. R. 1993. Social context of performance evaluation decisions. <u>Academy of management journal</u>, 36(1): 80-105.

Judge, T. A., Scott, B. A., & Ilies, R. 2006. Hostility, job attitudes, and workplace deviance: test of a multilevel model. <u>Journal of Applied Psychology</u>, 91(1): 126.

Kacmar, K. M., Zivnuska, S., & White, C. D. 2007. Control and exchange: The impact of work environment on the work effort of low relationship quality employees. <u>The Leadership Quarterly</u>, 18(1): 69-84.

Kang, M. 2003. The Managed Hand: The Commercialization of Bodies and Emotions in Korean Immigrant "Owned" Nail Salons. <u>Gender & Society</u>, 17(6): 820-839.

Kay, A. C., Wheeler, S. C., Bargh, J. A., & Ross, L. 2004. Material priming: The influence of mundane physical objects on situational construal and competitive behavioral choice. <u>Organizational Behavior and Human Decision Processes</u>, 95(1): 83-96.

Kilduff, G. J., Elfenbein, H. A., & Staw, B. M. The psychology of rivalry: A relationally dependent analysis of competition. <u>Academy of Management Journal</u>, 53(5): 943-969.

Kilduff, M. & Brass, D. 2010. Organizational Social Network Research: Core Ideas and Key Debates. <u>Academy of Management Annals</u>, 4: 317-357.

Kilduff, G., Galinsky, A., Gallo, E., & James Reade, J. 2012. <u>Whatever it takes: Rivalry and unethical behavior</u>. Paper presented at the Intl. Association for Conflict Management, IACM 25th Annual Conference, Spier, South-Africa.

Kulik, C. T. & Ambrose, M. L. 1992. Personal and situational determinants of referent choice. <u>Academy of Management review</u>, 17(2): 212-237.

Lam, C. K., Van der Vegt, G. S., Walter, F., & Huang, X. Harming high performers: A social comparison perspective on interpersonal harming in work teams. <u>Journal of Applied Psychology</u>, 96(3): 588.

Lawrence, B. S. 2006. Organizational reference groups: A missing perspective on social context. <u>Organization Science</u>, 17(1): 80-100.

Lazarus, R. S. & Cohen-Charash, Y. 2001. Discrete emotions in organizational life. In R. Payne & C. Cooper (Eds.), <u>Emotions at work: Theory, research and applications for management</u>: 45-81. New York: John Wiley & Sons.

Lee, K. & Allen, N. J. 2002. Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. <u>Journal of Applied Psychology</u>, 87(1): 131.

Lench, H. C., Flores, S. A., & Bench, S. W. 2011. Discrete emotions predict changes in

cognition, judgment, experience, behavior, and physiology: a meta-analysis of experimental emotion elicitations. <u>Psychological Bulletin</u>, 137(5): 834.

Lind, E. A., Kanfer, R., & Earley, P. C. 1990. Voice, control, and procedural justice: Instrumental and noninstrumental concerns in fairness judgments. <u>Journal of Personality and Social Psychology</u>, 59(5): 952.

Lively, K. J. 2007. Emotions in the Workplace. In J. E. Stets & J. H. Turner (Eds.), <u>Handbook of the Sociology of Emotions</u>: 569-585. New York: Springer.

Lockwood, P. & Kunda, Z. 1997. Superstars and me: Predicting the impact of role models on the self. <u>Journal of Personality and Social Psychology</u>, 73(1): 91.

Marsh, H. W. 1987. The big-fish-little-pond effect on academic self-concept. <u>Journal of Educational Psychology</u>, 79(3): 280.

Marsh, H. W. & Hau, K.-T. 2003. Big-Fish--Little-Pond effect on academic self-concept: A cross-cultural (26-country) test of the negative effects of academically selective schools. <u>American Psychologist</u>, 58(5): 364.

Melwani, S., Mueller, J. S., & Overbeck, J. R. 2012. Looking down: The influence of contempt and compassion on emergent leadership categorizations. <u>Journal of Applied Psychology</u>, 97(6): 1171.

Merton, R. K. & Rossi, A. S. 1968. Contributions to the Theory of Reference Group Behavior. In R. K. Merton (Ed.), <u>Social Theory and Social Structure</u>. New York: Free Press.

Michinov, N. 2005. Social comparison, perceived control, and occupational burnout. <u>Applied Psychology</u>, 54(1): 99-118.

Miles, J. A. 2012. <u>Management and Organization Theory</u>. San Francisco: Jossey- Bass.

Miner, J. 2007. <u>Organizational Behavior 4. From theory to practice</u>. New York: M.E. Sharpe.

Mitchell, T. R. 1997. Matching motivational strategies with organizational contexts. <u>Research in Organizational Behavior</u> 19: 57-150.

Molleman, E., Nauta, A., & Buunk, B. P. 2007. Social Comparison-Based Thoughts in Groups: Their Associations With Interpersonal Trust and Learning Outcomes. <u>Journal of Applied Social Psychology</u>, 37(6): 1163-1180.

Mussweiler, T. & Ruter, K. 2003. What friends are for! The use of routine standards in social comparison. <u>Journal of Personality and Social Psychology</u>, 85(3): 467.

Mussweiler, T., Ruter, K., & Epstude, K. 2004. The ups and downs of social comparison: mechanisms of assimilation and contrast. Journal of personality and social psychology, 87(6): 832.

Neighbors, C. & Raymond Knee, C. 2003. Self-determination and the consequences of social comparison. Journal of Research in Personality, 37(6): 529-546.

Pearson, C. M. & Porath, C. L. 2004. On incivility, its impact, and directions for future research. In R. Griffin & A. O'Leary-Kelly (Eds.), The dark side of organizational behavior: 403-425. San Francisco: John Wiley & Sons.

Pelham, B. W. & Wachsmuth, J. O. 1995. The waxing and waning of the social self: Assimilation and contrast in social comparison. Journal of Personality and Social Psychology, 69(5): 825.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5): 879.

Robinson, S. L. & O'Leary-Kelly, A. M. 1998. Monkey see, monkey do: The influence of work groups on the antisocial behavior of employees. Academy of Management Journal, 41(6): 658-672.

Rothbaum, F., Weisz, J. R., & Snyder, S. S. 1982. Changing the world and changing the self: A two-process model of perceived control. Journal of Personality and Social Psychology, 42(1): 5.

Rotundo, M. & Sackett, P. R. 2002. The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: a policy-capturing approach. Journal of Applied Psychology, 87(1): 66.

Sasovova, Z., Mehra, A., Borgatti, S. P., & Schippers, M. 2011. Network churn: The effects of self-monitoring personality on brokerage dynamics. Administrative Science Quarterly, 55(4): 639-670.

Scherer, K. R., Schorr, A., & Johnstone, T. (Eds.). 2001. Appraisal processes in emotion: Theory, methods, research. New York: Oxford University Press.

Scott, B. A., Colquitt, J. A., & Paddock, E. L. 2009. An actor-focused model of justice rule adherence and violation: the role of managerial motives and discretion. Journal of Applied Psychology, 94(3): 756.

Shah, P. P. 1998. Who are employees' social referents? Using a network perspective to determine referent others. Academy of Management Journal, 41(3): 249-268.

Skarlicki, D. P. & Folger, R. 1997. Retaliation in the workplace: The roles of distributive,

procedural, and interactional justice. <u>Journal of Applied Psychology</u>, 82(3): 434.

Smith, C. A. & Kirby, L. D. 2000. Consequences require antecedents: Toward a process model of emotion elicitation. In J. Forgas (Ed.), <u>Feeling and thinking: The role of affect in social cognition</u>. New York: Cambridge University Press.

Smith, R. H. 2000. Assimilative and contrastive emotional reactions to upward and downward social comparisons. In J. Suls & L. Wheeler (Eds.), <u>Handbook of social comparison: Theory and research</u>: 173-200. New York: Kluwer Academic/Plenum Publishers.

Smith, R. H. 2004. Envy and its transmutations. In L. Tiedens & C. Leach (Eds.), <u>The social life of emotions</u>: 43-63. Cambridge: Cambridge University Press.

Smith, R. H. & Kim, S. H. 2007. Comprehending envy. <u>Psychological bulletin</u>, 133(1): 46.

Smith, R. H. 2008. <u>Envy: Theory and Research</u>. New York: Oxford University Press.

Sobel, M. E. 1982. Asymptotic intervals for indirect effects in structural equations models. In Leinhart (Ed.), <u>Sociological Methodology</u>: 290-312. San Francisco: Jossey-Bass.

Stapel, D. A. & Koomen, W. 2005. Competition, cooperation, and the effects of others on me. <u>Journal of Personality and Social Psychology</u>, 88(6): 1029.

Sterling, C.M., Smith R. H. & van de Ven, N. 2013 <u>The Consequences of Benign and Malicious Envy in the Workplace</u>. Paper to be presented at the Academy of Management Meeting, Orlando, Florida.

Stein, M. 2000. "Winners" training and its troubles. <u>Personnel Review</u>, 29(4): 445-459.

Stets, J. E. & Turner, J. H. 2010. The Sociology of Emotions. In M. Lewis & J. Haviland-Jones & L. Feldman Barrett (Eds.), <u>Handbook of Emotions</u>, Vol. 3: 32-45. New York: The Guilford Press.

Suls, J. M. & Miller, R. L. 1977. <u>Social comparison processes: Theoretical and Empirical Perspectives</u>. Oxford: Hemisphere.

Suls, J., Martin, R., & Wheeler, L. 2002. Social comparison: Why, with whom, and with what effect? <u>Current Directions in Psychological Science</u>, 11(5): 159-163.

Tai, K., Narayanan, J., & McAllister, D. J. 2012. Envy as pain: Rethinking the nature of envy and its implications for employees and organizations. <u>Academy of Management Review</u>, 37(1): 107-129.

Takahashi, H., Kato, M., Matsuura, M., Mobbs, D., Suhara, T., & Okubo, Y. 2009. When your gain is my pain and your pain is my gain: neural correlates of envy and schadenfreude. Science, 323(5916): 937-939.

Taylor, S. E. & Lobel, M. 1989. Social comparison activity under threat: downward evaluation and upward contacts. Psychological Review, 96(4): 569.

Tesser, A. & Collins, J. E. 1988. Emotion in social reflection and comparison situations: intuitive, systematic, and exploratory approaches. Journal of Personality and Social Psychology, 55(5): 695.

Tesser, A., Millar, M., & Moore, J. 1988. Some affective consequences of social comparison and reflection processes: the pain and pleasure of being close. Journal of Personality and Social Psychology, 54(1): 49.

Tesser, A. 1991. Emotion in social comparison and reflection processes. In J. Suls & T. A. Wills (Eds.), Social comparison: Contemporary Theory and Research: 115-145. Hillsdale, NJ: Lawrence Erlbaum Associates.

Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. 2003. The impact of psychological contract fulfillment on the performance of in-role and organizational citizenship behaviors. Journal of Management, 29(2): 187-206.

Van de Ven, N., Zeelenberg, M., & Pieters, R. 2009. Leveling up and down: the experiences of benign and malicious envy. Emotion, 9(3): 419.

Van de Ven, N., Zeelenberg, M., & Pieters, R. 2011. Why envy outperforms admiration. Personality and Social Psychology Bulletin, 37(6): 784-795.

Vecchio, R. P. 2000. Negative emotion in the workplace: Employee jealousy and envy. International Journal of Stress Management, 7(3): 161-179.

Vecchio, R. P. 2007. Cinderella and Salieri in the Workplace: The Envied and the Envier., Managing Social and Ethical Issues in Organizations 109-135: Information Age Publishing.

Verduyn, P., Van Mechelen, I., & Tuerlinckx, F. The relation between event processing and the duration of emotional experience. Emotion, 11(1): 20.

Weiss, H. M. & Cropanzano, R. 1996. Affective Events Theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), Research in organizational behavior: An annual series of analytical essays and critical reviews.Vol. 18: 1-74. New York: Elsevier Science/JAI Press.

Wert, S. R. & Salovey, P. 2004. A social comparison account of gossip. <u>Review of General Psychology</u>, 8(2): 122.

Wheeler, L. & Miyake, K. 1992. Social comparison in everyday life. <u>Journal of Personality and Social Psychology</u>, 62(5): 760.

Wheeler, L., Martin, R., & Suls, J. 1997. The proxy model of social comparison for self-assessment of ability. <u>Personality and Social Psychology Review</u>, 1(1): 54-61.

Williams, L. J. & Anderson, S. E. 1991. Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. <u>Journal of Management</u>, 17(3): 601-617.

Wills, T. A. 1981. Downward comparison principles in social psychology. <u>Psychological Bulletin</u>, 90(2): 245.

Wood, J. V. 1989. Theory and research concerning social comparisons of personal attributes. <u>Psychological Bulletin</u>, 106(2): 231.

Wright, P. M., Kacmar, K. M., McMahan, G. C., & Deleeuw, K. 1995. P= f (MXA): Cognitive ability as a moderator of the relationship between personality and job performance. <u>Journal of Management</u>, 21(6): 1129-1139.

Zell, E. & Alicke, M. D. 2009. Contextual neglect, self-evaluation, and the frog-pond effect. <u>Journal of personality and social psychology</u>, 97(3): 467.

Zell, E. & Alicke, M. D. 2010. The local dominance effect in self-evaluation: Evidence and explanations. <u>Personality and Social Psychology Review</u>, 14(4): 368-384.

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                               competition theory. *The Academy of Management Best
                               Paper Proceedings.*

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                               2010. Social Networks, Groups, and Social Exclusion:
                               Combining Sociometric and Psychometric Approaches to
                               Understanding Social Exclusion in Organizational Settings.
                               In L. Neider and C. Schriesheim (Eds.) *Research in
                               Management: The Dark Side of Management:* 143-191.

Greenwhich, CT: Information Age Publishing.

Sterling, C., Kidwell, V., & Labianca, J. 2009. Task Transition and Pacing: The Role of Temporal Atypicality, Task Complexity, and Individual Time Orientation. *The Academy of Management Best Paper Proceedings.*