

THE ANTICIPATION OF 360 DEGREE FEEDBACK: CONSEQUENCES FOR
CONFORMITY

A Thesis

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by

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ABSTRACT

Multi-source feedback goes beyond the traditional performance appraisal process by reporting information from multiple organizational constituencies (e.g., downward from supervisors, upward from subordinates, and lateral from peers). The present study examined the effects of anticipated multi-source feedback on subsequent task performance in a team-based context. Critical to the first stage of the performance management cycle are the consequences that anticipated feedback may have on an individual's propensity to conform to majority influence (or group pressure).

Adopting an approach that involves anticipated feedback by team culture interaction, the conditions under which such feedback is likely to increase or decrease conformity pressure were tested. Using a 2 x 4 experimental design, it was hypothesized that (a) the anticipation of 360 degree feedback (versus supervisor, subordinate, and no feedback) would generate greater conformity pressure to the majority response of the group; (b) individualistic team culture would reduce the level of conformity, whereas collectivistic team culture would increase conformity; and (c) personal concern for being liked by fellow team members would mediate this effect. These hypotheses were tested on 158 undergraduate students who were asked to judge whether pairs of 3-dimensional objects are the "same" or "different" after mental rotation, while working independently in the middle manager position of a vertical team hierarchy. Using a variant of the Solomon Asch-conformity situation, the measure of conformity was the number of times each participant conformed to the incorrect majority response. No significant differences emerged for the hypotheses. The results are discussed in terms of their implications for anticipated multi-source feedback to influence individual performance. Recommendations for future research are provided.

Keywords: 360 degree feedback, conformity, individualism-collectivism, likability

BIOGRAPHICAL SKETCH

Ozias A. Moore, Jr. was born in Philadelphia, Pennsylvania. He earned a BS in Finance from the University of Pittsburgh in 1993 and an MSE in Technology Management from the University of Pennsylvania in 2004. While at the University of Pennsylvania, he was awarded the Alfred Fitler Moore Fellow in Management of Technology. His previous work experience is inclusive of key positions at Westinghouse Electric Corporation, IBM Corporation, American Express, and most recently as a Director at Pfizer, Inc. He also worked as a research assistant at the University of Pennsylvania for Drs. Kaminstein and Zane. While there, he developed a great interest in the psychological processes and constraints on the quality of decision-making, creativity, and team effectiveness. In August 2010, Moore matriculated into the MS/PhD program in Human Resources Studies with a dual minor in Organizational Behavior and Social Statistics at the Industrial and Labor Relations School of Cornell University under the supervision of Dr. Bradford Bell. Moore conducts research on individual and group performance, particularly decision-making in task-oriented teams, intergroup dynamics, creativity, and the quality of learning outcomes. He is a member of the Academy of Management, Society for Industrial and Organizational Psychology, and The PhD Project Management Doctoral Students Association.

I dedicate this thesis to my parents, along with other dear relatives, and friends
for their prayers, encouragement, and unconditional support.

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INTRODUCTION AND LITERATURE REVIEW

Providing feedback in the workplace is critical for employee training and development (Atwater, Roush, & Fischthal, 1995; Reilly, Smither, & Vasilopoulos, 1996). Feedback is a central element in the process of leadership development (Lepsinger & Lucia, 1998; London & Mone, 1999). One kind of feedback is the formal performance appraisal. Traditionally, feedback has been delivered only from supervisors to their subordinates. However, the ongoing utilization of work teams requires organizations to develop performance appraisal practices that are useful for evaluating both individual and group performance, especially in a self-managing team context (Murphy & Cleveland, 1991). Factors that have contributed to the shift from traditional performance appraisal systems to organizational assessment of a manager's effectiveness include the many roles that are relevant to a manager's job (Mintzberg, 1973), the presence of multiple constituencies in the middle manager's social structure (Morse & Wagner, 1978; Tsui, 1984a), and frequent reliance of organizations on the subjective judgments of its members when assessing managerial performance (Ashford & Tsui, 1991; Mills, 1983). In particular, because team members work in close proximity, they are able to observe each other's tasks and interpersonal behaviors, which can possibly make them the single best informed source for performance evaluations (Murphy & Cleveland, 1991). Given such factors in recent years, an alternative approach, known as 360 degree feedback, has generated considerable attention among both HR practitioners and scholars (London & Smither, 1995).

360 degree feedback is provided to focal employees from their supervisors as well as from peers and subordinates (Waldman, Atwater, & Antonioni, 1998). This feedback can also include the self, internal customers, external customers, and vendors/suppliers (Dalessio, 1998). The logic behind this approach is that employees

will benefit from the input of different constituencies (Campbell, McCoy, Oppler, & Sager, 1993) to guide their development and inform performance evaluations. Still, the effects of 360 degree feedback are controversial; some research suggests such feedback improves employee performance provided it is implemented in the right way (Atwater, Roush & Fischtal, 1995; Locke & Latham, 1990; Reilly, Smither, & Vasilopoulos, 1996) while a meta-analysis suggests that the magnitude of improvement over time is generally very small (Smither, London, & Reilly, 2005), or even has a negative effect on employee and organizational outcomes (Kluger & DeNisi, 1996).

Traditional top-down appraisal has been studied extensively because of its effects on individual task performers, implications relating to fair employment practices, and concerns regarding employee productivity in organizations (Pearce & Porter, 1986). Thus, there has been no shortage of research on traditional performance appraisal; many reviews of that work are available (e.g., Arvey & Murphy, 1998). Additionally, current research has investigated the consequences of feedback for subsequent performance. Many of these studies have been devoted to issues around the use of ratings in appraisal, and how to make them more objective and accurate in reflecting performance (Fletcher, 2001). Still, the amount of empirical evidence on the impact of feedback from multiple sources such as superiors, peers, and subordinates has received limited attention. Although scholars have shown that different sources provide different amounts of feedback (Greller & Herold, 1975; Hanser & Muchinsky, 1978; Herold & Parsons, 1985), very few researchers have directly examined the influence of feedback from different sources. London and Smither (1995) concluded that perhaps the most salient research question is whether or not multi-source feedback affects goal setting, skill development, behavior change, and performance management. Given the dearth of empirical data, it is possible that

employees are being negatively impacted by 360 degree feedback. Therefore, it is critical to examine the effectiveness of 360 degree feedback to better understand how well it works. Additionally, this study follows the call for future research to focus on examining “under what conditions 360 degree feedback work[s]” (Rynes, Gerhart, & Parks, 2005; Smither et al., 2005). For example, 360 degree feedback is sometimes experienced as a stressful event (Smither, London, & Richmond, 2005). The requirement to understand the feedback of the subjective judgments of others may also increase the complexity when evaluating an individual’s work. Some employees may have a greater tendency to perceive 360 degree feedback as threatening and anxiety provoking, making them less open to such feedback and more defensive.

Research on 360 degree feedback has focused on reactions to feedback after it is delivered and not the anticipation of feedback before it has been received, which is a critical gap because the anticipation of feedback sets the foundation for how individuals are likely to react. Theoretical work on antecedents of affect (Higgins, 1987; Lazarus, 1991), and on individuals reactions to feedback (Taylor, Fisher, & Ilgen, 1984) suggest that the anticipation of 360 degree feedback may influence how or whether individuals change their behavior in response to this feedback. The first contribution of this study is to demonstrate under what conditions the anticipation of feedback can impact important outcomes such as problem solving and decision making accuracy; outcomes that have not yet been investigated in existing research. Moreover, in this research, I will attempt to examine the cognitive processes of conformity or nonconformity as a result of anticipating feedback from the entire team. In other words, aside from the effects of feedback itself, it is also important to consider how individuals might respond to the looming prospect of receiving feedback and how the mere anticipation of feedback will shape their subsequent performance. The concern with the anticipation of feedback provides a more conservative approach for

examining recipient reactions to feedback. The negative consequences of 360 degree feedback may be much more pervasive than is currently assumed and may begin before feedback is even delivered. The second contribution of this study is testing boundary conditions, dimensions of team culture, which might either exacerbate or mitigate negative effects. It is predicted that the team's culture norm (individualism versus collectivism) will moderate the relationship between anticipated feedback and likability as well as likability and the propensity to conform. Third, this study will identify at least one individual priority variable, *concern for being liked*, which is predicted to mitigate the relationship between anticipated feedback and conformity. Overall, it is important that HR professionals ensure that the anticipation stage of the 360 degree feedback process is properly managed to mitigate the potentially negative effects on problem solving and the quality of group decision making. This study has important implications for organizational leaders who must learn how to manage the tension among issues relating to the usage of multi-source feedback.

This paper proceeds as follows. First, the basic elements of the performance appraisal and 360 degree feedback are outlined. Second, 360 degree feedback and team performance are discussed with particular focus on goal setting and control theory. Third, an overview of social influence and the psychological process of conformity pressure are described. Next, the stages of the performance management cycle are outlined with a focus on the anticipation of feedback stage. Fifth, I consider how relevant the priority or concern for being liked affects the anticipation of feedback and subsequent conformity pressure. Finally, I describe the basic elements of individualism and collectivism by discussing how people in these contrasting cultures view 360 degree feedback.

360 Degree Feedback: Overview

At its most basic level, feedback is information received by individuals about their past behavior (Annett, 1969). Feedback provides some information about the correctness, accuracy, or adequacy of the response (Bourne, 1966). Employees typically receive feedback in many ways and from many sources. They may receive it directly (Ilgen, Fisher, & Taylor, 1979), solicit it (Ashford & Cummings, 1983), or infer it from a variety of informal cues (Ashford & Cummings, 1983; Herold & Parsons, 1985). Feedback may also come from a variety of sources including superiors, peers, and subordinates (Herold & Parsons, 1985). A variant of multi-source or multi-rater feedback, referred to as 360 degree feedback, solicits views / ratings from several key constituencies representing the full circle of relevant viewpoints—subordinates, peers, supervisors (possibly including higher-level supervisors along with the direct supervisor). These ratings may also include customers and suppliers who may be internal or external to the organization, and self-ratings (Dunnette, 1993; Tornow, 1993). These different constituencies are believed to be a source of rich and useful information. For example, a subordinate's perspective is likely to be distinctly different from that of a supervisor or peer. It is reported that nearly all Fortune 500 companies are now using 360 degree feedback for development or appraisal (London & Smither, 1995).

In essence, 360 degree feedback creates a mirror that measures colleague perceptions of performance. The sources of 360 degree feedback are typically defined by an organization's hierarchically differentiated role structure. This hierarchy consists of job titles, reporting structures, rank ordering, and organization charts (Mintzberg, 1979). The rank ordering indicates that at least one individual or group must be subordinate to at least one other individual or group (Blau & Scott, 1962). This hierarchy also serves to establish order, facilitate coordination, and motivate

individuals (Magee & Galinsky, 2008; Tannenbaum, 1974). The nature of 360 degree feedback is purposed to align with the objectives, roles, and responsibilities commensurate with the rater and feedback recipient.

The research on the individual differences and responses to 360 degree feedback and performance appraisal suggest that individuals will differ in their reactions and response to feedback (DeCotiis & Petit, 1978; McCall & DeVries, 1977; McGregor, 1957; Meyer, Kay, & French, 1965). The understanding of 360 degree feedback (London & Smither, 1995) should be grounded in the extensive literature on feedback interventions (e.g., Ilgen et al., 1979; Kluger & DeNisi, 1996), goal setting (Locke & Latham, 1990) and performance appraisal (Cardy & Dobbins, 1994; Latham & Wexley, 1981; Mohrman, Resnick-West, & Lawler, 1989). This literature offers considerable guidance to researchers and practitioners concerning the use of 360 degree feedback.

Unlike traditional supervisory feedback, 360 degree feedback recognizes the value of input from different sources (Becker & Klimoski, 1989). The literature on performance appraisal highlights those areas in which performance appraisal and 360 degree feedback are similar and different. From a content perspective, they both tend to focus on achievement against goals or objectives and on assessment of competencies. For the most part, 360 degree feedback has been designed as a developmental rather than evaluative process. Conversely, performance appraisal is often linked to evaluative purposes and has consequences for distribution of rewards, merit increase, promotions, and layoff decisions. Additionally, performance appraisal often solely relies upon a supervisor evaluation, whereas 360 degree feedback as previously stated relies on multiple, often anonymous (e.g., feedback that comes from unidentified raters) sources (Atwater, Brett, & Charles, 2007).

360 degree feedback generated anonymously is by far the most prominent form in use today, probably because it is perceived, accurately or not, as more efficient to administer and less risky to both recipients and organizations. Research shows that anonymous feedback may prevent some of the rating distortion that occurs with performance appraisal (Kozlowski, Chao, & Morrison, 1998). Antonioni (1994) found that ratings from subordinates of superiors were less inflated in an anonymous condition than in an accountability or open condition, even if they were told that the feedback was solely for employee development. In addition, the results indicated that subordinates were more comfortable providing anonymous ratings. Similarly, London and Wohlers (1991) asked subordinates if they would have rated their supervisors differently had the feedback not been anonymous: 28% said they would have done so. Research suggests that in the absence of strong, psychologically safe face-to-face relationships, anonymity generates better quality data for recipients; thus, evidence is provided for the pervasive use of anonymous 360 degree feedback.

360 degree feedback proponents advocate a number of benefits at the individual and organizational level (Lepsinger & Lucia, 2009). Much of this advocacy is associated with the improved validity of multi-rater over single-rater assessments (Harris & Schaubroeck, 1988; Nilsen & Campbell, 1993). Numerous researchers have reported improved leadership and increased leadership self-awareness following 360 degree feedback or upward feedback interventions (e.g., Atwater et al., 1995; Reilly et al., 1996). For many employees, 360-degree feedback represents the first time they have had opportunities to see themselves as they are perceived by others. For example, it is expected that 360 degree feedback recipients become more self-aware through participation in such feedback, particularly as they compare their perceptions of their performance with the perceptions of others. In the best cases, recipients use this knowledge for self-development and leadership development by making changes

in their leadership behaviors, as stipulated by their raters, or working to help raters see more clearly how and what the recipients do as a constructive contribution.

Theoretically, increased self-awareness at the individual level should improve the performance of an organization as a whole, which supposedly benefits the organization as employees become more effective (Church, Waclawski, & Burke, 2001). For example, organizations use 360 degree feedback as a means for team building, talent management, succession planning, and personnel selection. Ideally, the combination of these activities leads to organizational learning if routine patterns of behavior are clarified or challenged and then adjusted. For this reason, 360 degree feedback is seen as a tool of strategic change (Lepsinger & Lucia, 2009), and thus, 360 degree feedback is frequently used as part of organizational development designs that are intended to enhance organizational performance, build stronger management teams, or integrate merging organizational cultures (Lepsinger & Lucia, 2009).

360 degree feedback also has many critics. Positive performance/behavior change and increased self-awareness are not the only outcomes that may result from 360 degree feedback. Some have called into question the entire process (Culbert, 2010). For example, Atwater, Waldman, Atwater and Cartier (2000) found that improvement following an upward feedback intervention only resulted for 50% of the supervisors who received it. In line with these critiques, several potential pitfalls overshadow the practice of 360 degree feedback, including the arousal of defensiveness, different power dynamics, and structural relationships related to the feedback process, and questions about the validity of results.

The benefits of 360 degree feedback are at risk when defensiveness induces a focus on self-preservation (Lipshitz, Popper, & Friedman, 2002) and when feedback is seen as threatening, such that it leads to threat rigidity (Staw, Sandilands, & Dutton, 1981). For example, 360 degree feedback is positively related to having a

performance orientation (Dweck, 1986). For those with a performance orientation, these individuals typically compare their performance to that of others and tend to focus on doing better than others (e.g., on the test or on the job). They tend to see failure as indicating lack of ability, and therefore view performance feedback as threatening. If these reactions emanate, the recipient is more than likely simply to ignore any potentially helpful information. The dysfunction of defensiveness can lead to reduction in learning at both the individual and organizational level. Argyris (2002) found when multiple people perpetuate defensiveness, they produce organizational “defensive routines” in which organization-level actions, policies, and practices are impacted. The process has been known to generate tension between the manager and those who provide ratings (Hautalumoa, Dickinson, & Inada, 1992).

The actual amount of empirical evidence on the impact of 360 degree feedback is disappointingly small considering the extent of its use (Mabey, 2001). Multiple researchers recommended examining the consequences of 360 degree feedback on performance measures, career development activity, and attitudes toward management (Fletcher & Baldry, 1999; Mabey, 2001). For example, Brett and Atwater (2001) called for research on the effects of 360 degree feedback in terms of reactions to feedback. They asserted that a better understanding of how managers perceive and react to feedback is needed if 360 degree feedback is to have the expected value to individuals and organizations. The purpose of this study is to examine the factors that influence individual anticipated reactions to 360 degree feedback and subsequent task accuracy. The interplay of various idiosyncratic factors may vary among the different sources of 360 degree feedback. For example, the power-dependence relationship between managers and their superiors, subordinates, and peers may be inconsistent among different sources (Eder & Fedor, 1989). Managers rely on their peers and subordinates to varying levels; however, all managers are highly dependent on their

superiors for resources (e.g., budget) and rewards (e.g., salary and promotions). Thus, managers have been traditionally accustomed to anticipating and seeking feedback from their superiors. This familiarity with their superiors as opposed to peers and subordinates may contribute to differences in how feedback is anticipated. Research supports this notion; it has also shown that the variety of feedback sources also increases individual fear and concern for greater impression management (Ashford & Tsui, 1991). The presence of such fear and impression management concerns may also influence feedback reactions.

360 Degree Feedback in Team Contexts

Feedback plays a pivotal role in individual behavior and performance improvement. In contrast to the well-known effects of individual-level feedback (Ammons, 1956; Guzzo, Jette, & Katzell, 1985; Ilgen et al., 1979; Kluger & DeNisi, 1996), the effects of feedback on team processes and performance are not nearly as well understood (Hinsz, Tindale, & Vollrath, 1997; Nadler, 1979; Pritchard, Jones, Roth, Stuebing, & Ekeberg, 1988). The use of teams and the notion of teamwork have increasingly become the norm within many organizations in response to competitive challenges and organizational needs for flexibility and adaptation. Moreover, various researchers have recognized that teams play a fundamental role in organizational success in a global, changeable, and client-oriented economy (Mathieu & Schulze, 2006) and research on task-oriented groups and teams is prevalent (Bettenhausen, 1991; Cohen & Bailey, 1997; Guzzo & Dickson, 1996; Guzzo & Shea, 1992; Ilgen, 1999; Levine & Moreland, 1990; Sundstrom, DeMeuse, & Futrell, 1990). A key determinant of the performance of team members is the quality of their processes for working together (Kernaghan & Cooke, 1986), which includes the shared perceptions and attitudes of the views of team members what constitutes appropriate team behavior and performance (Kernaghan & Cooke, 1990). Consequently, traditional

performance appraisal systems may not fully regulate these workers. Thus, an assessment of managerial effectiveness often relies, at least in part, on the subjective feedback or judgments of others (Herold & Parsons, 1985; Mills, 1983). As a result, organization reliance on 360 degree feedback programs to fulfill the expanded use of individuals working within teams has advanced.

A typical team performs multiple tasks, tends to make decisions by consensus, has a formal leader, and operates hierarchically as a task group. Teams usually promote comparative rather than absolute performance judgments of peers (Ilgen & Feldman, 1983). As a result, the performance of all group members affects evaluations of each group member (Grey & Kipnis, 1976; Liden & Mitchell, 1988). Given the complexities and ambiguity associated with teamwork (Katz & Kahn, 1978; Lombardo & McCall, 1982), it is argued that feedback from multiple sources, such as peers and subordinates, may play an important role in an individual's ability to be an effective manager (Ashford & Tsui, 1991). One aspect of this complexity is the presence of multiple constituencies or stakeholders in the team's social structure (Morse & Wagner, 1978; Salancik, Calder, Rowland, Leblebici, & Conway, 1975; Tsui, 1984a). For example, Conway (1999) found that peers typically paid more attention to interpersonal facilitation in making overall performance ratings, whereas supervisors paid more attention to task performance. Consideration needs to be given to the implications of these divergent stakeholder perspectives. Furthermore, this relationship between individual and team goals suggests that goals function similarly at both the individual and team level (DeShon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004). Specifically, research has shown that team-level goals serve the same function in the team-regulatory process as do individual-level goals in the self-regulatory process. This argument supports the notion that 360 degree feedback is able to influence both individual and team goals.

Feedback has long been known to increase performance by both motivating individuals and directing them to correct performance strategies (Ammons, 1956; Vroom, 1964). Others researchers argue a considerable body of evidence suggesting that feedback does not improve performance (Balcazar, Hopkins, & Suarez, 1985; Kluger & DeNisi, 1986). However, despite this evidence, many scholars and practitioners seemingly contend the effectiveness of feedback for improving performance. Given the importance of positive group outcomes, researchers and HR professionals have developed a number of process interventions to help establish and reinforce positive team behaviors and performance (Burke & Day, 1986; Woodman & Sherwood, 1980). The three main process interventions are (a) diagnosis and feedback, (b) process consultation, and (c) task redesign (Hackman & Morris, 1975). In line with Kluger and DeNisi's (1996) feedback intervention theory, learning models typically incorporate a feedback loop so people can also learn as they receive performance feedback (DeNisi & Kluger, 2000; McGill, Slocum, & Lei, 1992; Senge, 1994). Mechanisms that assist team members in such assessment and feedback can be crucial from both an evaluative and developmental perspective (Murphy & Cleveland, 1991; Saavedra & Kwun, 1993). Ideally, 360 degree feedback from other team members should be an important developmental tool fostering positive team behaviors and performance.

360 Degree Feedback and Goal Setting

Locke and Latham (1990) have shown that feedback and goal setting both play critical roles in performance development and change. Goal-setting theory (Locke, Cartledge, & Koeppel, 1968; Locke and Latham, 1990) and control theory (Carver & Scheier, 1982, 1990; Lord & Hanges, 1987; Nelson, 1993) are typically used to examine the conditions under which 360 degree feedback may favorably influence skill development and performance outcomes. These theories provide insights for

how feedback is used to improve performance (Kluger & DeNisi, 1996) and outline self-regulatory loops in which feedback becomes the basis for evaluation and subsequent adjustment. They also share several key activities, namely: self-monitoring of behavior, followed by self-evaluation of behavior by comparison to a standard, and then self-reaction in the form of satisfaction or dissatisfaction, which in turn leads to further adjustment of behavior or the modification of performance (Kanfer, 1990).

More specifically, control theory suggests that feedback is the basis for identifying goal-feedback discrepancies, which in turn directs individual attention towards change and improvement. The larger the discrepancy is between individual goals and behavior, the stronger the subsequent response. From this perspective, two important steps must occur following the receipt of feedback. First, individuals must focus attention on their behavior or performance so they can obtain input for comparison purposes. Second, they must self-regulate their behavior based upon whether or not they perceive a discrepancy between their observed behavior or performance and their standard/goal. These steps can also be envisioned to occur prior to the receipt of feedback. There must be an awareness of individual behavior or performance in comparison to a reference group as well as a perception of difference between the current state and the ultimate performance goal of an individual. In short, control theory emphasizes the combined role of goals and feedback in the regulation of individual behavior. 360 degree feedback affords individuals with the opportunity for both of these steps to occur. Goal-setting theory predicts similar outcomes, however, from this perspective: people are not motivated by the need to reduce the discrepancy but rather by the desire to achieve the goal (Kluger & DeNisi, 1996). From such a perspective, an individual may either work to achieve the desired goal, change the goal, reject the feedback, or abandon commitment to the goal. As in the

case with control theory, receipt of feedback becomes valuable because it is the means by which people know whether or not their performance is above or below standard.

For both of these perspectives, the anticipation of 360 degree feedback will reveal differences in the work performance of individuals and that of their group members. Attention is directed toward individual behavior at both the time people complete the feedback instrument and also at the time they anticipate the feedback. Kluger and DeNisi's (1996) feedback intervention theory shows that feedback focusing on the self (e.g., causing individuals to question their self-confidence) is likely to undermine performance. The anticipation of feedback sets the expectation that individuals will soon have the opportunity to identify gaps between how they perceive their performance and how other constituents perceive it. Thus, anticipated feedback or feedback in general may not lead to the intended skill development and performance improvement. As stated earlier, research has shown that performance improvement is not the only result that can be expected from feedback interventions. Kluger and DeNisi (1996) have found that the average performance difference (expressed in standard deviation units) among groups receiving a feedback intervention and control (no feedback) groups was .41, thereby indicating that, on average, feedback was associated with enhanced performance. However, about one-third of the effects were negative (i.e., feedback detracted from performance). Kluger and DeNisi (1996) also noted that reactions of individuals to feedback can result in changing their behavior, changing their (e.g., lowering) goals, rejecting the feedback, or escaping the situation (e.g., avoiding the tasks or people that provided the feedback). It is clear that feedback plays a valuable role in the self-regulation mechanisms associated with control and goal-setting theories. I predicted a change in individual performance simply from the anticipation of feedback. Given the previously discussed findings regarding the effectiveness of 360 degree feedback

(Reilly et al., 1996; Smither, Wohlers, & London, 1995), an important question for empirical investigation is whether or not these self-regulating mechanisms for performance improvement can be activated without actually receiving the feedback.

Conformity: Overview

Research on the conformity process has been examined extensively in the social influence literature (Aronson, 2003; Cialdini & Goldstein, 2004; Cialdini, Reno, & Kallgren, 1990; Deutsch & Gerard, 1955; Nemeth & Goncalo, 2005), which suggests that social influence pressure can come from different sources in one's environment and suggest how one should think or behave. The conformity process is the movement of an individual or a minority of individuals toward the position advocated by the majority. The threat of social sanctions in expressing public dissent can effectively enforce conformity pressures; even when individuals feel that the positions of others are incorrect, they often agree in order to avoid feeling ostracized (Dittes & Kelley, 1956). The vast majority of the research on conformity (see Allen, 1965; Darley & Darley, 1976; Kiesler & Kiesler, 1969 for reviews) has focused on the reasons for conformity versus independence – when do individuals conform to the majority view or resist it? A great deal of this interest stems from the iconic work of Solomon Asch (1951, 1956) who demonstrated that individuals will abdicate the information from their own senses in favor of the position espoused by a majority of individuals. More recently, researchers have focused on the minority view which may also actively promote their position and influence the majority and the bi-directionality of influence between majority and minority (Moscovici, et al., 1969; Moscovici & Faucheux, 1972; Moscovici & Nemeth, 1974; Nemeth, 1980).

Majority influence has been conceptualized to be based upon dependency's theoretical claims. The minority is both dependent upon the majority for information about reality and approval (Nemeth & Wachtler, 1983). The two forms of dependency

are termed informational and normative influence (Deutsch & Gerard, 1955). Informational influence occurs when majority influence causes individuals to be dependent upon the majority for information about reality. The normative influence occurs when they become dependent upon the majority for approval. For both informational and normative influence, a majority relates to a larger number of people providing their approval or disapproval. In a majority influence setting, individuals are placed into conflict with a majority who unanimously disagrees with them. In such a situation, they tend to assume that the majority must be right and they, the minority participants, must be wrong (Asch, 1951). On the other hand, minority influence is theorized as stemming from an appropriate behavioral style. Specifically, a behavioral style that conveys consistency and confidence has been emphasized (Moscovici & Faucheux, 1972; Nemeth, Swedlund, & Kanki, 1974; Nemeth & Wachtler, 1974). Such confidence with a position is held and thus causes a consideration of the possible correctness of that position. Studies have shown (e.g., Allen, 1965; Asch, 1951) that majorities tend to exert more public influence than minorities. In contrast, the influence by a minority at the public level tends to be accompanied by private change (Moscovici & Lage, 1976; Moscovici, Lage, & Naffrechoux, 1969; Nemeth & Wachtler, 1974).

360 Degree Feedback and Conformity

The anticipation of 360 degree feedback, compared to traditional (supervisor) feedback, may generate greater conformity pressure on subsequent tasks. Because 360 degree feedback relies on input from everyone on the team, it might trigger an interdependent “we” oriented self-construal that has been shown to increase the tendency to conform, reduce the willingness to remain independent from the group, and strengthen concerns with fitting in and being liked by fellow group members (Oyserman & Lee, 2008). In other words, 360 degree feedback sends the signal that

pleasing the entire team is critical for success, thus creating pressure to conform to their point of view. Although traditional feedback might increase the tendency for individuals to conform to their supervisors, this form of feedback gives employees wider latitude to deviate from the rest of the group. The influence by opinions of others can be perceived as “threat of social sanctions,” which can increase the level of conformity pressure even when individuals feel that the positions of others are incorrect; employees may agree to avoid feeling ostracized (Asch, 1955; Dittes & Kelley, 1996). As noted earlier, the 360 degree feedback process may be characterized by an acute self-awareness in which people attend consciously to the aspects of their performance that others can observe, such as their work behavior (Buss, 1980).

The 360 degree feedback process may also drive a conformity pressure that often produces a strong feeling of internal conflict. People are concerned with how others perceive and evaluate them. Because of this concern, people sometimes try to monitor the reactions of others to promote individual attainment of desired goals. When under the intense scrutiny of others, people find it difficult not to think about what others are thinking and search for cues regarding others’ thoughts. They also attend selectively to information that is relevant to creating the right desired outcome (Leary & Kowalski, 1990). If the anticipation of 360 degree feedback increases conformity pressure, then the consequences may be considerable for group processes and performance. First, 360 degree feedback might constrain the free expression of independent ideas if the pressure to conform causes people to withhold their most novel ideas from a group discussion out of a fear of rejection (Goncalo & Krause, 2010; Goncalo & Staw, 2006). Second, 360 degree feedback might lower the quality of group decision-making if people are reluctant to share critical information. Particularly, the withholding of such information is likely to occur in cases when

information is distributed so that each member of the team has a unique set of information. This information must be shared in order to reach an accurate decision (Stasser & Titus, 1987). Conformity pressure causes people to withhold unique information because it may conflict with the group's preferred course of action (Goncalo & Duguid, 2008).

In my study, I sought to investigate how the sources of anticipated feedback can affect conformity—specifically, whether the priming of anticipated feedback type can lead people to be more inclined to follow or resist the influence of others. I assumed that there is greater conformity created by a disagreeing majority than there is for a disagreeing minority. In the present study, I endeavored to investigate the possibility that anticipated feedback is enhanced or inhibited as a function of exposure to minority or majority views. Those exposed to the majority perspective would show a tendency to follow that position exactly (Nemeth, 1976; Nemeth & Wachtler, 1983). When individuals are faced with a majority who disagrees with them, they are immediately concerned about the correctness of their own position and the likelihood of disapproval from the majority (Asch, 1951). This exposure restricts their range of influence and renders consideration of divergent or self-determined answers less likely. Part of the mechanism presumed to underlie such differences is the notion that participants exposed to opposing majority views feel under much more pressure and stress (Nemeth & Wachtler, 1983). Such pressure and stress may increase the likelihood of conventional responses (Zajonc & Sales, 1966) and narrow the range of consideration to that urged by the majority. This pressure will typically result in a person presuming that the majority may be correct, even if they are not convinced that they are accurate. For the sake of approval, they are motivated to show public agreement. In contrast, when a minority is in disagreement, members of the majority

assume the minority is relatively incompetent or inaccurate (Moscovici & Lage, 1976; Nemeth et al., 1974; Nemeth & Wachtler, 1974).

I predicted that in the case of 360 degree feedback, much more stress created by a disagreeing majority is present than for a disagreeing minority. In this situation, when individuals are faced with a majority who disagrees with them, they are concerned about the correctness of their position and the likelihood of disapproval from the majority. These individuals are now left with the major decision to either move to the majority position or remain independent and the decision may come from their assessment of who is correct, the majority or themselves. However, it is more than likely that agreement with the majority will come from the desire of these individuals to avoid disapproval regardless of the perceived correctness of the majority position. In Asch's study (1951), participants followed this line of reasoning and made such a decision. The employee has to make a decision to agree with the majority or remain independent.

This minority influence to make a decision between two alternatives generates a much lower degree of conformity pressure than in the majority influence in which the pressure is considerably higher (Nemeth & Wachtler, 1983). The intensity of the consequences for anticipated feedback is heightened for those receiving 360 degree feedback. Those individuals exposed to a minority view (not 360 degree feedback) will experience less conformity pressure than those exposed to the 360 degree feedback. This conformity pressure is anticipated to limit the expression of independent viewpoints and compromise task accuracy. The multiple sources of 360 degree feedback will lead to decisions similar to that of the group. In non-360 degree feedback conditions, the conformity pressure is expected to be considerably less; thus, the likelihood to consider and maintain independent task accuracy or an individual minority viewpoint is increased.

In understanding conformity pressure and the role of 360 degree feedback in individual and team performance, it is recognized that working in the context of a team requires the regulation of individual behavior with respect to multiple team or group goals (Deshon et al., 2004) and cognitive propensity to process feedback (London & Smither, 2002). A number of factors may influence the delivery and processing of 360 degree feedback. The value and impact of the feedback starts prior to its actual delivery. More specifically, the effect of feedback self-awareness and cognitive processing in terms of individual anticipation of the 360 degree feedback is the critical event which shapes an individual's feedback orientation. The initial characteristics and aspects of individual feedback state may influence, reduce, or strengthen the impact of the 360 degree feedback on subsequent performance. These initial characteristics relate to the stages associated with the delivery of performance feedback. The behavioral and performance output may also differ as the feedback process evolves dynamically through the various stages of the performance management cycle (London & Smither, 2002).

The First Stage of Feedback: Anticipating Feedback

Feedback is a part of a dynamic process wherein an individual over time anticipates, receives, absorbs, and uses the information. The performance management cycle is typically segmented into three stages: (a) initially anticipating, receiving, and reacting to the feedback; (b) processing the feedback; and (c) using the feedback (London & Smither, 2002). These stages are repeated each time feedback is given. The performance management cycle can last days, weeks, or even months. The main component of a performance management cycle is the relationship among anticipating, receiving, and using feedback. Individual reactions and behaviors vary at each stage of the performance management cycle. Thus, each stage should be examined to determine ways to enhance the value of 360 degree feedback. On one

hand, little is known about feedback during the first stage of the performance management cycle (London & Smither, 2002). On the other hand, the third stage is the best understood phase of the performance management cycle due to the large body of literature on goal-setting theory (see Locke & Latham, 1990 for a review). The goal of this study is to contribute to the need for research in the first stage by examining how the anticipation of feedback from different sources (e.g., 360 degree, supervisor, and subordinates) may affect a person's propensity to conform.

The feedback literature has had a static focus on the immediate effects of feedback (see reviews by Ilgen et al., 1979; Nadler, 1979), feedback seeking (cf. Ashford & Cummings, 1983; Larson, 1984; Walker & Smither, 1999) and feedback interventions to improve performance (see Kluger & DeNisi's 1996 meta-analysis). A greater focus on the initial emotions and thoughts, and secondary reactions – the cognitions and emotions that occur before the feedback has had time to sink in is needed. The anticipation of feedback is a function of properties of both the stimulus and the anticipator and involves anticipating the feedback stimulus. The first stage of the performance management cycle is a perceptual process in that individuals need, first of all, to attend to or anticipate the feedback. How individuals think about themselves and their environment, and their initial anticipation of feedback will shape their immediate reactions to feedback (DeNisi, Cafferty, & Meglino, 1984).

A person's feedback orientation develops from the anticipation of feedback. According to London and Smither (2002), feedback orientation as a construct consists of multiple dimensions. These dimensions include: (a) liking feedback (i.e., absence or a low level of evaluation apprehension); (b) behavioral propensity to seek feedback (Ashford & Black, 1996; Ashford & Tsui, 1991); (c) cognitive propensity to process feedback mindfully and deeply; (d) sensitivity to others' view of oneself (Levy, Albright, Cawley, & Williams, 1995); (e) a belief in the value of feedback (Bandura,

1982); and (f) feeling accountable to act on the feedback. An individual's overall receptivity to feedback includes the anticipation of feedback, comfort with feedback, tendency to seek feedback and process it mindfully, and the likelihood of acting on the feedback to guide behavior change and performance improvement (London & Smither, 2002). This orientation can evolve over time as individual awareness about the feedback becomes more evident and valuable to each person.

Recent theorizing in regards to 360 degree feedback (Atwater et al., 1998; London & Smither, 1995) points to the importance of the cognitive evaluations of and anticipated emotional reactions of individuals to their feedback and ultimate response. The desire to reduce uncertainty starts with individual initial receptivity to feedback, where the desire to protect self-esteem and manage the impressions of others affects whether and how people seek feedback (Levy et al., 1995). Thus, dimensions of feedback orientation may be influential as feedback is anticipated, received, interpreted, and applied. The uncertainty about where one stands in the eyes of others may affect how feedback is received initially. This sensitivity about what others think may come from the desire to reduce uncertainty, protect individual egos, and control self-presentation (Levy et al., 1995). The goal to protect personal ego may influence whether feedback is processed mindfully. Attempting to manage the impressions of others may influence whether and how one changes individual behavior (London & Smither, 2002).

360 degree feedback is linked to the concepts of self-monitoring and public self-consciousness. Individuals who are self-monitors are sensitive to how others react to them, seek to understand what others expect of them, and vary their behavior to meet the expectations of the situation (Snyder & Copeland, 1989; Warech, Smither, Reilly, Millsap & Reilly, 1998). Self-verification and justification theories also relate to 360 degree feedback. In general, people try to affirm their self-concepts by

interpreting their experiences in such a way that their self-images remain stable or are restored (Baumeister, 1999; Steele, Spencer, & Lynch, 1993). The initial frame of mind of individuals will influence how they react to feedback over time, which becomes difficult when the negative effects from the anticipation of feedback reduce the linkages between a desire to seek meaning in the feedback and performance outcomes (e.g., recognition and rewards).

Theoretical work on antecedents of affect (Atwater et al., 1998; Higgins, 1987; Lazarus, 1991) and on individual reactions to feedback (Taylor et al., 1984) suggests that the reaction of feedback recipients in anticipation of 360 degree feedback may influence positively or negatively their individual and team performance. The anticipation of feedback sets the foundation for improving behavior and performance. How feedback is anticipated is also influenced by the individual's feedback orientation, the nature of the feedback (its specificity, clarity, and relevance to the task at hand) and how it is delivered. The consequences from 360 degree feedback may be considerable in cases in which it triggers self-concept sensitivity (Oyserman & Lee, 2008). Prior to receiving feedback, the initial reaction is likely to be emotional rather than cognitive (Zajonc, 1998). For example, in initially anticipating general discomfort with the feedback process, fear about the effects of the information can lead to defensiveness, confusion, uncertainty about what to do, or perceptions of bias or unfairness. These concerns and uncertainties increase feedback conformity.

*Anticipated
Feedback Types*

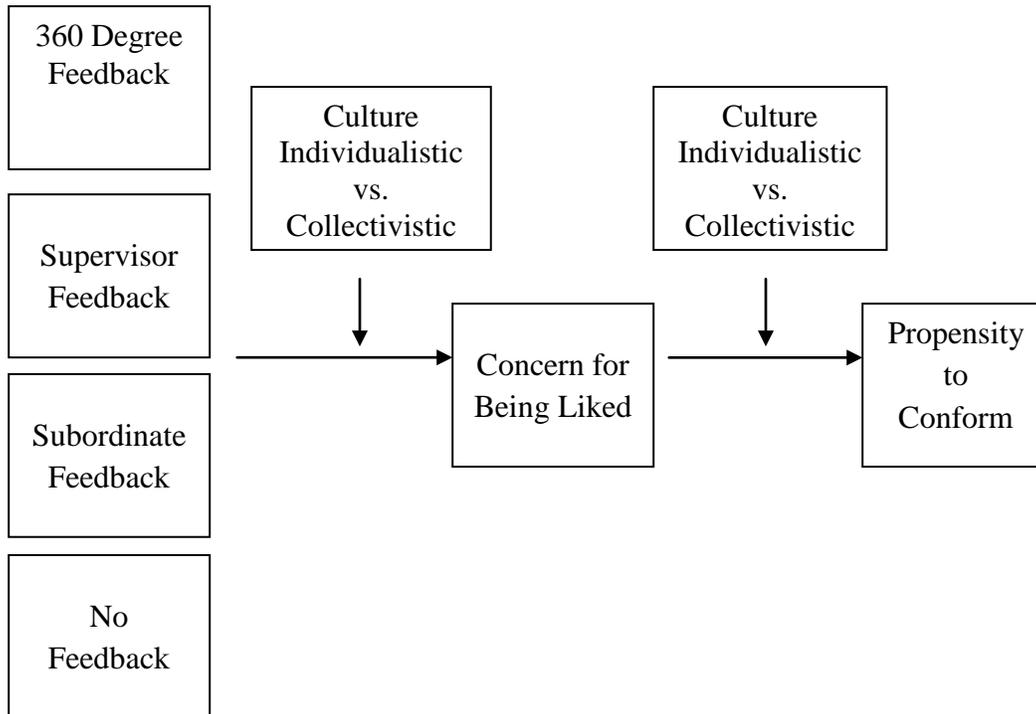


Figure 1. Anticipation feedback type – Propensity to Conform Model

In the present study, I attempted to take an even more conservative approach by examining the effect of the mere anticipation of feedback. It was hypothesized that the anticipation of feedback from multiple sources (i.e., 360 degree, supervisor, and subordinates) would generate conformity pressure on the *feedback – propensity to conform relationship*. Consistent with Reily et al. (1996) and Smither et al.'s (1995) findings, which suggest that feedback itself may not be the critical variable in producing change, improvement for individuals who did not receive feedback but were exposed to the feedback instrument (by completing self-ratings and ratings for their bosses) improved as much as those who actually got feedback reports. Similarly, Smither, Wohlers, and London (1992) found that expressing intentions of team leaders to change their behaviors were the same regardless of whether the leaders received

individualized, upward feedback or only normative feedback (average of team leaders' ratings). However, given the quasi-experimental nature of these studies, these researchers acknowledged the difficulty by determining whether exposure or feedback was the critical variable in producing change. Locke and Latham (1990) also argued that the act of introducing a formal feedback system into a work group may sometimes be sufficient to cause spontaneous goal setting. Furthermore, Leonard and Williams (2001) found that accountability (measured before feedback was received) was a better predictor of developmental behaviors taken in the response to 360 degree feedback than other variables including self-efficacy, need for achievement, supervisor support, and situational constraints. The present study continued this stream of research by investigating the anticipatory effects of feedback. It was hypothesized that the anticipation of 360 degree feedback vs. supervisor feedback vs. subordinate feedback vs. no feedback would generate greater conformity pressure on the feedback-propensity to conform relationship.

H1: The anticipation of 360 degree feedback versus supervisor, subordinate, and no feedback will increase an individual's propensity to conform to the majority response.

Individualism-collectivism and 360 Degree Feedback

In the foregoing discussion, I do not maintain that the negative consequences of anticipating 360 degree feedback are inevitable. Potential boundary conditions that might moderate negative effects were considered. A key aspect of performance is adapting to the cultural demands within an organization (Chao, O'Leary-Kelly, Wolf, Klein, & Gardner, 1994) or in a new country (Black & Mendenhall, 1990). In a global economy, jobs require individuals to learn to operate effectively in a variety of environments which may embody different values and cultural orientations (Black et

al., 1990; Noe & Ford, 1992). How feedback is anticipated and its effect on workers in these changing and varied environments has not been extensively examined in the feedback literature. Given the extensive globalization of today's business environment, the extent to which workers can effectively anticipate feedback and perform effectively in different cultures and environments has become a basic prerequisite.

Chao et al. (1994) outlined one component of performance involving learning goals and values (formal rules and principles as well as unwritten, informal goals and values that govern behavior), which suggests that successful performance involves both learning and operating within the rules of organizational culture norms. Beyond simply learning about a new culture or environment, however, a key aspect of performance for many employees also involves learning the expected rules for their organizations' feedback program. The important role of organizational culture for feedback is consistent with research showing how organizational support can enhance or detract from continuous learning (London & Smither, 1999). For example, the organizational culture norm can provide employees with clarity and shared understanding concerning behavior and performance expectations. The culture also helps to provide employees with more or less freedom to decide how to interpret (greater sense of self-control) and take action on the feedback. The external environment helps individuals to acquire and encourage a positive mindset to anticipate, seek, and receive feedback. Noe and Wilk (1993) found that work environment perceptions (e.g., social support and situational constraints) affected the number of developmental activities in which employees participated.

Schein (1992) defined culture as "a pattern of shared basic assumptions" that group members denote "the correct way to perceive, think, and feel." Culture can apply to both the individual and group levels. The group level describes to what

extent norms value individual autonomy and uniqueness; the individual level describes to what extent people's ideas about themselves are affected by their interrelationships with others (Markus & Kitayama, 1991; Oyserman, Coon, & Kemmelmeier, 2002) along with how group membership and interrelationships with others are used to define individuals. Employees are spending a larger proportion of their time working in groups (Ilgen, 1999). As a result, it has become increasingly important to understand how feedback is affected by individual group culture.

Culture has been conceptualized along a variety of content-related and structural dimensions (Gelfand, Nishii, & Raver, 2006; Hofstede, 1980). The dimension of culture that seems to have received the most scholarly attention in cross-cultural and social psychology is individualism-collectivism (Bond, 1994a; Brewer & Chen, 2007; Hofstede, 1980; Triandis, 1995). The dimensions of individualism and collectivism differ in their relative emphasis on independence versus interdependence with people's social groups (Markus & Kitayama, 1991). Individualism-collectivism donates a multidimensional continuum and may affect people's self-construal and values. Research has shown that the self-construal of individualism-collectivism can be situationally primed, so that a particular set of values becomes salient (Goncalo & Staw, 2006). Researchers have been able to prime cultural identities in a variety of ways and with participants (e.g., European North Americans and East Asians) from various cultural identities (Hong, Chiu, & Kung, 1997; Hong, Morris, Chiu, & Benet-Martinez, 2000). A person's perspective on the anticipation of feedback may depend in part on their organizational culture. More specifically, organizational culture can help to encourage and emphasize the important role of formal or informal feedback via traditional performance appraisal or 360 degree feedback. Unfortunately, little is known about the extent to which culture affects multi-source feedback. The individual-collectivism dimension can be used to predict behavior (Markus &

Kitayama, 1991). Thus, in this study, I sought to examine the extent to which the dimensions of individualism versus collectivism differentially moderate the relationship between 360 degree feedback and task conformity.

The norms for a person working in a collectivistic culture or interdependent self-construal place a greater emphasis on meeting a shared standard to promote harmony and cooperation in individual relationships to the group (Wink, 1997). They refer to their group and interrelationships to define themselves. Their “true self” tends to vary depending on the social context. People in collectivistic organizational cultures have been observed to identify more strongly with their work groups (Chatman, Polzer, Barsade, & Neale, 1998). The goal of an employee within a collectivistic culture is not to maintain independence from others, but to promote the interest of the group (Davidson, Jaccard, Triandis, Morales, & Diaz-Guerrero, 1976). These individuals are viewed as inherently interdependent with the group to which they belong and might consider the failure to yield to others as rude and inconsiderate (Azuma, 1994; Goncalo & Staw, 2006). For people in collectivistic cultures, instead of being encouraged to stand out from their group by competitive acts of achievement, individuals tend toward self-improvement motivated by concern for the well-being of the larger social group (Kitayama, Markus, & Lieberman, 1995). Thus, groups exhibiting collectivistic norms are expected to be high in achievement of the collective group goals.

On the other hand, the norms for people working in an individualistic culture may encourage individuals to resist social pressure if it contradicts their own preferences because such norms emphasize being “true” to themselves and their unique set of needs and desires (Fiske, Kitayama, Markus, & Nisbett, 1988). Their goal is to believe that their unique traits are a direct consequence of their self-identity. People in an individualistic culture or independent self-construal strive for special

recognition by achieving beyond the norms of the group. As a result, such individuals can be expected to be consistent in their views and maintain them in the face of opposition. As a result, they tend to emphasize unique aspects of their personality and rely on their personal identity rather than their social identity (cf. Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and are viewed as independent and possessing a unique pattern of traits that distinguish them from other people (Markus & Kitayama, 1991).

The concept of conformity may have different connotations in different cultures. One of the most important consequences of such divergent views is the degree of conformity that is observed in social settings (Goncalo & Staw, 2006). Research has shown that high levels of group harmony and collaboration may not always be beneficial for an organization (e.g., reduced levels of creativity). Goncalo and Staw (2006) argue that harmony, cohesion, and collectivistic values lead to conformity. In contrast, conformity is typically viewed as a form of deviance and negativity in an individualistic culture (Kim & Markus, 1999). The level of conformity pressure may undermine the task performance accuracy in organizations that use 360 degree feedback and promote collectivistic values. Given the very divergent organizational culture norms for performance rewards and career development, I suggested in this study that an organizational decision to adopt a collectivistic or individualistic culture may moderate the relationship between anticipated feedback and task conformity. Thus, understanding how employees might respond to 360 degree feedback in a traditionally individualistic workplace to a more collectivistic workplace that values the needs of the group over the individual (Locke, Tirnauer, Roberson, Goldman, Latham, & Weldon, 2001) is critically important.

The expected input from multiple feedback sources implies that individuals will experience greater pressure because when people operating under collectivistic

norms tend to consider their similarity to others, they are predicted to experience greater conformity pressure. Conversely, in individualistic groups that value individual work and uniqueness, these people in the presence of anticipated feedback should be less hesitant (experience less conformity pressure) to follow the group, for they prioritize their own needs over those of the groups to which they belong (Hsu, 1985; Markus & Kitayama, 1991; Triandis & Gelfand, 1988) and exhibit a heightened concern for remaining independent of the group (Hofstede, 1980). In turn, collectivistic groups are more responsive to norms, and might be more inclined to cooperate and follow the collective goals of the group. Organizational adoption of individualism-collectivism culture norms may moderate the relationship between the anticipation of feedback and individual propensity to conform. It was asserted that an individualistic culture norm will encourage uniqueness and maintenance of independence from others. Given the inclusion of likability (which will be discussed in the next section) in the model (Figure 1) a two-stage test for moderation was hypothesized.

H2_A: Individualistic and collectivistic team culture moderates the relationship between anticipated feedback and likability such that a person's concern for being liked will decrease (*increase*) when anticipating 360 degree feedback versus supervisor, subordinate, and no feedback within an individualistic (*collectivistic*) team culture.

H2_B: Individualistic and collectivistic team culture moderates the relationship between likability and propensity to conform to the majority response such that conformity will decrease (*increase*) when anticipating 360 degree feedback versus supervisor, subordinate, and no feedback within an individualistic (*collectivistic*) team culture.

Individual Priorities

Researchers have investigated how individual dispositions may impact reactions to feedback. For example, individual differences such as self-esteem (Shrauger & Rosenberg, 1970) and social anxiety (Smith & Sarason, 1975) have been shown to be related to the ways in which feedback is perceived and used rather than merely exploring the relationships between disposition or personality traits and feedback. In addition to the types of anticipated feedback type, I focus on an individual's priorities while working on group tasks to understand how this focus regulates the anticipation of feedback and impacts subsequent task conformity. The anticipation of feedback should be related conceptually to individual priority variables. The priorities or interpersonal strategies people adopt to address others, feelings that drive social behavior and performance, and distinctive interpersonal characteristics are evident across situations (Hogan, Hogan, & Roberts, 1996). For example, Ryan, Brutus, Greguras, and Hakel (2000) examined how feedback recipients initially accepted and internalized feedback. Recipients who scored higher on measures of flexibility and wanting to make a good impression were perceived by the provider as having a positive reaction to the feedback, whereas recipients who scored lower on these measures had the opposite reaction to the feedback.

Typically, almost everyone wants to be liked by their team members. People also tend to rely on the groups around them to gather important information about what is going on. Normally, these processes serve to help people to get along with others, leading them to shift their behaviors in small ways to match the groups and promote harmony. Sometimes, however, this automatic tendency to go with the group may result in hasty decisions that later may be regretted. The priority or concern for being liked is in line with Deutsch and Gerard's (1955) concepts of normative and informational social influence. They define the concept of normative social influence

as “influence to conform to the positive expectations of another,” and informational social influence as “influence to accept information obtained from another as evidence about reality” (p. 629). For example, in the case of informational influence when an individual works within a team or group, and information is received by the team that is in some way unclear or ambiguous, the team will subsequently interpret this information. Individuals will change their perception of what is happening to match that of the team. Here, conformity occurs because these individuals actually believe that the team’s perceptions are more accurate than their own. Thus, the conformity in this case is entirely subconscious; the person never even realizes that it has occurred.

On the other hand, in the case of normative influence, when these same individuals are working within teams where information is received by the teams that is in some way unclear or ambiguous and the team interprets the information, these individuals will change their perception or behavior to match the group because they want to be accepted and liked by them. Here, they will agree with and conform to something that they know is wrong, just to fit in. In this case, the people know that they are making the wrong choice, but it is more important for the group to like them, so they go along with it in any case.

Kiesler and Kiesler (1969) referenced Festinger’s (1954) social comparison theory in their argument for the concern with being liked. They argued that the opinions of similar others provide a social reality for the validation of opinions. They also referenced Byrne’s (1961) demonstration of the similarity-attraction effect, Schachter’s (1951) demonstration of the direction of group pressure toward deviants, and Berenda’s (1950) finding that children are more likely to conform to the judgments or opinions of peers than teachers. Furthermore, Thibaut and Strickland’s (1956) concept of group set and task set was also in parallel with the priority of being liked. In a group set, individuals are concerned with achieving or maintaining

membership with the individuals whose attitudes are being communicated to them. In a task set, these people are disposed to view the other individuals in a group as mediators of fact. As a result, Thibaut and Strickland made the distinction between the “need to be liked” and the “need to be correct.” Lefkowitz (2000) concluded from his review of 24 studies that the influence of being liked is often found to relate more to greater halo effects, reduced accuracy, and positive regard for rate performance. Lefkowitz (2000) and Varma, DeNisi, and Peters (1996) pointed out that although the effects of liking are well documented, the range of reasons for the influence of liking are not clear.

A supporting source of evidence in support of the effect on conformity of the concern with being liked comes from Deutsch and Gerard (1955). This experiment compared public with private response and found that the occurrence of conformity in a private situation is evidence for informational social influence. Also consistent with the results from Asch’s (1952) conformity experiments and Insko, Gilmore, Moehle, Lipsitz, Drenan, & Thibaut’s (1982) balance interpretation of agreement effects is the concern with being liked. Balance theory (Heider, 1946, 1958) indicated that conformity is a function of the participant’s attraction to some other person or group (cf. Sampson & Insko, 1964). McGhee and Teevan (1967) used a variant of the Asch-conformity experiment in which the measure of conformity was the number of times a subject agreed with the other subjects’ incorrect responses. They found that those who scored high on the n-affiliation scale conformed more than those who scored low. The results in the literature are mixed (cf. Allen, 1965); in some cases the generalization for the effect of the concern with being liked on conformity holds and in others it does not. However, the general premise is that conformity is sometimes a function of attraction and sometimes a function of other determinants has been systematically acknowledged (Becker, Lerner, & Carroll, 1966; Kelman 1961). Because being liked

is characterized in part by a desire to please others, I expected that individuals who are high in the concern for being liked would feel more obligation to go along with their group rather than remain independent or reject the group (majority) feedback; thus, they would feel accountable to use and follow their 360 degree feedback.

The concern for being liked may mediate the relationship between anticipated 360 degree feedback and conformity. The priority to be liked and accepted by others is particularly acute, and the anticipation of 360 degree feedback might cause individuals to behave in ways that ensure they will fit in and remain in harmony with the group. In contrast, people who are relatively low on this priority are insensitive to the opinions of others. For these people, the prospect of feedback may merely be a welcomed opportunity to receive accurate information about their performance but not necessarily trigger a concern with being ostracized from the group. Based on the similar research findings as noted previously, as well as the definition for the construct being liked, I also expected that individuals who place a priority on being liked would experience a higher amount of conformity on tasks when 360 degree feedback is anticipated than for other feedback types. Specifically, it is hypothesized that

H3: Likability mediates the relationship between the anticipation of 360 degree feedback versus supervisor, subordinate, and no feedback and an individual's propensity to conform to the majority response.

To study the effects of anticipated feedback on the propensity to conform, I experimentally manipulated an individualistic versus collectivistic culture orientation as well as the type of anticipated feedback as either: *360 degree feedback*, *supervisor feedback*, *subordinate feedback* or *no feedback*. The salience of different feedback types was varied in order to better discern under what conditions individualistic versus collectivistic culture orientation would affect individual task conformity. Thus, by

experimentally manipulating individualism-collectivism, it is possible to test for the moderated relationship of culture orientation on the anticipated feedback-conformity relationship. Furthermore, by experimentally manipulating the type of anticipated feedback, it is also possible to test for the priority of being liked to mediate the anticipated feedback-conformity relationship.

METHOD

Participants

One hundred and sixty-nine undergraduate students at a large northeastern university in the United States voluntarily participated in this study in exchange for \$15. All participants gave written consent to a protocol approved by the Cornell University Institutional Review Board for Human Participants (IRB). Sixty percent of the participants were female and 40% were male. Their racial/ethnic composition was 46% Caucasian, 28% Asian, 10% African-American, 10% Hispanic, and 6% other. Their average age was 20.5 years ($SD = 2.06$).

Task

The task was computer-based and chosen to simulate a complex assignment. In organizations, work assignments are often complex and require team effort and collaboration. This complexity increasingly causes people to work together to seek, synthesize, and disseminate information from each other (Sonnenwald & Pierce, 2000). The task was also disconnected in its content from the other parts of the study to further create a new and unfamiliar task experience. The content displayed three dimensional figures that were adapted from Shepard and Metzler (1971). Participants were presented with a pair of three dimensional cube mental rotation figures in which one figure could be rotated with respect to the other, and one of the figures could be identical to or a mirror image (i.e., positive or negative) of the comparison figure. The seven perspective views for each object permitted construction of at least two unique pairs at each angular difference in orientation ($M = 137$ degrees) from 100 to 180 degrees, in 20 degree steps (Berns, Chappelow, Zink, Pagnoni, Martin-Skurski & Richards, 2005). For this task, the participant was instructed to decide, accurately, whether the two figures were the same or different. For example, an object pair of three dimensional figures would constitute a *same* (see Appendix K) pair (i.e., the

objects can be rotated into congruence), differing in orientation, or would represent a *different* pair (i.e., the objects cannot be brought into congruence by any rotation). Additionally, for each of the object pair questions, participants were provided the answers of their teammates in terms of the percentage “same” and percentage “different” (e.g., 85% of the team answered “same,” and 15% answered “different”). Participants indicated their answer by clicking a box marked “same” or “different”, and received a point for correctly determining if the object pairs were similar or different. All participants were provided the same sets of object figure pairs and were allowed as much time as they needed to complete the questions.

Design

In the study, I employed a 2 (Organizational Culture Norms: Individualism versus Collectivism) x 4 (Anticipated Feedback Types: 360-degree feedback vs. Supervisor Feedback vs. Subordinate feedback vs. No feedback) between-subjects factorial design. Participants were randomly pre-assigned to one of the eight experimental conditions. Groups of eight people were used in each session resulting in a total of 27 groups.

Experimental Procedure

Set-up

On arrival at the laboratory, each participant was escorted to a cubicle equipped with a personal computer. Each cubicle was partitioned with a cubicle divider panel. The participants were given a consent form for their review and signature, which provided a brief description of the study. After all participants were seated, a brief oral introduction to the experiment ensued. They were told that the study is designed to examine individual and group performance and has two phases. In the first phase, participants were instructed that they would work alone and complete a decision-making task, whereas in the second phase they would enter a

virtual common room where all communications with their team members would occur as they work on multiple decision-making tasks concurrently. After I collected the consent forms, I asked the participants to log into their university email account and verify receipt of an email pertaining to the study. Following verification that everyone received the email, all participants were instructed to open the email, click on the weblink, and begin the study. Each questionnaire was uniquely labeled with each participant's name. The names and roles of their team members (i.e., the other participants in the session) were also embedded into the questionnaire for the second phase. All experimental instructions, conditions, stimuli, and data collection were conducted using professional experimental software. After the participants were logged into the survey tool, the study's description and set-up were reiterated. Furthermore, the participants were told that the study would involve a complex business simulation.

Back Story

Given the goal of the study to understand how the anticipation of feedback from various organizational sources (i.e., 360 degree, supervisor, and subordinates) would affect individual propensity to conform, it was essential to create a plausible organizational context that made sense to the participant. To set the stage for the entire experiment, I adapted the "Looking Glass Inc." (Lombardo, McCall, & DeVries, 1989), a simulated business organization. The goal of this cover story was to include a sensible, logically consistent rationale for the participants' roles, responsibilities, and performance criteria as well as organizational culture. Furthermore, the cover story incorporated the manipulation of the independent variables and the collection of the dependent variable. This cover story has been used in other studies (i.e., Chatman & Barsade; 1995, 1998) as a flexible, realistic, and engaging way to assess individual behavior and team effectiveness.

The participants were given background on Looking Glass Inc., which began with an overview of the president and founder of this firm, M. L. Smith, whose leadership was described as the power shaper and driving force for the culture norms of the organization. These organizational core values were translated into value statements that defined how people should behave with each other and the basis against which the organization evaluated its employees and internal community. Next, the organizational structure was described as having 20 managers, ranging from plant managers to chief executive. These managers were appropriated to one of three divisions: Advanced Products (seven managers), Commercial Glass (six managers), or Industrial Glass (seven managers). Within a division, each team consisted of eight members. A team was led by a chief executive who was responsible for a team of four middle managers. The middle manager's both reported to this chief executive as well as having managerial responsibilities for their subordinate direct reports. Each participant was in the middle manager position. They were responsible for three subordinate direct reports and also had three peer middle managers. In this middle manager position, the participant was also instructed that they would be reporting to one of the chief executive officers within the Advanced Products division.

The participants were told that they were replacing the previous middle manager who had suddenly died within the Advanced Products division. To explain the organization further, all participants were shown their unique organizational hierarchy chart diagram (see Appendices A & B) which assigned their name to one of the middle manager positions and randomly assigned the names of the other seven participants to one of the other roles on the organizational chart. Thus, the participants were to believe that the other study participants were either peer middle managers, subordinates, or their chief executive. This chart also provided descriptions for each of the team roles (i.e., chief executive, middle manager, and subordinate report). The

participants were instructed that understanding the team hierarchy and its basis for evaluation as well as their assigned role in that hierarchy was important because their performance and pay in the study would be based on feedback from the individual or team members specific to their pre-assigned condition.

Procedure

In the first phase of the study, participants were provided with the details of the Looking Glass Inc. back story as well as their pre-assigned condition instructions that included a description of their culture norm, team role/responsibilities, and feedback assessment source. The instructions were reinforced in an effort to fully familiarize each participant with their assigned role, role assignment, and team background information. Participants were also instructed that they would independently complete a decision-making task, and for the remaining tasks they would work with their team and subsequently receive performance based feedback on their individual performance at the end of the experiment (a ruse, for no participant would actually meet this contrived team). It was made clear that their performance was based on their level of accuracy for each of the decision-making task problems. The metric of performance was essentially the number of correct answers out of the total team decision-making problem set.

Following the procedures used by Chatman and Barsade (1995, 1998), I manipulated the culture norm by providing a paragraph (see Appendices C & D) outlining the details for the organizational culture as either individualistic or collectivistic. This description appeared immediately following the company and team role overview section. The information regarding the corporate culture also outlined the specific details about the participants' pay bonus and reward information, which was commensurate with their particular culture norm condition. After the details of the back story were provided, participants were also given a question to

ensure that they fully understood their pre-assigned anticipated feedback condition (e.g., 360 degree feedback, supervisor feedback, subordinate feedback, or no feedback). This question also illustrated their team's organizational chart, asking them to click on each of the people in the chart who would be providing them with performance feedback at the end of the team exercises. Additionally, they were told that based upon their performance feedback at the end of the team exercise, they might be selected to work on another team for extra pay. Before engaging in the second phase of the study, participants were asked to complete a practice decision-making question independently, which was designed to allow the participant to become familiar with the task instructions associated with the three dimensional cube mental rotation figures.

The second phase of the study commenced after the participants independently completed their practice decision-making question. To further enhance the believability of the team assignment, participants were told, "Please wait while we access the server for your teammates' information." After a mandatory survey tool system delay of 60 seconds, each participant was given 30 three-dimensional object figure pairs and asked to work on each of these questions with their team members and indicate if the objects could be rotated to match each other (hence the "same") or no rotation can make them match (hence "different"). Displayed for each question, participants were given their team's answer in terms of the team's overall percentage that the object pairs were the same and different. This information was provided to enhance the realism of the anticipated group feedback, such as in individual responses in being accountable to the team. Participants could simply ignore this information and independently determine the correct answer or take into consideration the team's answer. By predesign, all participants received the same 30 questions but in a randomized order. Out of the 30 questions, there were 12 trials in which the team's

overall response was incorrect, 14 trials in which the team's overall response was correct, and 4 split-decision trials which were inserted as fillers to maintain believability about the team interaction. Following the team decision-making tasks, participants completed a series of questions to test their understanding of their organizational culture condition. Next, participants completed a series of questions about their priorities during the team decision-making exercises. These priority questions attempted to assess dimensions of likability and accuracy. Finally, participants completed a set of demographic questions. The actual study took an average of 45 minutes to complete.

Manipulations

Anticipation of Feedback

Participants were assigned to one of four anticipation of feedback experimental conditions: 360-degree feedback, supervisor feedback, subordinate feedback, and no feedback. This manipulation was consistent with research on performance appraisal feedback (Kluger & DeNisi, 1996). As noted earlier, this first stage just before the performance feedback is given encompasses the perceptual process about individual beliefs about their environment and feedback orientation, which ultimately shapes their initial reactions to feedback (DeNisi et al., 1984). Locke and Latham (1990) asserted that the mere exposure to a feedback system within a work group may be sufficient to affect behavior and performance. Participants in the *360-degree feedback* condition were informed that at the end of the team exercises, they would receive performance feedback report from all seven team members—from their one (1) chief executive, three (3) peer middle leaders, and three (3) subordinate direct reports. Participants in the *supervisor feedback* condition were instructed that at the end of their team exercises, they would receive performance feedback from their chief executive only and no one else on their team. Participants in the *subordinate feedback*

condition were instructed that at the end of their team exercises, they would receive performance feedback only from all three of their subordinate direct reports. It was also reiterated who from their team would vote on whether or not they would be selected to work on the next bonus team. It was explained to participants in the feedback condition that at the end of the team exercise, they would be evaluated by their supervisor, subordinates, or team members, and this feedback would be also used to decide if they would be selected to work on another team for extra money. This suggestion to work on a bonus team for extra money was incorporated to emphasize the usefulness and impact of the anticipated feedback. In all three of these experimental conditions, anticipated feedback served as the basis for their performance evaluation, which provided participants with the opportunity to earn extra pay as well as helping them decide if they would be selected to work on another team for extra money. In contrast, the participants in the *no feedback* condition were not told that they would receive a feedback report following the team exercise. They were specifically instructed that they would not receive any feedback from their chief executive, peer middle managers, or subordinate direct reports and that at the end of the team tasks, a team member would be randomly selected to work on another team for extra money.

Collectivistic versus Individualistic Culture

Participants were assigned to one of two culture experimental conditions: individualistic or collectivistic. These culture manipulations were adapted from Chatman et al. (1995, 1998). The manipulations provided the participants with information about the values, beliefs, and rewards associated with their organizational culture norm. The manipulations follow the conceptual definitions of individualism-collectivism. Thus, the organization was portrayed as valuing and rewarding individual achievement, effort, and initiative in the individualistic condition or

cooperation, shared benefits, and teamwork in the collectivistic condition. The pay bonus and option of being selected to participate on the next bonus team were intended to simulate differences in the salience of team membership. In the individualistic condition, people could be successful (get larger bonus and awards) based solely on their own accomplishments, regardless of their relationships with other team members. This situation should have increased their focus on what differentiated them from others. In contrast, in the collectivistic condition, success was contingent on coordinated performance among team members, increasing the salience of shared objectives and commonalities among members.

First, an exploratory factor analysis (EFA) was conducted to examine the underlying factor structure related to the dimensions of individualistic culture and collectivistic culture. The EFA was conducted on 12 items (six related to individualistic and six related to collectivistic) with principal axis factoring (PAF) analysis with direct oblimin rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, $KMO = .939$. Bartlett's test of sphericity $\chi^2 (66) = 1650.95, p < .001$, indicated that correlations between items were sufficiently large for PAF. An initial analysis was run to obtain the eigenvalues for each component in the data. Two components had eigenvalues over Kaiser's criterion of 1 and in combination explained 67.65% of the total variance. The scree plot also showed the inflection point that justified retaining two components. Then, a two-factor individualistic and collectivistic model was tested using confirmatory factor analysis (CFA) procedure in AMOS. The CFA analysis showed that the two factor model of individualistic culture and collectivistic culture provided a good data fit, $\chi^2 (53, N=158) = 134.502, p < 0.0001, \chi^2/df = 2.538, CFI = 0.95, IFI = 0.951, NFI = 0.921, RMSEA = 0.099$. A chi-square difference test also showed that the two-factor model fit the data significantly better than a one-factor model, $\Delta\chi^2 (1, N = 158) = 51.106,$

$p < 0.0001$. Additionally, the AIC for the two factor model was 184.502 and the value for the one factor model was 233.608. The reliabilities for the individualistic culture and collectivistic culture scales were both highly reliable, Cronbach $\alpha = .915$ and $.919$ respectively.

Measures

Propensity to Conform

Participants were asked to rate whether each of the pairs of three dimensional cube mental rotation figures were either the same or different. The participants were provided with their team's answer in terms of the overall percentage correct or incorrect or split decision. The measure for the propensity to conform was the objective measure of the participants' number of correct responses (accuracy) on the team decision-making task questions when the team's overall percentage (influence) was for the incorrect answer. The number of correct answers for participants reflects their level of resistance or nonconformance when the pressure of the group was for the participant to conform to the incorrect answer.

Priorities

Conformity or influence may sometimes be a function of other determinants. The goal of the priority measures was to determine whether or not participants, while working on the team exercises, thought certain priorities or attitudes were significant enough to mediate the relationship between feedback type and conformity. This focus on individual priorities was modeled after other researchers who asked participants to rate their concern or focus on a number of social psychological phenomena, including self-presentation, social anxiety, and fear of evaluation (e.g., Schlenker, 1980; Smith & Campbell, 1973; Watson & Friend, 1969). The participants were asked to rate the following (see Appendices E & F) 16 priorities: *being* conscientious, liked, self-confident, efficient, admired, approved of, agreement, precise, appreciated, exact,

accepted, respected, meticulous, careful, rigorous and acknowledged. The scales had a five-point Likert-type format, (1= *strongly agree* to 5= *strongly disagree*) on the extent to which they agreed that the priority was important while working on the team decision tasks. Eight of the items assessed priorities related to being liked by others and eight items related to being accurate while working on tasks. These items were also combined to create a two priority scale. A likability index was created by averaging participant ratings of the eight questions that accessed attributes related to the priority of being liked when working on team exercises. First, an EFA was conducted on 16 items (8 items related to likability and 8 items related to accuracy) to examine underlying factor structure of the data. The EFA conducted was a principal axis factoring analysis with direct oblimin rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .840. Bartlett's test of sphericity $\chi^2 (91) = 1222.745, p < .001$, indicated that correlations between items were sufficiently large for PAF. An initial analysis was run to obtain the eigenvalues for each component in the data. Two components had eigenvalues over Kaiser's criterion of 1 and in combination explained 53.78% of the total variance. The scree plot also showed the inflection point that justified retaining two components. Then, a two-factor likability and accuracy model was tested using confirmatory factor analysis (CFA) procedure in AMOS. The CFA analysis showed that the two factor model of likability and accuracy provided acceptable fit of the data, $\chi^2 (76, N= 158) = 213.169, p < 0.0001, \chi^2/df = 2.805, CFI = 0.883, IFI = 0.885, NFI = 0.832, RMSEA = 0.107$. A chi-square difference test also showed that the two-factor model fit the data significantly better than a one-factor model, $\Delta\chi^2 (1, N = 158) = 410.119, p < 0.0001$. Additionally, the AIC for the two factor model was 271.169, and the value for the one factor model was 679.288. The likability index had high reliability, Cronbach's $\alpha =$

.879. However, the reliability for the accuracy items had relatively low reliability, Cronbach's $\alpha = .503$.

Demographics

At the end of the questionnaire, demographic information was captured (e.g., gender, age, race/ethnicity, college major, and education level). There were also questions that asked if the participant was familiar with the Asch studies (1952, 1956) and if they took Professor J. A. Goncalo's courses *Managing Creativity* or *Social Influences*.

Manipulation Checks

In the first phase before beginning the decision-making tasks, participants were provided with a copy of the organizational hierarchy chart (see Appendix G) to test understanding of their assigned feedback type. They were asked to respond to the question, "To ensure that you understand your role before the simulation begins, please click on the people in the chart who will be providing you with performance feedback at the end of the team exercises." In the event that participants incorrectly clicked a box in the organizational hierarchy chart that represented the team member who would be providing their feedback, they were re-directed back to the prior question containing the background details of their feedback manipulation. All participants ultimately had to answer this question correctly to move on in the study. The results revealed that participants responded correctly 93% of the time for the 360-degree feedback condition, 100% for the supervisor feedback conditions, 100% for the subordinate feedback condition, and 95% for the no feedback condition.

To test the effectiveness of the culture manipulations, I employed an approach similar to the procedure outlined by Chatman and Barsade (1995). In the second phase, immediately following the 30 team decision-making exercise, participants were asked to complete 12 organizational culture questions (see Appendices I & J). They

rated 12 dimensions of organizational culture, six of which were relevant to individualism and six of which were relevant to collectivism on a 5-point Likert-type scale (from 1= *extremely characteristic* to 5= *extremely uncharacteristic*). A sample item is, “At Looking Glass Inc. cooperation and teamwork were highly valued and rewarded and cooperation among individuals and departments was considered to be the best road toward innovation and corporate success.” An independent-samples t-test was conducted to compare the mean manipulation check measure of culture for the participants assigned to the individualistic versus collectivistic culture conditions. There was a significant difference in the mean scores for participants in the individualistic culture condition ($M = 4.83$, $SEM = .178$) compared to the collectivistic culture ($M = 2.11$, $SEM = .206$) condition; $t(118) = 9.822$, $p < .001$. There was also significant difference in the mean scores for the participants in the collectivistic culture condition ($M = 5.10$, $SEM = .148$) compared to the individualistic culture ($M = 3.05$, $SEM = .291$) condition; $t(129) = 6.805$, $p < .001$. These results suggest that the participants in each of the culture conditions properly reported their assigned culture such that participants in the individualistic condition reported being more individualistic and participants in the collectivistic condition reported being more collectivistic.

The analysis focused on the response of the participants to the individual decision-making questions in which the goal was to determine if the images were the same or different. Given the interest in examining the propensity to conform, the primary dependent variable was the total number of correct answers on 12 of the 30 the decision-making questions in which the team’s percentage or influence was in the direction of the incorrect answer. In line with previous research, because this experiment involved an increasing number of trials, it was prone to monotonic nonlinearity. Thus, an arcsine square root transformation was used to transform the

data to a normalized distribution (Cohen & Cohen, 1983). As detailed earlier, for each of the decision-making questions, the percentage of the team's response was specified by displaying the percentage of the team's answer that the image was the *same* and *different*. This subset of 12 questions provided the participants with the opportunity to agree with the team and conform to the incorrect answer. Or the participants could remain independent from the group and not follow the conformity prime.

RESULTS

The means, standard deviations and intercorrelations between observed study variables are presented in Table 1. The propensity to conform is negatively related to 360 degree feedback and supervisor feedback ($r = -.052$ and $-.094$) and positively related to subordinate feedback and no feedback ($r = .079$ and $.069$). This means that a person's propensity to conform decreases when one is anticipating 360 degree feedback and supervisor feedback. Conversely, a person's propensity to conform increases when one is anticipating subordinate feedback and no feedback. Because these relationships are not significant, one cannot have confidence in the direction of these relationships. No feedback is positively related to likability ($r = .156$, $p < 0.05$). A person has a greater concern for being liked when a person is not expected to receive any team feedback. Individualistic culture is positively related to likability ($r = .137$, $p < 0.05$). Thus, it seems as people work within a team with an individualistic culture they have an increased concern for being liked. Conversely, collectivistic culture is negatively related to likability ($r = -.137$, $p < 0.05$), as people work in a collectivistic team culture there is a reduced concern for being liked.

The cell means for effects of culture and anticipated feedback types on likability and propensity to conform are presented in Table 2. For participants working within an individualistic team culture the highest mean concern for being liked was for individuals anticipating supervisor feedback ($\bar{x} = 3.3$) and no feedback ($\bar{x} = 3.3$). These same feedback conditions experienced the highest mean concern for being liked for participants working within a collectivistic team ($\bar{x} = 2.9$ and $\bar{x} = 3.2$ respectively) culture. For participants working within an individualistic team culture the highest mean propensity to conform was for individuals anticipating subordinate feedback ($\bar{x} = .41$) and no feedback ($\bar{x} = .46$) and the lowest mean propensity to conform was for individuals anticipating supervisor feedback ($\bar{x} = .35$). Conversely,

for participants working within an collectivistic team culture, the highest mean propensity to conform was for individuals anticipating subordinate feedback ($\bar{x} = .54$), and the lowest mean propensity to conform was for individuals anticipating 360 degree feedback and supervisor feedback ($\bar{x} = .40$).

The first hypothesis proposed that participants anticipating 360 degree feedback compared to supervisor feedback, subordinate feedback, and no feedback would experience greater conformity pressure on the decision-making tasks. If this prediction is true, then those participants in the 360 degree feedback condition would have produced a higher number of incorrect responses, for these participants would have been incorrectly influenced by their team's answers. More specifically, it was believed that anticipating feedback from multiple team sources would increase personal desire to conform to a team's response. A one-way analysis of variance (ANOVA) was conducted on the anticipated feedback type of participants on their propensity to conform. This ANOVA revealed that there was not a main effect (Table 3) for anticipated feedback type, $F(3, 154) = .883, P = .451$. Thus, Hypothesis 1 was not supported.

Table 1

Means, Standard Deviations, and Intercorrelations Between Observed Study Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Propensity to Conform	0.427	0.337	—							
2. 360 Degree Feedback	0.247	0.433	-.052	—						
3. Manager Feedback	0.253	0.436	-.094	-.333**	—					
4. Subordinate Feedback	0.222	0.417	.079	-.305**	-.311**	—				
5. No Feedback	0.279	0.450	.069	-.356**	-.362**	-.331**	—			
6. Individualistic	0.494	0.502	-.074	.022	.007	-.008	-.020	—		
7. Collectivistic	0.506	0.502	.074	-.022	-.007	.008	.020	-1.000**	—	
8. Likability	3.056	0.787	-.076	-.097	.035	-.105	.156*	.137*	-.137*	—

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

Table 2

Cell Means for Effects of Culture and Anticipated Feedback Types on Likability and Propensity to Conform

Culture	<i>Individualistic</i>				<i>Collectivistic</i>			
	<u>360</u>	<u>Manager</u>	<u>Subordinate</u>	<u>None</u>	<u>360</u>	<u>Manager</u>	<u>Subordinate</u>	<u>None</u>
Feedback Type:								
Cell Size:	20	20	17	21	19	20	18	23
Likability	3.02	3.29	3.06	3.27	2.82	2.91	2.75	3.24
Propensity to Conform	0.39	0.35	0.41	0.46	0.40	0.40	0.54	0.47

Table 3

Effect of Feedback Type on Propensity to Conform

	Type III Sum of Squares	Df	Mean Square	F	Sig.
Feedback Type	.301	3	.100	.883	.451

The second hypothesis asserted that culture would moderate the amount of conformity that people would experience. Given the construct definition for individualistic culture, these participants were predicted to experience less conformity. In contrast, participants within a collectivistic culture would experience greater conformity in the presence of team feedback (i.e., 360 degree feedback) than when anticipating supervisor feedback or subordinate feedback. Furthermore, given the (Figure 1) inclusion of the likability mediation variable in the model, the testing of the second hypothesis was conducted in two steps, which allowed for a two-stage test for moderation. As illustrated in the model at *stage 1*, there is the possibility for culture to moderate the relationship between anticipated feedback type and likability and at *stage 2* there is the possibility for culture to moderate the relationship between likability and propensity to conform. First, given the categorical nature of both predictor variables (anticipated feedback type and culture) and the continuous outcome variable of likability, a two-way ANOVA was conducted. Secondly, given the mixture of categorical (culture) and continuous (likability) predictor variables on the continuous outcome variable of conformity, a general linear model (GLM) was conducted. In preparation for the second step, the variable *likability* was mean centered in an effort to reduce any potential covariance between the linear and the interaction terms, thereby reducing any effects of multicollinearity. This process was done by

subtracting the mean of likability ($\bar{x} = 3.0561$) from each person's likability index score. For step 1 (Table 4), the two-way ANOVA revealed that there was not an interaction between feedback type and culture, $F(3, 150) = .407, P = .748$. These results indicated that the neither feedback type nor the moderation of culture on the relationship between anticipated feedback type and a person's concern for being liked was significant. In step 2 (Table 5) of the test of hypothesis 2, the two-way interaction of culture and likability on the propensity to conform was also not significant $F(1, 154) = 1.884, P = .172$.

Table 4
Effect of Feedback and Culture on Likability

Step 1

	Type III Sum of Squares	<i>Df</i>	Mean Square	F	Sig.
Feedback Type x Culture	.743	3	.248	.407	.748

Table 5
Effect of Culture and Likability on Propensity to Conform

Step 2

	Type III Sum of Squares	<i>df</i>	Mean Square	F	Sig.
Culture x Likability	.213	1	.213	1.884	.172

Note. Likability was mean centered.

The third hypothesis was that an individual's priority of being liked would mediate the relationship between the feedback type and the propensity to conform. If this predication is correct, then participant level of conformity should be statistically distinguishable given the presence of likability and anticipated feedback. It was asserted that a greater priority for likability would influence participant to follow the team's decision. A two-way ANOVA was conducted on the feedback type and likability. The mean centered variable for likability was also used to test this hypothesis. The final hypothesis predicted that the likability would mediate the relationship between feedback type and propensity to conform. This analysis revealed that the conditions for mediation were not supported $F(42, 87) = 1.23, P = .162$. See Table 6.

Table 6

Effect of Feedback and Likeability on Propensity to Conform

	Type III Sum of Squares	<i>Df</i>	Mean Square	F	Sig.
Feedback Type x Likability	5.372	42	.128	1.285	.162

Note. Likability was mean centered.

DISCUSSION

In this study, I sought to test and extend existing literature to suggest that use of multi-source feedback is only beneficial for particular groups (Saavedra & Kwun, 1993). The major purpose of this study was to examine how people respond to the looming prospect of receiving 360 degree feedback. It was predicted that the anticipation of 360 degree feedback would influence how and whether individuals would change their responses on decision-making tasks. The influence from different feedback sources on conformity pressure was tested (e.g., 360 degree, supervisor, subordinates, and no feedback). The movement towards the position advocated by the majority was defined as one's *propensity to conform*. Furthermore, this prediction acknowledges that in the conformity process, individual decisions can be influenced or inhibited, presumably because of inhibitions arising from fear of majority evaluations. Also considered was the general point that conformity, or influence, is sometimes a function of other determinants like culture and likability. Team organizational culture was predicted to moderate the relationship between 360 degree feedback and conformity while the individual priority of being "liked" was predicted to mediate this relationship.

The study started with the hypothesis that anticipated 360 degree feedback type would influence individual propensity to conform, and in the context of multi-source feedback, increase the level of team influence on individual decision-making. Subordinates and peers are affected by organizational behaviors and decisions in ways that are not always apparent to the supervisor. It was predicted that different feedback constituencies like that of a subordinate would be distinctly different from that of the supervisor (traditional performance appraisal).

This predication is perplexing in that the effects of anticipated feedback type on individual propensity to conform were not supported. The results showed that

participants, regardless of anticipated feedback type, did not experience significant differences in the levels of conformity. Thus, the assumption that 360 degree feedback would result in a higher propensity to conform was not supported.

The second hypothesis was that the interaction of participants' anticipated feedback type and exposure to either individualistic or collectivistic organizational culture would affect their priority for being liked (Stage 1) as well as the interaction of participants' culture and concern for being liked would affect their propensity to conform (Stage 2). Unexpectedly, the interaction of anticipated feedback and culture as well as culture and likability did not influence being liked or propensity to conform. Thus, there was no support for team organizational culture to moderate the relationship between 360 degree feedback and conformity.

The final hypothesis was that the interaction of anticipated feedback type and concern of the participants for being liked would affect their propensity to conform. The lack of a main effect for likability on propensity to conform appeared consistent with the mixed findings of Deutsch and Gerard's (1955) study. The next section provides additional reasons for why the study's hypotheses may not have been supported.

Limitations and Future Directions

A very plausible explanation appears to be that the organizational cover story may have failed to generate the desired sense of individuals working within a group or team. Even though the majority of the participants accurately answered the culture and team role manipulation check, it may have been operationalized in a number of different ways. On the one hand, participants could have followed their prescribed priming condition and operated accordingly with their randomly assigned team members. On the other hand, given the lack of a prior history with their assigned team members in terms of their team members' personal attributes and prior performance,

the participants may not have generated a realistic reciprocal team member interaction. The lack of apparent team reliance could also have been affected by a low degree of goal independence (Van der Vegt, Emans, & Van der Vliert, 2001) or outcome interdependence (Van der Vegt, Emans, & Van der Vliert, 2000; Wageman, 1995). Furthermore, the cover story provided detailed individual team member information (e.g., names, roles and responsibilities). However, the suggested answer from each individual team member was not delineated. Only the overall team response was provided as an itemized view of the team response, which may have helped participants take steps for action planning in anticipation of the multi-source feedback. Moreover, a related explanation is that the participants may not have fully adhered to their role description and weakened the intended level of attribution necessary to fully promote a sense of individualism or collectivism. Given the all-encompassing background information and instructions – team roles and organizational culture norms (individualistic vs. collectivist) and assigned role responsibility (middle manager reporting to a supervisor and managing a team of direct reports) – the participants may have been overwhelmed with requirements that may have added to their concern for accuracy during the decision-making tasks of the study.

A second limitation was the use of a decision-making task that did not integrate well into the organizational cover story (Looking Glass, Inc.). Typically, the role of middle managers exists within the context of a business strategy and is designed to execute the strategy with the resources allocated – financial, material, and human (Schneider, Wheller, & Cox, 1992; Schneider, While, & Paul, 1998). A better linkage between the decision-making exercise and the organizational cover story may have helped to show how the performance and subsequent team feedback of the individual team members were aligned with the business strategy. Additionally, given the lack of familiarity of the participants with the mental rotation task, they may not

have felt qualified to assume the suggested response of the team. This lack of qualification would have hampered my intended desire to test the majority influence. A decision-making exercise that mirrored a real world business task may have better captured the intended essence of the constructs of interest (Berkowitz & Donnerstein, 1982).

A third limitation, though the reasons for this phenomenon are not entirely clear, is that the main effect of organizational culture on the propensity to conform was also not significant. Other researchers were able to find such an effect. For example, in the results of Goncalo and Duguid (2008), some support was provided for the role of conformity pressure; individualistic attributions liberated groups to express more disagreements. Moreover, numerous other studies have successfully used manipulations in research on the individual-collectivism dimension (e.g., Beersma & De Dreu, 2005; Chatman & Barsade, 1995, 1998; Goncalo, 2004; Goncalo & Duguid, 2008; Goncalo & Staw, 2006). Still, researchers have also acknowledged that individualism and collectivism are operationalized in very different ways, which may make conflicting results difficult to interpret (Goncalo & Krause, 2010).

A fourth limitation may stem from not providing participants with the feedback form or requesting them to complete the feedback form for each of their team members. Given that the central point of 360 degree feedback is to gather information from different feedback sources on the performance of the middle manager, the collection of feedback should have followed, which would have also created a heightened expectation for the forthcoming team feedback. For example, including a survey of items that take the form of a multirater-assessment instrument that has supervisor, peers, and direct reporters rate their middle manager may have helped to legitimize the anticipation of 360 degree feedback. In a similar study, Dominick, Reilly, & McGourty (1997) did not identify any differences among the subjects in

anticipation and feedback conditions. However, in their modified 1998 study, they did find a significant difference by making it more salient in the instructions that the participants would receive feedback the next time they met with the experimenter. Exposure to the feedback instrument may have also given the participants a stronger framework for understanding their own performance in a team context and a better focus for their attention on the relevant performance indicators. This exposure also makes the anticipation of 360 degree feedback potentially more threatening, for as participants complete their forms, they begin to sense the looming prospect of receiving such feedback at the end of the exercise. Such a belief is consistent with those reported by Reilly et al. (1996) and Smither et al. (1995), who found that exposure to a feedback instrument without feedback resulted in as much improvement as feedback itself. Unlike the present study, however, their results did not include a sample not exposed to the instrument.

Although there may be various reasons for this result, it is worth noting that Insko et al. (1983) argued that despite the widespread discussion in the literature regarding the concern with being liked, the amount of experimental evidence for the effect of the concern with being liked on conformity seems to be sparse and circumstantial. Perhaps part of the reason for the researchers' skepticism is the recognition of the limited implications of prior experiments (Berenda, 1950; Byrne, 1971; Schachter, 1951), thus raising the fifth limitation for conditions under which the prediction could not emerge.

Regarding the sixth limitation, a difficulty was present in capturing the ongoing, hierarchical, and interdependent nature of the relationships of middle managers with their supervisors, peers, and direct reports in a 1 hour laboratory study. The procedure to assign the participant to the middle manager position and the other seven participants to other roles in the team hierarchy (e.g., supervisor, peers, and

subordinates) was obviously so random to the participants that it may have undermined the credibility of the role assignment. The consequences of multi-source feedback in a laboratory setting clearly are not the same as they are in actual organizations in which a variety of rewards and penalties, including the future of the supervisor-manager-peer-subordinate relationship, may ultimately hinge on the anticipation and aftereffect of such feedback. Although the teams met only once for approximately 1 hour, the goal of the decision-making task was to create an interactive experience designed to teach the participants about teamwork and what some researchers refer to as generic team skills (behaviors that are beneficial to team members regardless of the work setting) (e.g., Gaddy & Wachtel, 1992). The self-regulation framework suggests that in organizations, inaccurate knowledge has some clear costs (Ashford & Tsui, 1991). Although a great deal of effort was taken to promote psychological realism (Berkowitz & Donnerstein, 1982; Carlsmith, Ellsworth, & Aronson, 1976), including using vivid and engrossing manipulations and creating real stakes by using monetary contingencies, the manipulation may not have fully captured the essence of an interdependent team hierarchy. In lieu of this limitation, it should be noted that there is meta-analytic support that suggests that laboratory findings generalize well across an array of psychological domains (Anderson, Lindsay, & Bushman, 1999).

Finally, in this experiment, I used a sample of undergraduates who had very little or no experience with multi-source feedback in an organizational setting. Perhaps the results would have been different in a quasiexperimental field setting in which 360 degree feedback is common practice for performance appraisal; moreover, the feedback results in accountability for action and follow-through. Thus, compared with actual middle managers, it is likely that these managers would be more greatly influenced by subordinate and peer feedback.

Beyond addressing the specific limitations noted in the previous paragraph, this study raises several interesting questions, which should be considered in future research. In an upcoming laboratory study, I plan incorporate a *peer feedback* condition. The current study did not test for this condition. As a result, the confound of the feedback of supervisors, peers, and subordinates within the 360 degree feedback condition may account for the difficulties in obtaining significant findings for anticipated feedback type on conformity. The aggregation of the multiple sources (e.g., supervisor, peer, and subordinate) into the 360 degree feedback condition may have created spurious relationships for this condition. An examination of each distinct 360 degree feedback source (e.g., supervisor, peer, subordinate) will perhaps render salient differences. Consistent with this later explanation, the greatest difference in multi-source feedback type means that differences were found between supervisors and subordinates. For college students, conformity pressures often originate in the overt attitudinal expressions and evaluations of their peers (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). The supervisor's attribution may only be salient in the presence of subordinate feedback. This presence of significant rating variance between supervisor and subordinate has been found in prior studies (e.g., Schmitt, Noe, & Gottschalk, 1986; Zammuto, London, & Rowland, 1982). For example, Klimoski and Inks (1990) found that if a supervisor thinks that particular subordinates believe they have performed well, the supervisors experience "expectational pressures." For example, pressure to conform to the wishes of their subordinates makes supervisors feel more accountable; thus, the supervisors are pressured to issue higher ratings.

The current study only provided the participants with two response options (same or different), which may have created a "boundary condition." In similar studies, the key distinction was the range of provided answers (i.e., Nemeth, 1976;

Nemeth & Wachtler, 1983). These researchers found evidence for how group influence may either narrow or widen the range of consideration from conventional to more novel solutions. Future studies should utilize a wider range of response options. If participants in the current study had greater or unrestricted response options, the chance to detect significant differences among the participants in a variety of anticipated feedback and culture conditions may have materialized (Nemeth & Wachtler, 1983). The upcoming laboratory study will incorporate a larger range of response options on the task exercise, an individual exercise that is identical to the procedure used by Galinsky et al. (2008). The participants will rate the task using a range from 1 to 11 (*not much* through *very much*). A comment box will be provided for additional input. This exercise is also more analogous to a typical organizational task.

In future studies, the conformity primed questions should be incorporated in the beginning of the problem set (or spread throughout) as opposed to in the latter half of the questions. Empirical data show that conformity often manifests on the first few trials or in the first few minutes of a discussion, even though the reasons for this effect are not entirely clear (Asch, 1951). The current study placed the decision-making questions that comprised the dependent variable in the latter half of the question set. It is the last half of the trials rather than the first half in which a sizable “group effect” for minority influence is typically evident (Nemeth et al., 1974). Consistent with this ordering, the participants’ responses on the latter half of the decision-making exercises were in the direction of the minority team’s responses.

My future research will also consider the aspect of a team created by the configuration of the team member attributes (Bell, 2007). The composition of a team is considered to have a strong influence on team processes and outcomes (Bell, 2007). I am particularly interested in examining the anticipated feedback-conformity

relationship within homogeneous and heterogeneous teams. I predict that the anticipation of feedback within these teams will have different conformity reactions. Individuals within homogeneous teams should be more likely to conform under the influence of others, given similarities in backgrounds, experience and thought, while feedback from individuals within heterogeneous teams should result in less conformity due to divergent roles (Mello & Ruckes, 2006). The importance placed on team design derives from the need to align a team's composition with organizational goals and resources (Koslowski & Ilgen, 2006). An examination of 360 degree feedback and team composition is critical given the divergent nature between homogeneous and heterogeneous decision-making teams.

Conclusion

With the increased utilization of 360 degree feedback for purposes beyond performance appraisal, such as for succession planning and outplacement (Church & Bracken, 1997), it is imperative that organizations learn how to manage the conformity pressures stemming from anticipated feedback. Feedback involves multistage cycles: anticipation, reception, interpretation, and application (London & Smither, 2002). The effects of 360 degree feedback should be measured at each stage to understand better how to maximize individual and team effectiveness. In this study, I have attempted to show that not all feedback is effective in improving performance and that the anticipation of 360 degree feedback may interfere with efforts to improve performance. Relatively little is known about how 360 degree feedback can provide reliable information about the performance of coworkers, supervisors, or suppliers. In turn, the decisions that are based on 360 degree feedback may ultimately improve or impair organizational effectiveness.

Research is still needed on the different sources of 360 degree feedback. The results of the present study indicate that more laboratory studies on 360 degree

feedback are needed. This study also highlights the importance of taking into account the team cultural orientation and individual differences (priorities). Following the approaches to overcome the identified limitations, it would be possible to determine what needs to be done to improve ratee reactions to anticipated 360 degree feedback, and ultimately improve the work behaviors and performance of the ratees as well as similar considerations within a team-based environment. Without such consideration, the continued used of 360 degree feedback by organizations may actually result in unintended consequences. It remains for future researchers to investigate these complex and potentially restrictive conditions.

APPENDIX A
TEAM HIERARCHY CHART

 Cornell University

**“Looking Glass Inc.”
Advanced Products Division**

Below is a copy of the group’s organization chart for your role within the Advanced Products division. You were assigned to role of one of the newly appointed **middle managers**.

It is very important that you become familiar with your assigned role, role assignment, and detailed role background information for the other members of your team.



```
graph TD; CE[Chief Executive] --> MM1[Your role Middle Manager]; CE --> MM2[Middle Manager]; CE --> MM3[Middle Manager]; MM1 --> SR1[Subordinate report]; MM1 --> SR2[Subordinate report]; MM1 --> SR3[Subordinate report];
```

>>

APPENDIX B

TEAM HIERARCHY CHART INSTRUCTIONS

 Cornell University

**“Looking Glass Inc.”
Advanced Products Division**

Below is a copy of the group’s organization chart for your role within the Advanced Products division. Please become familiar with your assigned role, role assignment, and team background information for the other members of your team.

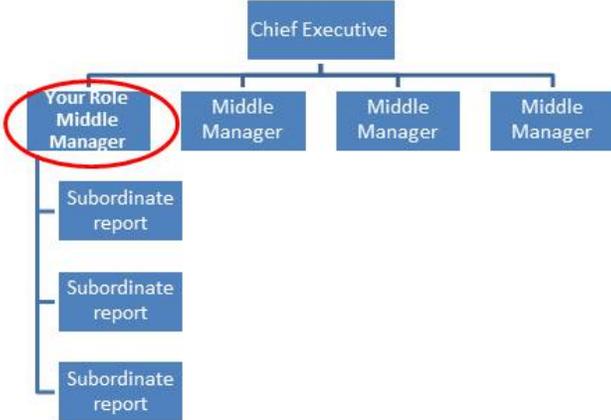
5 Key Points to Remember:

1. You will be working as part of a **team of 8 members**.
2. As previously stated, **you are assigned to one of the middle manager positions**
3. Within this team hierarchy your middle manager position occupies **the middle position**
4. **In your role as a "middle manager" you have:**
 1. *One* chief executive you report to;
 2. *Three* middle managers (peers) at your same level and;
 3. *Three* subordinates (direct reports) that report to you

Your Chief Executive is:
Your Peer Middle Managers are:
Your Subordinate Direct Reports are:

5. **Role Descriptions:**

1. **Chief Executive:** Responsible for overall management of the group and oversees progress towards group goals and objectives. They work with other division managers regarding hiring, compensation and other personnel matters.
2. **Peer Middle Managers:** Works independently and collaboratively with each of the other three peer middle managers (at same position level). Is responsible to help instruct, mentor and manage their subordinate reports.
3. **Subordinate Direct Reports:** Reports to a middle manager. There are three subordinate reports that report directly to you. You serve in a role to help instruct, mentor and manage these subordinate direct reports.



```
graph TD; CE[Chief Executive] --- MM1[Middle Manager]; CE --- MM2[Middle Manager]; CE --- MM3[Middle Manager]; CE --- MM4[Middle Manager]; MM1 --- SR1[Subordinate report]; MM1 --- SR2[Subordinate report]; MM1 --- SR3[Subordinate report];
```

APPENDIX C

LOOKING GLASS COVER STORY (INDIVIDUALISTIC CULTURE)



Cornell University

The president and founder of Looking Glass Inc., M.L. Smith, is still the driving force of Looking Glass Inc.'s corporate culture. He and the founding senior managers are proud of LG Inc.'s reputation in the industry as an individualistic organization. At LG Inc. individual effort and initiative are highly valued and rewarded, and competition among individuals and departments is considered to be the best road toward innovation and corporate success. Both employees and outsiders categorize LG Inc. as having a very individualistic culture.

Your pay bonus will be based on individual-achievement and the individual's contribution to LookingGlass Inc.'s performance.

Close

APPENDIX D

LOOKING GLASS COVER STORY (COLLECTIVISTIC CULTURE)



Cornell University

The president and founder of Looking Glass Inc., M.L. Smith, is still the driving force of Looking Glass Inc.'s corporate culture. He and the founding senior managers are proud of LG Inc.'s reputation in the industry as a team organization. At LG Inc. cooperation and teamwork are highly valued and rewarded, and cooperation among individuals and departments is considered to be the best road toward innovation and corporate success. Both employees and outsiders categorize LG Inc. as having a very collectivistic culture.

Your pay bonus will be based on teamwork and the team's contribution to LookingGlass Inc.'s performance.

Close

APPENDIX E

EXAMPLE: INDIVIDUAL PRIORITY QUESTION FOR LIKABILITY



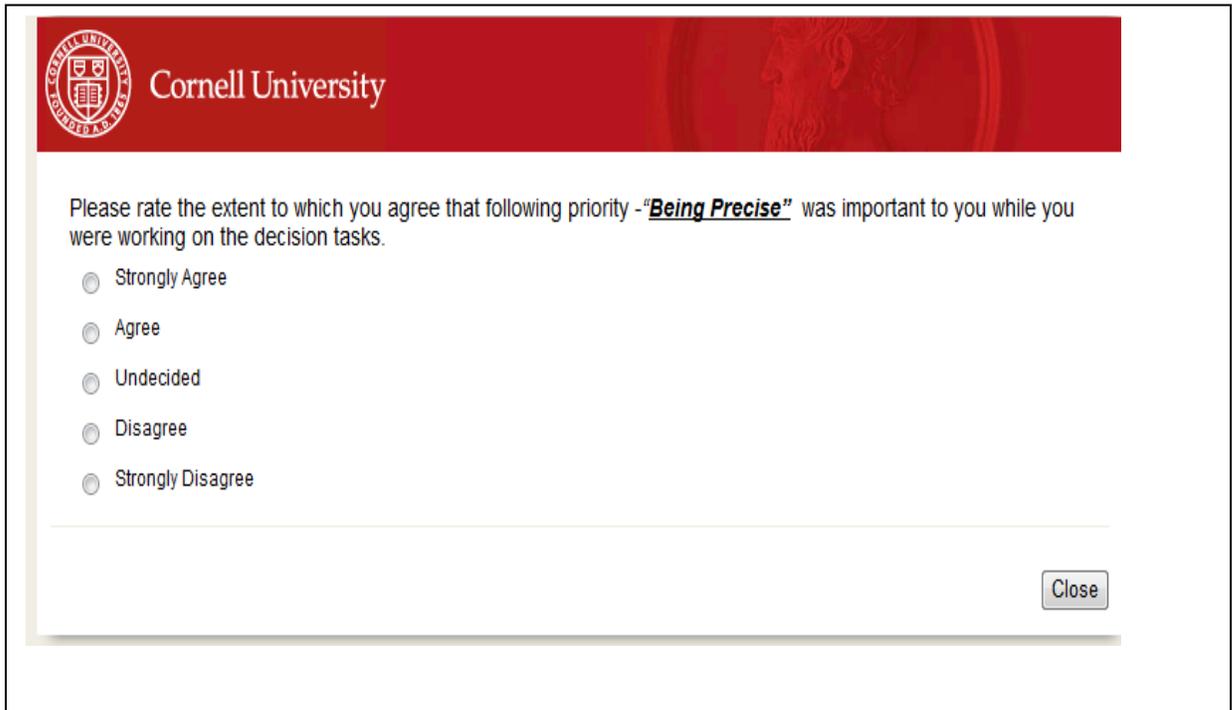
Cornell University

Please rate the extent to which you agree that following priority - "Being Liked" was important to you while you were working on the decision tasks.

- Strongly Agree
- Agree
- Undecided
- Disagree
- Strongly Disagree

APPENDIX F

EXAMPLE: INDIVIDUAL PRIORITY QUESTION FOR ACCURACY



The image shows a screenshot of a survey question from Cornell University. The header is a red bar with the Cornell University logo and name. The question asks the respondent to rate the importance of the priority "Being Precise" while working on decision tasks. There are five radio button options: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. A "Close" button is located in the bottom right corner of the question box.

 Cornell University

Please rate the extent to which you agree that following priority -"***Being Precise***" was important to you while you were working on the decision tasks.

- Strongly Agree
- Agree
- Undecided
- Disagree
- Strongly Disagree

[Close](#)

APPENDIX G

FEEDBACK MANIPULATION CHECK QUESTION



Cornell University

To ensure that you understand your role before the simulation begins please click on the people in the chart who will be providing you with performance feedback at the end of the team exercises.



```
graph TD; CE[Chief Executive] --- MM1[Your Role Middle Manager]; CE --- MM2[Middle Manager]; CE --- MM3[Middle Manager]; CE --- MM4[Middle Manager]; MM1 --- SR1[Subordinate report]; MM1 --- SR2[Subordinate report]; MM1 --- SR3[Subordinate report];
```

Close

APPENDIX H

3-DIMENSIONAL OBJECT PAIR INDIVIDUAL TASK INSTRUCTIONS



Cornell University

In this simulation you will work on a complex decision making task as part of your Looking Glass Inc., Team.

Specifically, you will be presented with pairs of 3-dimensional objects.

Your task is to judge whether the objects can be rotated to match each other (hence called "same") or no rotation can make them match (hence called "different").

Before you begin working with your team, please complete **a practice question** on your own. If you need clarification of the instructions please contact the lab assistant.



APPENDIX I

EXAMPLE: INDIVIDUALISTIC CULTURE MANIPULATION CHECK

QUESTION



Cornell University

At Looking Glass Inc. individual effort and initiative were highly valued and rewarded and competition among individuals and departments was considered to be the best road toward innovation and corporate success.

- Extremely characteristic
- Characteristic
- Neither characteristic or uncharacteristic
- Not characteristic
- Extremely uncharacteristic



APPENDIX J

EXAMPLE: COLLECTIVISTIC CULTURE MANIPULATION CHECK

QUESTION



Cornell University

At Looking Glass Inc. cooperation and teamwork were highly valued and rewarded and cooperation among individuals and departments was considered to be the best road toward innovation and corporate success.

- Extremely characteristic
- Characteristic
- Neither characteristic or uncharacteristic
- Not characteristic
- Extremely uncharacteristic

[Close](#)

APPENDIX K
OTHER DOCUMENTS

Study Introduction



Welcome and thank you again for participating today.

This study is complex business simulation. There are several other participants in this session; like you, each participant is in a private cubicle and will work individually on both the individual and team tasks. More specifically, this study has two phases; you will be provided with more details shortly.

In general, for the **first phase** you will work alone and complete several decision making tasks.

In the **second phase** you will move into a virtual common room and work with your team members on several decision making tasks. You will be automatically entered into the virtual team room via this survey software tool. All communication with your team members when in the virtual common room will take place on your computer.

Now let's move into the first phase.

[>>](#)

Looking Glass Cover Story



Cornell University

"Looking Glass Inc."

You will be participating in a business simulation called Looking Glass Inc.

Below are the details of the organization that you need to know in order to participate in this simulation.

There are 20 managers in the Looking Glass (LG) Inc. organization, ranging from plant managers to vice presidents. These managers are divided among three divisions: Advanced Products (seven managers), Commercial Glass (six managers), and Industrial Glass (seven managers).

Each chief executive has a team of middle managers. The middle managers report up to their chief executive as well as having managerial responsibilities for their subordinate direct reports. More specifically, the middle managers reports to their assigned chief executive and each of the middle managers is also responsible for a group of subordinate reports.

You are assigned to the Advanced Products division in the role of one of the newly appointed middle managers for a group of three subordinate direct reports. You are replacing one of the previous middle manager who died suddenly. **You have three peer middle managers in your organization. You report to the one of the chief executive officers within the Advanced Products division.**

>>

360 Degree Feedback Manipulation (1 of 2)



Cornell University

Performance Feedback:

Understanding the hierarchy and your assigned role in that hierarchy is important because your performance and pay in this study will be based on feedback **from each of your group members** that you will receive at the end of the team exercises.

More specifically, at the end of your team exercises; you will receive a feedback report with feedback from each of your seven team members (from your one (1) chief executive, your three (3) peer middle leaders and your three (3) subordinate direct reports. You will have the opportunity to earn extra pay today based on this feedback. **In other words, your performance feedback will come from input from all 7 members of your team.** Again, this feedback will serve as the basis for your performance evaluation.

360 Degree Feedback Manipulation (2 of 2)



Cornell University

At the end of the next task, you will be evaluated by your group (entire team: chief executive, peer middle managers and subordinate direct reports) to decide if you will be selected to work on another team for extra money. All of the 7 members of your team (your (1) chief executive, your three (3) peer middle leaders and your three (3) subordinate direct reports) will vote whether or not you should be selected to work with this next bonus team.

Close

Supervisor Feedback Manipulation (1 of 2)



Cornell University

Performance Feedback:

Understanding the hierarchy and your assigned role in that hierarchy is important because your performance and pay in this study will be based on feedback **only from your chief executive** that you will receive at the end of the team exercises.

At the end of your team exercises, you will receive a feedback report with feedback from your one (1) chief executive. You will have the opportunity to earn extra pay today based on this feedback. **In other words, your performance feedback will come from only your chief executive and no one else on your team** (you will **NOT** receive feedback from your peer middle managers or subordinate direct reports). Again, this feedback will serve as the basis for your performance evaluation.

[Close](#)

Supervisor Feedback Manipulation (2 of 2)



Cornell University

At the end of the next task, you will be evaluated by your chief executive to decide if you will be selected to work on another team for extra money. Only your chief executive will vote whether or not you should be selected to work with this next bonus team.

Close

Subordinate Feedback Manipulation (1 of 2)



Cornell University

Performance Feedback

Understanding the hierarchy and your assigned role in that hierarchy is important because your performance and pay in this study will be based on feedback from each of your (3) subordinate direct reports that you will receive at the end of the team exercises.

More specifically, at the end of your team exercises; you will receive a feedback report with feedback from each of your three (3) subordinate direct reports. You will have the opportunity to earn extra pay today based on this feedback. In other words, your performance feedback will come only from the input of your (3) subordinate direct reports. Again, this feedback will serve as the basis for your performance evaluation.

Close

Subordinate Feedback Manipulation (2 of 2)



Cornell University

At the end of the next task, you will be evaluated only by your subordinate direct reports. They will decide if you will be selected to work on another team for extra money. All three (3) of your subordinate direct reports will vote whether or not you should be selected to work with this next bonus team.

Close

No Feedback Manipulation (1 of 2)



Cornell University

Performance Feedback:

At the end of this study, **you will have the opportunity to earn extra pay based your performance.** Understanding the hierarchy and your assigned role in that hierarchy is important because it will provide the basis for your performance and pay

Note: You will **not** receive any feedback from your chief executive, peer middle managers or subordinate direct reports.

Close

No Feedback Manipulation (2 of 2)



Cornell University

At the end of the next task, you or a member from your entire team (chief executive, peer middle managers and subordinate direct reports) will be randomly selected to work on another team for extra money.

Close

360 Degree Feedback Condition Decision-Making Task Instructions



Cornell University

Background: Now that you're done the practice question, please wait while we access the server for your team members information. You are now assigned to work with your entire team on this decision making tasks. Your team members have assumed roles that of your chief executive, middle manager peers, and subordinate direct reports. **Your role assignment is the same. You are a middle managers with three subordinate direct reports and a chief executive.**

You will receive feedback on your performance at the end of this exercise from ALL of your team members (your (1) chief executive, your three (3) peer middle leaders and your three (3) subordinate direct reports) **and have the opportunity to earn extra money today based upon this feedback.** There are correct answers to each of the problems and the metric of performance will be your level of accuracy in relation to answering each problem correctly.

Instructions: Are the objects below the same (can be rotated to match) or different (no rotation can make them match)? Please indicate your answer by clicking a box marked "same" or "different." There is no time limit, you are allowed as much time as you need to make your decision. Please, work with your team members on the next 30 questions. The percentage of your team's response for each question in terms of their decision that the object pair is the "same" and "different" is displayed for each question.

Close

Supervisor Feedback Condition Decision-Making Task Instructions



Cornell University

Background: Now that you're done the practice question, please wait while we access the server for your team members information. You are now assigned to work with your entire team on this decision making task. Your team members have assumed roles that of your chief executive, middle manager peers, and subordinate direct reports. **Your role assignment is the same. You are a middle managers with three subordinate direct reports and a chief executive.**

You will receive feedback on your performance at the end of this exercise from your chief executive only. You will have the opportunity to earn extra money today based upon this feedback. There are correct answers to each of the problems and the metric of performance will be your level of accuracy in relation to answering each problem correctly.

Instructions: Are the objects below the same (can be rotated to match) or different (no rotation can make them match)? Please indicate your answer by clicking a box marked "same" or "different." There is no time limit, you are allowed as much time as you need to make your decision. Please, work with your team members on the next 30 questions. The percentage of your team's response for each question in terms of their decision that the object pair is the "same" and "different" is displayed for each question.

Close

Subordinate Feedback Condition Decision-Making Task Instructions



Cornell University

Background: Now that you're done the practice question, please wait while we access the server for your team members' information. You are now assigned to work with your entire team on this decision making tasks. Your team members have assumed roles that of your chief executive, middle manager peers, and subordinate direct reports. **Your role assignment is the same. You are a middle managers with three subordinate direct reports and a chief executive.**

You will receive feedback on your performance at the end of this exercise only from ALL of three (3) of your subordinate direct reports. You will have the opportunity to earn extra money today based upon this feedback. There are correct answers to each of the problems and the metric of performance will be your level of accuracy in relation to answering each problem correctly.

Instructions: Are the objects below the same (can be rotated to match) or different (no rotation can make them match)? Please indicate your answer by clicking a box marked "same" or "different." There is no time limit, you are allowed as much time as you need to make your decision. Please, work with your team members on the next 30 questions. The percentage of your team's response for each question in terms of their decision that the object pair is the "same" and "different" is displayed for each question.

No Feedback Condition Decision-Making Task Instructions



Cornell University

Background: Now that you're done the practice question, please wait while we access the server for your team members' information. You are now assigned to work with your entire team on this decision making tasks. Your team members have assumed roles that of your manager, team leader peers, and direct reports. **Your role assignment is the same. You are a middle manager with three subordinate direct reports and a chief executive. You will have the opportunity to earn extra money today based upon your performance.** There are correct answers to each of the problems and the metric of performance will be your level of accuracy in relation to answering each problem correctly.

Instructions: Are the objects below the same (can be rotated to match) or different (no rotation can make them match)? Please indicate your answer by clicking a box marked "same" or "different." There is no time limit, you are allowed as much time as you need to make your decision. Please, work with your team members on the next 30 questions. The percentage of your team's response for each question in terms of their decision that the object pair is the "same" and "different" is displayed for each question.

[Close](#)

Transition From Individual Decision-Making Task To Team Decision-Making Tasks



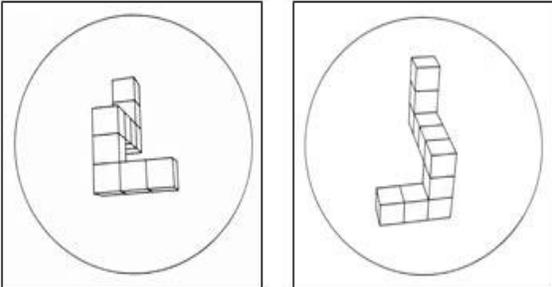
Cornell University

At this point all of the background details for this simulation should be clear including (1) the culture at Looking Glass Inc., (2) who will deliver you feedback and (3) how that feedback will affect your pay for this experiment. Please wait 1 minute while the system is accessing the server for your team members' information.



Example: Decision-Making Question Where the Team's Response was in Favor of the Incorrect Answer

 Cornell University



Please, work with your team members and indicate if the objects above can be rotated to match each other (hence called "same") or no rotation can make them match (hence called "different").

Your team's response

- Same 90%
- Different 10%

Your response: The objects above are the:

Same Different

[Close](#)

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