THE ROLE OF REGULATORY FOCUS ON A PEER-FEEDBACK PROCESS:

A LONGITUDINAL STUDY WITH MBA STUDENTS

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ABSTRACT

We investigated the role of regulatory focus on individuals' reactions to feedback on leadership skills in the context of small learning teams. A total of 285 students participated in a peer-feedback assessment process twice during their MBA program. Results show that promotion-focused individuals evaluate themselves at higher levels and receive higher peer ratings of team leadership than prevention-focused individuals. Interestingly, we also found that regulatory focus has a moderating effect on satisfaction with the feedback process and on leadership improvement. Promotion-focused individuals were equally satisfied with positive and negative feedback but improved their leadership ratings after receiving positive feedback (high peer ratings). In contrast, prevention-focused individuals showed satisfaction only with positive feedback and showed no improvement in their leadership skills regardless of the type of feedback. We include implications of results for research on regulatory focus and feedback as well as their practical implications for leadership development.

Keywords:

Regulatory Focus, Multisource Feedback, Leadership Development.

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Learning teams have become widespread in business schools as a tool to make students active participants in their own education and to develop a number of interpersonal skills that are critical for their success as managers and leaders (Boni et al., 2009; Donia et al., 2018; Ohland et al., 2012; Verzat et al., 2009). Learning teams offer students significant information on task assignments, provide emotional support, and are an excellent source of self-awareness and self-development (e.g., Brutus et al., 2013). In such teams, students spend a considerable amount of time working together in an intense and demanding environment, and teammates are in an ideal position to provide insights about other members and their impact on the team. Accordingly, many instructors use peer-feedback exercises to facilitate the transfer of information among team members (Donia et al., 2018; Gueldenzoph & May, 2002; Hansen, 2006), as they have proven to be a powerful tool to improve and develop individuals' leadership skills (Brett & Atwater, 2001).

Extant research in this area has found that the acceptance of feedback is a key psychological process underlying its effects on subsequent behavior (Brett & Atwater, 2001; Ryan et al., 2000). When individuals accept the feedback offered, they become more likely to act upon it. An important research stream has explored strategies that mitigate negative reactions to feedback (Feys et al., 2011; Kluger & DeNisi, 1996), such as making feedback recipients feel good about the feedback received (Brett & Atwater, 2001; Ryan et al., 2000) and providing procedural information (Feys et al., 2011).

Whereas researchers have explored the characteristics of feedback itself and the process to deliver it, much less attention has been given to the recipients of feedback. This is an understudied area with potential for a significant contribution in the feedback literature. If

individual reactions to feedback differ based on personal characteristics, then programs that apply the same methods to deliver feedback for all employees will achieve suboptimal results. In the present study, we draw from the literatures on self-regulation (Brockner & Higgins, 2001; Higgins, 1997, 1998) and team leadership (Carson et al., 2007; Hackman, 2002; Kozlowski et al., 2016; McGrath, 1962) to explore the effect of self-regulation orientation on individual reactions to feedback about leadership behavior in small teams.

We examine a peer-feedback process of MBA students assigned to formal learning teams, which evaluated their team leadership skills at two different points in time four months apart. Through this longitudinal study, we seek to explain individuals' varying reactions to feedback interventions with the regulatory process that people use to align themselves, in terms of behaviors and self-conceptions, with specific goals or standards (Higgins 1997, 1998). At the core of self-regulation theory is the idea that individuals set goals, evaluate their progress against these goals, and adapt their behavior to close the gap between their current states and their ideal goals. An important aspect of this process is the feedback loop that provides information about a current state and produces a correction to bring the individual in line with the desired goal (Carver & Scheier, 1998). To better understand this mechanism, which represents the ultimate purpose of the feedback process, we also include in our study the investigation of how people develop self-ratings. We know that in order to be willing to develop existing skills and build new ones, individuals need to recognize some room for improvement (Lee & Carpenter, 2018). The gap between one's private image and the feedback one receives from others is an important stimulus for development (Bass & Yammarino, 1991).

This study contributes to the literatures on feedback and leadership development in several ways. First, over the last few decades many researchers have stressed the importance of developing interpersonal skills among MBA students (e.g., Bedwell, Fiore, & Salas, 2014), and MBA programs have responded by extensive use of self-awareness and peer-feedback

exercises (Donia et al., 2018). Learning interpersonal skills, however, is a self-regulated activity that uses feedback as a catalyst for individuals' adaptive processes (Butler & Whine, 1995). As students monitor their engagement with their learning teams, they process external feedback and generate internal feedback to regulate their own behavior. Individual differences have received little attention in the feedback literature, but they play a key role in how people regulate themselves (Higgins, 1997, 1998), an oversight addressed in our study.

Second, we answer recent calls for longitudinal research on leadership development (e.g., Vogel, Reichard, Batistic & Cerne, 2020) and regulatory focus (e.g., Kark & Van Dijk, 2019). We use a longitudinal field study to examine the role of regulatory focus on individuals' reactions to feedback and their skill-acquisition later. This design allows us to examine the connection between students' emotional reactions to feedback and their skill improvement.

Finally, our results have implications for the literature on self-regulation. Many studies have documented the effects of regulatory focus on individual work outcomes (e.g., Johnson et al., 2015). However, fewer papers have explored the interpersonal consequences of self-regulation. In response to calls for more studies on the social and interpersonal repercussions of regulatory focus (e.g., Lanaj et al., 2012), our study examines the role of self-regulation focus on two key aspects of team dynamics: attributions of leadership and feedback processes.

THEORY AND HYPOTHESES

Team Leadership

Given that most leadership theories assume a direct interaction between leaders and followers, and among followers themselves as they exchange their views on the leader, many authors claim that a small group is one of the most relevant social contexts to examine leadership processes (e.g., Kozlowski et al., 2016). A popular perspective to study leadership in small teams is the functional approach developed by McGrath (1962, 1984) and extended by Richard Hackman and colleagues (Hackman, 2002; Hackman & Wageman, 2005; Hackman

& Walton, 1986; see Zaccaro et al., 2001). According to McGrath (1962: 5), the function of the leadership role is "to do, or get done, whatever is not adequately handled for the group needs". Leadership is considered a social problem-solving activity where leaders manage "to ensure that all functions critical to both task accomplishment and group maintenance are adequately taken care of" (Hackman & Walton, 1986: 75). A key aspect of the functional approach is that leadership is not a specific set of behaviors, but rather generic responses to help team members solve whatever problem the team faces at a given time. This perspective specifies three main areas of operation for team leaders that can be applied straightforwardly to learning teams in educational settings: (1) direction, to specify the group's main overall purpose or strategic vision, (2) motivation, to energize team members so that they put enough effort and persistence into pursuing the team's goals, and (3) support and development, to enhance the climate in the team, develop the necessary skills in other members of the team, and improve team processes.

We rely on this model by conceptualizing team leadership as those actions conducted by team members to provide direction, motivation, and support to other team members. Different versions of these three dimensions have been included in other models of leadership (e,g, Bass & Avolio, 1994; Conger & Kanungo, 1998; Yukl, 2009), all related to perceptions of leadership emergence (see Bass & Bass, 2008; Hoffman, 1979) and leadership effectiveness (e.g., Kirkpatrick & Locke, 1996). The first dimension, offering direction or strategic vision, refers to the ability to establish future-focused action plans for the team from a systems and holistic perspective (Liedtka, 1998). Strategic thinking solves complex problems by combining a rational and convergent process with a creative and divergent approach. In the context of educational learning teams, offering direction helps the team by prioritizing tasks and activities, making team members aware of opportunities and challenges, and helping team members develop a comprehensive view of team activities.

The second dimension, providing motivation or influence, reflects the ability to sway the attitudes and behaviors of team members. A key determinant of leadership effectiveness is the ability to influence others to pursue the goals of the team or the organization; in fact, Yukl (2009: p. 23) states that "leadership is the process of influencing others to understand and agree about what needs to be done." In the context of educational learning teams, all team members have opportunities to use motivational tactics. As members work on team assignments, they need to exercise influence and gain support to align other team members to pursue their common goals.

The third dimension, giving support and coaching, is a central characteristic of developmental and transformational leaders (Bass & Avolio 1994). Individuals who help and coach other team members become more visible, are highly respected, and secure their standing in the team (Tyler & Blader, 2001). In the context of educational learning teams, offering coaching and support refers to the ability to help others, give appropriate and constructive feedback, and be open to sharing relevant information with other team members.

Most learning teams in educational settings function as self-managed teams with no single individual formally appointed as the leader, and it is important to discuss the nature of leadership in these teams and how we conceptualize team leadership. Traditional leadership research has adopted a leader-centric perspective which assumes that leadership functions are the responsibility of one single individual acting as the formal leader of the group (see Bass & Bass, 2008; Yukl, 2009). Instead, studies of self-managed teams (Douglas & Gardner, 2004; Manz & Sims, 1980) question this assumption and view team leadership as an emergent and distributed phenomenon that cannot be allocated to one single individual (e.g., Carson et al., 2007; Mayo et al., 2003; Pearce & Conger, 2003; Pearce et al., 2009; Pearce et al., 2010). These authors argue that in a self-managed team without formal supervision team members share the leadership function by adopting different roles. For example, Pearce and Conger (2003: 1)

define shared leadership as "a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both." We integrate the functional perspective of team leadership with research on shared models of leadership, conceptualizing team leadership as those activities conducted by members of a team that provide a strategic vision, motivate and influence, and support and coach team members to accomplish the team's performance goals.

The distribution of leadership and influence in a team, however, is not uniform. As members of problem-solving teams work together, they evaluate each other's skills and competence, and team members who are viewed as the most capable become more influential (Hoffman, 1979). In fact, prior research on leadership emergence has shown that team members who emerge as leaders have good communication skills, possess high levels of self-confidence and self-efficacy, are more persuasive and influential, display more effective listening skills, and spend more time helping others (see Acton et al., 2019, for a review). Thus, the degree of leadership influence attributed to each member of the team is, to a large extent, based on those skills and personal characteristics typically associated with leadership functions. We next outline the basic principles of Regulatory Focus theory as they relate to team leadership and feedback.

Regulatory Focus Theory

Regulatory Focus Theory (RFT) (Higgins, 1997, 1998; Higgins & Spiegel, 2004) is a theory of self-regulation that seeks to explain people's adaptive processes as they pursue individual goals. RFT proposes that people self-regulate through two different systems that satisfy two basic human needs: nurturance and security. Nurturance is addressed through self-regulation that focuses on promotion, by pursuing desired goals through advancement and accomplishments. Promotion-focused people have a need for growth and development and are

more concerned with reaching ideal goals. Security is addressed through self-regulation that focuses on prevention, by following duties and obligations and avoiding situations that interfere with desired end-states. Prevention-focused people have a need for security and safety, are more concerned with avoiding undesired circumstances, and show a state of vigilance to assure safety and non-losses (Brockner & Higgins, 2001; Crowe & Higgins, 1997). These two self-regulatory systems can emerge from diverse circumstances, such as a chronic disposition determined by personality and early life experiences or as a situationally induced psychological state (Higgins, 1997, 1998). It is important to note that promotion and prevention are independent foci (i.e., one person might show high levels of one, both, or neither) and for this reason it is necessary to analyze them separately (Kark & Van Dijk, 2007, 2019).

An important aspect of RFT is the idea of congruence, or fit, between regulatory focus and how people react to a type of stimuli. Individuals are motivated to act with their dominant response, and their regulatory focus predisposes them to react in certain ways to search for rewards or avoid punishment. For example, promotion-focused people will be more responsive to situations that provide positive incentives and allow them opportunities to accomplish their goals through gains and advancements. Prevention-oriented individuals, however, are more likely to take action and respond to stimuli that require avoidance of punishment.

We therefore expect promotion- and prevention-focused people to react differently when dealing with positive and negative feedback, because the nature of the feedback interacts differently with their self-regulating behavior. Individuals with a dominant system focusing on promotion should be inclined to show a constructive attitude towards any type of feedback in general because it provides an opportunity to improve and better themselves. In contrast, individuals with a dominant system focused on prevention may tend to care less about positive feedback and be more likely to show vivid reactions (i.e. agitation) when confronted with negative feedback. We therefore propose that in multisource feedback processes, regulatory

focus plays an important role in three ways. First, it affects leadership behavior in teams, influencing the feedback individuals are likely to receive from others. Second, it affects tendencies in self-evaluations based on how individuals see themselves, resulting in different estimations of leadership capabilities. Finally, it affects individual satisfaction and experience, arising from how people approach pleasure and avoid pain.

Regulatory Focus and Peer Ratings from Team Leadership

Learning teams in educational settings are highly interdependent, and individual contributions are essential to the overall success of the team. Team members who are goal directed, future oriented, hardworking, and persistent in reaching the goals of the team are perceived as valuable members and are given a certain degree of power and influence in the team (Hoffman, 1979). These personal attributes are common in individuals with a promotion focus (Higgins & Spiegel, 2004), and we expect them to be perceived as influential members of the team for three main reasons. First, promotion-focused individuals see the world filled with opportunities and possibilities. They are concerned with growth and accomplishments, and they use eager and active strategies to pursue their goals. They set high standards and challenging goals and are more persistent in pursuing difficult goals (Higgins & Spiegel, 2004). These traits are all associated with the team leadership function of providing direction. Second, there is empirical evidence showing that promotion-focused individuals are more open to change, more creative when approaching problem-solving activities and more willing to take risks (e.g., Ahmadi et al., 2017; Crowe & Higgins, 1997; Kark et al., 2018). They also consider more alternatives when making decisions and have a worldview that is more flexible and open to change (Crowe & Higgins, 1997; Liberman et al., 1999). These are all characteristics closely associated with inspirational (Conger & Kanungo, 1998) and transformational leadership (Bass & Avolio, 1994). Finally, promotion-focused individuals tend to be generally optimistic and have higher self-esteem (Grant & Higgins, 2003; Leonardelli et al., 2007; Moretti & Higgins,

1990). These personal characteristics have been linked to leadership emergence (see Acton et al., 2019). Accordingly, because team leadership is associated with goal achievement and inspiration, we expect promotion-focused individuals to receive high ratings on team leadership skills.

In contrast, we expect that individuals with a prevention focus will receive lower ratings of team leadership. Prevention-focused individuals are socialized to fulfill their duties. They are concerned with safety, responsibility, and obligations. They are vigilant to prevent bad things from happening as they pursue their goals. Individuals operating with a prevention focus use avoidance as goal attainment, are very sensitive to punishment, and experience a wider range of negative emotions. Even though these characteristics can be associated with team performance, (i.e., error-seeking and correction activities are necessary for team effectiveness), they are not related to perceptions of leadership (see Bass & Avolio, 1994). In addition, while perceptions of leadership tend to be associated with change (i.e., Herold et al., 2008), there is empirical evidence that prevention focus is related to a commitment to the status quo (Crowe & Higgins, 1997; Herzenstein et al. 2007; Johnson et al., 2017; Kark et al., 2018; Liberman et al., 1999). This preference for the status quo seems to be related to a heightened sensitivity to potential losses and increased motivation to minimize possible regret if things do not go well (Liberman et al., 1999). Finally, prevention focus has been found to be uncorrelated with self-esteem which is a strong predictor of leadership (Grant & Higgins, 2003). Thus, we expect that prevention focus has a negative association with peer ratings for team leadership.

Hypothesis 1: Team members with a high promotion focus will receive higher ratings of team leadership skills by their peers, whereas individuals with a high prevention focus will receive lower ratings of team leadership skills.

Regulatory Focus and Self-ratings of Team Leadership

One of the most pervasive findings in the literatures on leadership development and feedback is the gap between individuals' self-assessment and their assessment by others (Heidemeir & Moser, 2009; Lee & Carpenter, 2018). Compared to the views of third parties, individuals' evaluation of their own skills and performance is usually higher. Many 360-degree feedback interventions consider the gap between self-ratings and peer ratings as an important window of opportunity to explore areas for development apparently hidden to individuals (Heidemeier & Moser, 2009). In fact, if we believe that we are very good at something, we do not see the need to work on developing further skills. It is therefore important to understand which personal characteristics inflate or deflate individuals' perceptions of their leadership skills. We expect self-regulation to have a significant effect on individuals' self-assessment of their leadership skills, since it relates so deeply to how individuals see their relationship with the external world (opportunities versus threats).

Two basic motives for self-assessment often described in the self-regulation literature are self-enhancement and self-protection (Alicke & Sedikides, 2011; Hepper et al., 2010; Wood et al., 1994). As individuals strive to protect their self-esteem, they promote positive self-views (self-enhancement) and prevent negative views of themselves (self-protection). Self-enhancement theory suggests that people have a basic drive to see themselves positively and receive positive evaluations from others (Fiske, 2018; Inderrieden et al., 2004; Schrader & Steiner, 1996). For example, research shows that people see themselves as superior to their peers, take credit for success, deny responsibility for failure, and forget negative feedback more than positive feedback (see Alicke & Sedikides, 2011). In general, high self-esteem is associated with self-enhancement strategies (Baumeister et al., 1989).

In contrast, self-protection strategies serve to prevent negative views of the self, causing people to exert caution, minimize risks, and steer clear from challenges (Heimpel et al., 2006;

Wood et al., 1994). Self-protective strategies involve self-handicapping, sandbagging, and appearing competent (Petersen, 2014). In general, people with low self-esteem engage more often in self-protective strategies.

We expect that individuals with a promotion versus prevention focus will differ in their approach to self-assessment. Promotion-focused individuals regulate using eager strategies focused on growth and development. Positive or self-enhanced evaluations stress individuals' strengths and future opportunities, which support the emphasis of promotion concerns. In contrast, less positive self-evaluations stress weaknesses and potential failures, which is consistent with the vigilance strategies that accompany prevention concerns. Initial support for this idea comes from Scholer et al. (2014). In a series of laboratory studies, the authors found that individuals primed with promotion concerns showed a tendency to inflate their self-evaluations, whereas individual primed with prevention concerns showed a tendency to deflate theirs. Additional insight comes from research on self-handicapping behavior (Baumeister & Scher, 1988; Hendrix & Hirt, 2009). Self-handicappers are individuals who make excuses before a performance. By anticipating the potential negative consequences of their actions, they have a justification for their possible failure and may avoid further embarrassment. Some evidence shows that prevention-focused individuals are self-handicappers (Hendrix & Hirt, 2009). They experience very intense negative affect when they imagine failure in an evaluative situation (Idson et al., 2000). A peer-evaluation exercise will exacerbate their evaluative concerns, prompting prevention-focused individuals to engage in self-handicapping behavior and provide lower ratings in their self-assessment of leadership skills.

Accordingly, we expect that when individuals compare self-ratings with peer ratings, promotion-oriented people will manifest an overly optimistic view of themselves while prevention-oriented people will manifest a pessimistic view of themselves to prevent disappointments. We posited in Hypothesis 1 that, compared to prevention-focused

individuals, promotion-focused individuals would display more behaviors consistent with the three leadership dimensions. We expect self-ratings on leadership skills to follow suit. To tease out the inflating effects of promotion focus and the deflating effects of prevention focus, we need to first establish statistical controls for peer ratings of leadership skills.

Hypothesis 2: After controlling for peer ratings of leadership skills, high promotion-focused individuals will overestimate their self-ratings of leadership skills, whereas high prevention-focused individuals will underestimate their self-ratings of leadership skills.

Moderating Effects of Regulatory Focus on Leadership Skills Improvement

RFT theory predicts that individuals with different regulatory foci react differently to their emotional experiences (Brockner & Higgins, 2001; Idson et al., 2000). High promotion individuals are concerned with aspirations and accomplishments, and react more intensely when they experience success. In contrast, high prevention individuals are concerned with safety and responsibilities, and experience failure more intensely (Idson et al., 2000). These patterns of emotional reactions to success and failure have implications for future action strategies. In addition, researchers have found that when high promotion individuals experience success, they increase their eagerness to work toward a goal. Using a scenario experiment, Van Dijk and Kluger (2004) found that when regulatory focus fits the kind of feedback received (i.e. positive feedback for promotion focus and negative feedback for prevention focus), the motivation to succeed is higher. In turn, this motivation has an impact on performance.

We expect promotion-focused individuals to invest more energy and effort to improve their overall team leadership skills if they receive positive feedback from their peers. Given that developing team leadership skills is an important goal for most MBA students, this effort should result in an increase in leadership competencies over time. However, success or positive

feedback would not be a strong motivation for prevention-focused individuals to improve, since they are less concerned with gains than avoiding losses. Their strategic vigilance will activate their motivation to succeed only when they receive negative feedback; then they will be motivated to act and develop their competencies.

Hypothesis 3a: Promotion focus will moderate the relationship between the type of feedback received at T1 and leadership skill improvement at T2, so that high promotion individuals will show a higher increase in leadership skills after receiving positive feedback.

Hypothesis 3b: Prevention focus will moderate the relationship between the type of feedback received at T1 and leadership skill improvement at T2, so that high prevention individuals will show a higher increase in leadership skills after receiving negative feedback.

Regulatory Focus and Satisfaction with Feedback

We also expect regulatory focus to moderate the relationship between the type of feedback received from peers and the overall satisfaction with the feedback exercise. RFT states that the extent to which people are promotion-focused or prevention-focused influences the nature and magnitude of their affective response to episodes of success and failure (Brockner & Higgins, 2001; Idson et al., 2000).

Accordingly, we expect that when people are engaged in a self-regulatory process that emphasizes promotion, their need for growth and development motivates them to value feedback to align themselves with their ideal self. The main goal of a peer-feedback exercise is to contribute to individual development by increasing individuals' self-awareness about the impact of their actions on other team members. This exercise requires people to focus on

personal growth. We expect promotion-oriented participants to be more satisfied with both positive and negative feedback because they see both types of feedback as valuable opportunities to improve. In contrast, we expect people with low promotion focus to be more satisfied only when they receive positive feedback.

A different process operates when individuals have a prevention focus. Receiving feedback from peers can be perceived as a threat to self-esteem and a way to lose face in front of teammates. Thus, prevention-focused individuals will approach the exercise with more doubts, and they will be more guarded against peer feedback. These participants will be more likely to express dissatisfaction with the exercise when they receive negative feedback.

Hypothesis 4a: Promotion focus will moderate the relationship between the type of feedback received at T1 and satisfaction with the feedback exercise, so that high promotion individuals will be highly satisfied with both positive and negative feedback, while low promotion individuals will increase their satisfaction only with positive feedback.

Hypothesis 4b: Prevention focus will moderate the relationship between the type of feedback received at T1 and satisfaction with the feedback exercise, so that high prevention focus will magnify the negative effects of positive and negative feedback.

METHODS

Sample

Two hundred and eighty-five MBA students from a large business school in Europe participated in the study. The instruction language was English, and the student sample included 39 different nationalities. There were 213 males and 72 females with an average age of 29.54 years and 6.2 years of work experience. When students enter the MBA program, they

are randomly placed in different sections of 50-60 students. Within each section, the MBA program assigns students to small learning teams of five or six, maximizing team diversity in terms of sex and nationality. The sample for this study includes five different sections of 59, 60, 60, 52, and 54 students respectively, and 50 small learning teams.

The learning teams function as autonomous self-managed units without formally appointed leaders. Team members work closely together to prepare for classes, team projects, and exams. Each team has a small room reserved for the entire semester where they meet every day for one hour in the morning. In addition, they also meet frequently in the afternoon to review classes and to work on special assignments. Although the MBA program puts a cap on team projects at 50% of the final grade, the usual practice among faculty is to assign 15-25% of the final grade to these team projects. Because team members spend a considerable amount of time working together, they get to know each other quite well. At the end of each semester, students are reassigned to a different learning team for the following semester. The peer feedback exercise was conducted within these small teams following the procedure described below.

Procedure

The study took place in the context of an Assessment and Development (A&D) workshop that was part of an integrated initiative of the MBA program to develop leadership and team skills among the MBA students. It was one of several workshops providing in-depth practical exercises on various topics such as leadership, communication, feedback, influence, negotiation, and self-management. The A&D workshop asked students to develop self-awareness of team leadership skills and outline a Personal Development Plan (PDP) for improvement. The feedback received was intended to increase their self-awareness as team leaders and inform them of areas where they could improve. The central part of the workshop was an online Peer Evaluation Survey (PES) developed by the first author in collaboration with

the Information Technology department. Students completed the web-based survey at two different times during the MBA program, coinciding with the end of the first and second semesters and with four months of separation (see Appendix A). Students always evaluated team members who had worked together the previous semester but would be apart the following semester. In this way, we avoided potential biases in the feedback process. Students received individual reports with quantitative data on their leadership skills including their self-ratings, the average of their peer ratings within the small learning teams, and the grand mean of the entire section. Reports also contained qualitative comments made by their peers. This feedback was anonymous. Students only received aggregate data within their small learning teams.

The A&D workshop was structured in three different modules and included two interim online surveys between modules. In Module I (3 hours), students received an introduction about the workshop and learning objectives, a lecture on the importance of feedback for self-awareness, and instructions on how to complete the online PES. They also completed the regulatory focus measure and their personal information on a paper-and-pencil survey. In addition, they signed a consent form permitting the use of their data for research purposes. After Module I, students had one week to complete the online PES before attending Module II.

Module II took place one week later and consisted of a half-day seminar (4.5 hours). The instructor distributed the individual reports, delivered a lecture on how to interpret the data, and allowed 30 minutes for individuals to consider the information. Students were encouraged to compare their self- and peer-ratings, to identify strengths, areas for development and potential gaps, and to draw conclusions about their leadership performance in the teams. During this time, the professor was available to answer any questions. Next, students met with their first-semester small learning teams in breakout rooms for a Peer Feedback Exercise to discuss the feedback for one hour (approximately 10-15 minutes per person). During this time,

students received additional information from their peers to clarify the feedback contained in the reports and help each other develop team leadership skills. Then, all students went back to class for a debriefing of the exercise. During the debriefing, students discussed the effectiveness of the feedback process and received instructions on how to outline a Personal Development Plan (PDP) for improvement. The PDP template asked students to select one or two areas they wanted to improve based on the feedback received and to develop an action plan. Students were encouraged to use other team members as resources for their improvement, but they worked on their PDPs entirely by themselves without faculty help. At the end of this second module, students completed the measure of satisfaction with the exercise. They were also informed that they would have a second round with the online PES at the end of the semester in which they would receive feedback from the new team members.

Finally, Module III took place four months later, at the end of the second semester. One week before the module, students received an email with instructions to complete the online PES taking as reference the new learning teams that they had been working with during this second semester. Students completed the PES instrument for the second time and attended a short final workshop (1.5 hours) in which they received the feedback reports and had another peer-feedback session in small breakout rooms. After the peer feedback exercise students came back to class for a short debriefing on the feedback process.

Although the five sections had different professors teaching the A&D workshop, the three modules were taught by the same professor. The professors met to prepare the program, the exercises, and the lectures. All faculty used the same materials, and students received the same information. Faculty interaction with students was restricted to the face-to-face classes with no individual activities outside the classroom.

Students participating in the workshop received a pass–fail grade based on their attendance and participation, customary for all workshops in the MBA program. Also, as a

safeguard, instructors were encouraged to review qualitative comments and block any offensive feedback, such as sexist or racist comments before students received their reports.

Measures

Team Leadership

Team leadership was assessed by a web-based peer evaluation survey with 12 items, including measures for three leadership competencies, as follows. *Offering Direction and Strategic Vision*: (1) "Is able to see the consequences of decisions and actions for the team in a future scenario," (2) "Sees the need and opportunities to make the right choices and set the direction for the team to follow," (3) "Adds relevant information about the past, present, and future in developing action plans for the team," and (4) "Knows how to prioritize tasks and activities properly to accomplish the goals of the team." *Providing Motivation and Influence*: (1) "Takes charge and is influential in the team," (2) "Can get the support of others toward his/her goals and objectives," (3) "Manages to change other people's opinions and behaviors using persuasive arguments," and (4) "Shows confidence in his/her skills to overcome any obstacle." *Giving Support and Coaching*: (1) "Helps others to identify their goals and objectives," (2) "Gives positive and negative feedback timely and properly," (3) "Is a good listener who spends time helping and coaching others," and (4) "Shares relevant and useful information with others in an open and appropriate manner." Students read a definition of the dimensions and saw a screen with each item followed by the picture and name of all members of their team including themselves. Their task was to rate the way each person normally acted in the team, using a scale ranging from 1 (*never)* to 5 (*frequently if not always)*.

Regulatory Focus

We used the General Regulatory Focus Measure, (Lockwood et al., 2002) adapted to MBA students to measure promotion and prevention focus. The scale included nine items each

for promotion and prevention focus and asked participants to rate themselves on a scale from 1 (*not true of me at all*) to 5 (*very true of me*). For example, "I typically focus on the success I hope to achieve in the future" addressed promotion focus, and "I often worry that I will fail to accomplish my academic goals" targeted prevention focus. The Cronbach's alphas for the two scales are .79 and .76 respectively.

Satisfaction

We used a 3-item measure to assess the degree to which participants were satisfied and felt that the feedback exercise was useful for their leadership development in the team. Participants used a scale from 1 (*Disagree*) to 5 (*Agree*) to rate these items: (1) "I enjoyed receiving feedback from my peers," (2) "I have learned a lot from the feedback that my peers gave me," and (3) "All in all, the peer feedback exercise was very useful for my development." The Cronbach's Alpha for the scale is .80.

Control Variables

We controlled for a number of demographic variables that affect ratings of leadership skills and individuals' self-evaluations of leadership skills, including age, work experience, and gender. Age and work experience seem to be important in formulating self-perceptions (Yammarino & Atwater, 1993), and we measured these as number of years. We also controlled for gender because there is evidence in the feedback literature documenting gender differences in feedback processes (Mayo et al., 2012). Finally, the sample included students from 39 different nationalities so it was important to consider the effects of cultural differences. Research on national cultures has shown that compared to individualistic cultures, collectivistic cultures are more likely to have a prevention focus (Kim & Park, 2019; Lee et al., 2000) and to have different communication styles (Gudykunst, 2004). Thus, we included a measure of individualism/collectivism based on Hofstede and Hofstede's (2011) cultural map. On a scale from 0 to 100, the country with the most individualistic score is the U.S. (Individualism=91)

and the country with the lowest score is Ecuador (Individualism=8). Societal individualism/collectivism scores were standardized against the set of countries included in the present study. In addition, because students came from five different sections, we used four dummy variables to control the effects of each class.

Analyses

We began our analyses by conducting a confirmatory factor analysis to establish the discriminant validity of our scales. Multiple and moderated-regression analyses were used to test all hypotheses. We conducted separate regression models for peer ratings, self-ratings, and satisfaction with the feedback process as dependent variables. We also centered all variables prior to running the analyses. As customary, control variables were entered first, followed by main effects. Multiplicative terms were added last to examine the hypothesized interactions. The interaction terms were computed by multiplying the centered independent and moderator variables.

Measurement Models

Before testing our hypotheses, we conducted a Confirmatory Factor Analysis (CFA) using maximum likelihood estimation procedures implemented in AMOS 26.0 (Arbuckle, 2019) to test the hypothesized factor structure of the team leadership scale. First, we tested the three-factor model of the team leadership scale for the components of strategic vision, persuasion, and coaching. The overall fit of the three-factor model to the data was quite poor (χ^2 (51) = 196.54, p <. 01, CFI = .936, RMSEA = .11, AIC = 274.18). We then tested a two-factor model integrating the two scales more closely connected (motivation and coaching), and the overall fit improved but fell short of an adequate fit of the data (χ^2 (51) = 176.54, p <. 01, CFI = .958, RMSEA =.10, AIC = 254.34). Finally, we ran a one-factor model combining the three components into one dimension. The model with one-factor structure (χ^2 (46) = 96.13, p < .01; CFI = .986, RMSEA = .06, AIC = 190.12) showed a better fit with the data. Thus, we

ran the analysis with just one factor: Team Leadership. The reliability of the scale as measured by Cronbach's Alpha was 97, 98, 98, and 98 for peer and self-ratings at T1 and T2 respectively.

Aggregation of Peer Ratings

Participants in the study evaluated themselves (self-ratings) and every other member of their learning team (peer ratings) on the team leadership scale. A traditional way to compute a single measure of peer ratings of team leadership for each participant is to compute an average score for each rater group. For that, we need to justify aggregation across peers, showing enough homogeneity of ratings within groups. We computed the multi-item interrater agreement index ($R_{WG(J)}$) (James et al., 1993; see also Lebreton & Senter, 2008). Our results show that the average $R_{WG(J)}$ indexes for the scale and two time periods ranged from .84 to .92. Similarly, the intraclass correlation coefficients (Kenny & Lavoie, 1985) ranged from .71 to .80, and they are statistically significant beyond the $p<.01$ level. These results suggest very strong interrater agreement (Lebreton & Sender, 2008) in peer ratings within each learning team. We therefore computed the average evaluation that each student received from team members as an overall index of team leadership.

RESULTS

Table 1 shows the means, standard deviations, and correlations among all variables. The correlation between promotion focus and prevention focus is .18 ($p< .01$) which is similar to other studies in this area. Promotion focus shows positive and statistically significant correlations with individualism ($r=.15$, $p<.05$), self-ratings of team leadership at T1 ($r=.20$, $p<.01$) and T2 ($r=.33$, $p<.01$), and peer ratings of team leadership at T1 ($r=.19$, $p<.01$) and T2 ($r=.17$, $p<.01$). In addition, prevention focus shows a negative and statistically significant correlation with self-ratings of team leadership at T1 ($r=-.17$, $p<.01$). There are also positive and statistically significant correlations between self-ratings and peer ratings of team leadership at T1 ($r=.29$; $p<.01$) and T2 ($r=.34$; $p<.01$). Age shows a negative and statistically

significant correlation with peer ratings of team leadership at T1 (r=-.14; p<.05). Individualism shows a positive and statistically significant correlation with self-ratings of team leadership at T1 (r=.14; p<.05). Table 1 also shows the reliability indices for all the scales.

Table 2 shows the mean and standard deviations for the self-ratings and peer ratings of team leadership for men (N=213), women (N=72), the different sections, and the entire sample (N=285). We ran t-tests to test for differences between men and women and ANOVA tests to explore differences among sections. The results show that men evaluated themselves and received peer ratings higher than women at T1 and T2. However, only the differences at T1 are statistically significant for self-ratings (men=4.10 vs women=3.96, t=2.15, p<.05) and peer ratings (men=4.01 vs women=3.81, t=3.50, p<.01). These differences are consistent with those found in other studies using 360º degree-feedback programs (e.g., Johnson & Helgeson, 2002). In addition, the ANOVA tests comparing the five sections show statistically significant differences among sections for self-rating at T2 (F=10.72, p<.01), peer ratings at T1 (F=7.31, p<.01), and peer ratings at T2 (F=12.84, p<.01). The post-hoc Tukey tests show that these differences are attributed to two sections. Section 4 showed a statistically significant lower mean than the other four sections in self-ratings (mean=3.84 vs 4.28, 4.20, 4.38, and 4.34 for Sections 1, 2, 3, and 5 respectively) and peer ratings of team leadership at T2 (mean=3.73 vs 4.23, 4.16, 4.37, and 4.22 for Sections 1, 2, 3, and 5 respectively). Also, Section 5 showed statistically significant higher means than the other sections in peer ratings of team leadership at T1 (mean=4.23 vs. 3.84, 3.80, 3.98 and 3.94 for Sections 1, 2, 3, and 4 respectively). Differences among sections can be attributed to two factors. First, MBA sections had different professors and, although all workshops had the same curriculum, personal teaching style might have contributed to differences in how students approached the peer-feedback exercise. Second, the data was collected during the second and third semesters, and it is therefore reasonable to expect that after several months in the program, each section had developed its

own social dynamics regarding leadership, communication, decision-making processes, and cohesion. Consequently, each section could have experienced the feedback process in different ways.

[Insert Tables 1 & 2 about here]

Hypotheses Tests

Table 3 shows the results of the hierarchical-moderated regression analyses that we conducted to test our hypotheses.

Hypothesis 1: Regulatory Focus and Peer Ratings of Team Leadership

We proposed that individuals with a promotion focus will receive higher ratings of leadership from their peers, whereas individuals with a prevention focus will receive lower ratings of leadership. To test this idea, we used regression analyses to isolate the effects of promotion and prevention on peer ratings of leadership. When promotion and prevention focus were entered together in the equation, promotion focus showed a positive and statistically significant beta coefficient (Beta=.20, $p< .05$). Prevention focus showed a negative and statistically significant beta coefficient (Beta=-.10, $p< .05$) predicting peer ratings of leadership at T1. Further, these two variables significantly added explained variance (change $R^2 = .04$, $p<.01$). We then ran the same regression equations at T2. In this case, the beta coefficients were not statistically significant for promotion (Beta=.01, p=n.s.) or prevention focus (Beta=.07, p=n.s.). These results show support for Hypothesis 1 at T1.

[Insert Table 3 about here]

Hypothesis 2: Regulatory Focus and Self-ratings of Leadership

We proposed that individuals with a promotion focus will overestimate their leadership skills, whereas individuals with a prevention focus will underestimate theirs. To test this idea,

we entered the control variables into the regression equation including the peer ratings of leadership at T1. Assuming that peer ratings aggregated across multiple peers are likely to be a better representation of the "true score" of the individual, a positive or negative relationship between regulatory focus and self-ratings of team leadership indicates overestimation or underestimation of leadership skills. As expected, when promotion and prevention focus were entered together in the equation, promotion focus showed positive and statistically significant beta coefficients (Beta=.19, $p<.01$) and (Beta=.27, $p<.01$) at T1 and T2 respectively. In contrast, prevention focus showed negative and statistically significant beta coefficients (Beta=-.18, $p<.01$) and (Beta=-.16, $p<.05$) predicting peer ratings of leadership at T1 and T2 respectively. These results support Hypothesis 2.

Hypotheses 3a and 3b: Moderating Effects of Regulatory Focus on Skill Improvement

We examined the moderating effects of regulatory focus on the relationship between peer ratings of team leadership at T1 and T2. The overall correlation between these two measures for the entire sample is .26, explaining only 7% of the variance at T2 and indicating that receiving high ratings at T1 does not guarantee receiving high ratings at T2. We hypothesized that promotion focus will magnify the strength of the relationship because receiving positive ratings will increase individuals' resolve to improve their skills. In contrast, high prevention focus will mitigate this relationship since it is only after receiving negative feedback that high prevention-focused people are motivated to improve their skills.

Accordingly, we computed two interaction terms by multiplying peer ratings of team leadership at T1 with promotion and prevention focus respectively. We then entered the control variables into the regression equation, including the peer ratings of leadership at T1 to control for the baseline level of team leadership skills. In the second step, we added the promotion and prevention focus variables, and finally we entered the two interaction terms. Results presented in Table 3 reveal statistically significant interactions for peer ratings at T1 and both promotion

and prevention focus (beta=.17, p<.01 and beta=-.14, p<.01 respectively). To determine if the form of the significant interactions supported our hypotheses, we graphed the relationships for high and low levels of promotion and prevention with the type of feedback received, following Aiken and West (1991) and Dawson (2014). Low ratings at T1 indicate negative feedback and high ratings at T1 indicate positive feedback. Figure 1a shows the graph for promotion focus and type of feedback, indicating a positive relationship between peer ratings at T1 and T2 for low and high promotion focus. A simple slope test, however, shows that the slope for high promotion focus is stronger (t=5.48, p<.01) than the slope for low promotion focus (t=4.11, p<.01). As expected, these results indicate that receiving high ratings of team leadership at T1 is a stronger predictor of high ratings of team leadership at T2 for high promotion focus, than for low promotion-focused individuals. Figure 1b shows the graph for prevention focus and peer ratings of team leadership at T1. The graph shows a more moderate slope for the relationship between peer ratings of team leadership at T1 and T2 when prevention focus is high. The simple slope tests confirm that the slope of the relationship is higher when prevention focus is low (t=5.81, p<.01) than when prevention focus is high (t=1.26, p=ns). However, contrary to our expectations, high prevention individuals did not show higher levels of peer ratings of leadership at T2 after receiving negative feedback (low ratings of leadership at T1). Overall, these results provide partial support for our hypotheses.

[Insert Figures 1a & 1b about here]

Hypotheses 4a and 4b: Moderating Effects of Regulatory Focus and Satisfaction with the Feedback Process

RFT suggests that the degree of promotion and prevention focus has important effects on the nature and magnitude of individuals' emotional reactions (Brockner & Higgins, 2001), and we hypothesized that the affective response to the feedback process varies between promotion- and prevention-focused individuals. In particular, we proposed that high promotion

focus is associated with high satisfaction no matter the type of feedback received, because these students see both positive and negative feedback as a way to improve and achieve their goals. In contrast, we expected that high prevention focus is associated with high satisfaction only when these students receive positive feedback, because negative feedback threatens their need for security and represents a threat to their self-esteem. To test this idea, we examine the moderating effects of regulatory focus on the relationship between peer ratings of team leadership at T1 and satisfaction with the feedback process. We regressed satisfaction on the control variables, ratings of leadership at T1, promotion and prevention focus, and the two interaction terms by multiplying the ratings of leadership at T1 with promotion and prevention focus respectively.

[Insert Figures 2a & 2b about here]

The results show statistically significant interactions of ratings of leadership at T1 with promotion focus (beta= -.16, p<.01) and prevention focus (beta= .17, p<.01). To determine if the form of the significant interactions supported our hypotheses, we graphed the relationships for high and low levels of promotion and prevention focus with the type of feedback received (positive or negative) predicting satisfaction. Figure 2a shows the graph for promotion focus and type of feedback, illustrating that when promotion focus is high, students manifest high levels of satisfaction with the feedback exercise, including both types of feedback. However, low promotion focus shows a positive relationship between peer ratings at T1 and satisfaction. A simple slope test shows that the slope of the low promotion focus is positive and statistically significant (t=2,98, p<.05), while the slope of the high promotion focus is not statistically significant (t=-0.84, p= ns). Figure 2b shows the results for prevention focus. The results show a positive relationship between type of feedback and satisfaction for both low and high

prevention focus. However, the slope for high prevention focus is stronger ($t=3.80$, $p<.01$) than the slope for low prevention focus ($t=2.06$, $p<.05$). These results support hypotheses 4a and 4b.

DISCUSSION

Our study examined the role of regulatory focus on the development of team leadership skills in MBA students. The results show that having a promotion versus prevention focus plays an important role in how students working in the context of small learning teams evaluate their own leadership skills, are evaluated by their peers, and react to the type of feedback received. Consistent with our predictions, we found that promotion-focused individuals rated themselves higher in team leadership skills and received higher ratings of team leadership from their peers. In contrast, prevention-focused individuals rated themselves lower in leadership skills and received lower ratings. Promotion focus is associated with high levels of achievement, perseverance, openness to new ideas, and risk-taking behaviors that are clearly associated with team leadership. In contrast, prevention focus is related to avoiding mistakes, following rules, and failing to provide direction. This focus might be seen as reactive and lacking innovation, which may result in lower ratings of team leadership.

More interestingly, we found that the type of leadership feedback received at T1 had a differential impact on promotion- and prevention-focused individuals at T2 (four months later). As expected, high peer ratings of team leadership at T1 (positive feedback) led high promotion-focused individuals to receive higher peer ratings of team leadership at T2 than low promotion-focused individuals. That is, positive feedback interacts with promotion focus to produce greater improvements on team leadership skills the following semester. In contrast, the reverse was observed for high prevention-focused students. They showed little improvement in peer ratings of team leadership at T2 regardless of the type of feedback received at T1. Whereas low prevention students showed a marked improvement the following semester after receiving

positive feedback compared to those who received low peer ratings, high prevention students did not show any improvement regardless the feedback received. We expected high prevention students to improve their skills after receiving negative feedback (low peer ratings). However, the results show that they received similar peer ratings the second semester after receiving both positive and negative feedback.

Giving and receiving feedback is an emotional and demanding task (Pierce & Porter, 1986) that is often considered a difficult conversation (Argyris, 1994), and we wanted to explore the degree of comfort that individuals with different regulatory focus experience as they go through a multisource feedback process. As expected, we found that promotion and prevention focus moderate the relationship between the type of feedback received (positive vs. negative) and the degree of satisfaction with the feedback exercise. Promotion-focused individuals were equally satisfied with positive and negative feedback, whereas prevention-focused individuals showed higher levels of satisfaction only when they received positive feedback. Promotion-focused individuals have a high need for learning and growth, and they may perceive positive and negative feedback as valuable sources of information to improve and achieve their ideal self. However, prevention-focused individuals are motivated to avoid failure and may experience negative feedback as an unpleasant event. Even if they did improve their ratings at T2 following negative feedback, they had a negative experience about the process.

Contributions to Theory

Overall, our findings have theoretical relevance because they address some interpersonal outcomes of regulatory focus. Researchers have explored the effects of self-regulation on individual work outcomes (see Johnson et al., 2015; Kark & Van Dijk, 2019; Lanaj et al, 2012). However, the interpersonal consequences of self-regulation have received

less attention, with calls for more studies on the social and interpersonal implications of regulatory focus (e.g., Johnson et al., 2015; Lanaj et al., 2012,). Our study contributes to this line of research by suggesting that individuals' self-regulation focus influences key aspects of the social dynamics of teams, such as perceptions of leadership and feedback processes. This is a promising area of research (see Kark & Van Dijk, 2007, 2019; Neubert et al., 2008) with important implications for leadership research. Our findings indicate that leadership emergence and leadership style might be closely related to individuals' regulatory focus.

This study also contributes to the literature on regulatory focus and feedback. Previous studies in the laboratory have found that positive information motivates promotion-focused individuals towards action, whereas negative information motivates prevention-focused individuals (e.g., Van Dijk & Klugger, 2004). Our results using a longitudinal field study are consistent with these authors regarding promotion focus, but they open new questions regarding individuals with high prevention focus. High prevention individuals were in fact the most dissatisfied after receiving low peer ratings (negative feedback), but this did not result in significant improvement of their leadership skills later. We might speculate here whether this absence of improvement is due to a lack of will or a lack of skill. It could be that high prevention students did try to improve their leadership standing in their teams, but they lacked the skill to do it. The results from Van Dijk and Klugger (2004) in the laboratory showed that high prevention individuals raised their motivation after negative feedback in order to avoid failure later. Our results do show that high prevention students were more dissatisfied at T1, and it is possible that they did try to improve in order to avoid negative ratings of team leadership in the second semester. After all, dissatisfaction has elements of negative affect and heightened activation (see Watson, et al., 1988). However, this effort did not translate the negative affect into superior leadership skills. Learning leadership skills is a complex process, and it could be argued that prevention-focused individuals who want to avoid failure and prevent mistakes

have developed strategies inconsistent with more proactive and risk-taking behaviors associated with team leadership. Such students could have been genuinely concerned about the feedback received but unable to develop the required team leadership skills. The design of our study does not allow us to explore the mediating role of motivation versus learning skill factors, but future studies could explore the role of these two processes connecting individuals' motivational dispositions and behavior.

These results have also implications for research on multisource feedback processes. A common concern in the feedback and development literature is identifying effective ways to deliver feedback that can be readily accepted by the target person and lead to improvement actions (e.g., Feys et al., 2011; Ryan et al., 2000). Less attention, however, has been given to individual differences that play a role in how people react to feedback. Our study shows that individual differences, such as how people regulate themselves, should be included in conceptual models of feedback and development. Feedback increases self-awareness about positive and negative aspects of individuals, transforming the frame of reference about the self (Mezirow, 1991). Merizow suggests that when people receive negative feedback, emotional fallout creates a defensive reaction to protect one's self-concept and self-esteem. It seems that this counter reaction might be different for people with different regulatory focus. While a defensive reaction is consistent with our findings for prevention-focused individuals, it does not apply to promotion-focused individuals who seem to embrace negative feedback as an opportunity to improve their leadership ratings later in time.

Our study also contributes to the literature on individual differences and leadership. A long tradition of research on personality and leadership was nearly abandoned following negative reviews by Mann (1959) and Stogdill (1948). Although some researchers continued to explore the dispositional bases of leadership (e.g., Kenny & Zaccaro, 1983; Lord et al., 1986), critics of the role of personality on leadership created a false consensus around the idea

that leadership could not be predicted from individual traits (Zaccaro, Kemp & Bader, 2004). It was not until more recently that researchers showed renewed interest in the relationship between personality and leadership, showing that personal factors such as intelligence (e.g., Judge, Colbert, & Illies, 2004) and the BIG 5 personality dimensions (e.g., Bono & Judge, 2004) are clearly related to leadership emergence and effectiveness. A renewed impetus came a few years later with a special issue in Leadership Quarterly (2012) when the editors (Antonakis, Day & Syncs, 2012) invited future research to adopt more dynamic notions of traits and how they can elicit leader prototypes and trait-induced behaviors. Our study contributes to this line of research by focusing on individuals' self-regulation, an adaptive process that individuals adopt to pursue their goals, as a predictor of leadership style and emergence. Our results advance this line of research by showing that personal dispositions such as promotion and prevention focus are associated with behavioral and team strategies that might be important markers of leadership emergence and leadership effectiveness.

Practical Implications for Leadership Development

Our results have important practical implications for leadership development programs. Management educators and HR professionals have been interested for quite some time in offering solid feedback interventions to help managers develop their full potential. Our findings indicate that people with different self-regulatory foci show different levels of improvement in response to feedback that they perceive either as an opportunity or as a challenge. Leadership development programs can be framed as processes of gains versus losses. For instance, using a gains process, a program might stress the opportunity for increasing motivation and high performance in teams. Focusing on a losses process, a program could emphasize the importance of avoiding errors and mistakes. When companies send employees to training courses because employees have received low ratings on performance evaluations, this

leadership development activity is based in a process of losses. However, when companies send their high potentials to leadership development courses because they are expected to increase their responsibilities in the organization, they are framing the development activity as a process of gains. It is therefore important to consider individual differences in the process of selecting and preparing participants for feedback exercises and leadership development programs to maximize the benefits of these programs.

Moreover, our findings bear implications for performance feedback in work organizations. Feedback is key for performance improvement. However, regulatory focus sensitizes people to different types of information eliciting different emotions (Brockner & Higgins, 2001). In our study, promotion-focused individuals experienced high levels of satisfaction when they received positive and negative feedback; they seemed to value any type of feedback offering the possibility to improve and achieve their goals. However, only positive feedback proved to be a predictor of subsequent improvements in their peer ratings of team leadership at T2. In contrast, prevention-focused individuals experienced high levels of satisfaction only when they received positive feedback and showed similar peer ratings of team leadership at T2 regardless of the type of feedback received at T1. Interventions to improve performance levels of employees might need different feedback strategies. While promotion-focused individuals will accept both positive and negative feedback, only positive feedback leads to leadership improvement. Prevention-focused individuals seem to be less responsive to feedback. They accept positive feedback readily but are less responsive to both positive and negative feedback to improve their leadership skills. As discussed above, we cannot determine with our data if they lack motivation or learning skills to improve. However, leadership development interventions for high prevention-focused individuals that rely exclusively on feedback might not be enough to improve performance. Such interventions may need to be complemented with other hands-on activities aimed towards skills practice.

Another application of our findings pertains to the development of team and leadership skills in educational settings. The development of interpersonal skills are key objectives of business institutions as they are easily transferred across settings. However, long-term double-loop learning is always an uncomfortable process (Argyris, 1995) because it requires individuals to recognize personal limitations and common mistakes in their interpersonal relationships that inevitably result in failed strategies and undesirable consequences. There is evidence that PES instruments are useful to quantify the "softer" and most elusive part of business education (Brutus & Donia, 2010; Brutus et al, 2013). Our approach combining a PES instrument with multiple modules of skill development exercises to help students appreciate the value of feedback, develop communication skills and practice emotional control to reduce defensiveness can have a greater impact on students' development. In our study, students experienced an average increase of 0.41 standard deviations in peer ratings of team leadership from T1 to T2. A study conducted by Brutus and Donia (2010) using only a centralized PES instrument in the context of an organizational behavior course reported an increase of 0.17 standard deviations from T1 to T2. Both studies used one semester of difference between uses. Clearly, a PES instrument supported by a skills development workshop can prove to be a very powerful intervention for developing leadership skills in educational settings. We note, though, that in a meta-analysis by Kluger and DeNisi (1996), feedback caused worse performance in about one-third of cases. High prevention individuals might be more at risk to hinder their development after feedback sessions if they are not supported with coaching and skill development practices.

Our study has implications for students transitioning to work organizations. Multisource feedback has become a prevalent activity in organizations (see Fleenor et al., 2020), and 360-degree feedback interventions have become an essential part of talent management systems. The widespread use of this managerial practice is based on the idea that

the boss is not the only person with relevant information about the performance and potential development of employees. Despite its numerous benefits, the implementation of multisource feedback systems is often afflicted by a lack of agreement among peers (Yammarino, 2003). Response biases such as halo effects, leniency, and cognitive consistency can have undesirable effects on peer ratings, threatening the construct validity of multisource feedback processes. Thus, training students to develop their observational and analytical skills to evaluate others is a valuable preparation for the work setting. High proficiency levels of observational and feedback skills will definitively facilitate students' transition into organizations.

Finally, our results also have implications for our society in general. The last few decades have seen a massive increase in self-help books, with self-awareness experts recommending that people seek out feedback to better understand themselves (e.g., Stone & Heen, 2014). However, voices have emerged reporting undesirable consequences of too much feedback in work organizations (e.g., Ilgen et al., 1979; Lurie & Swaminathan, 2007; Salvati et al., 2004). A study by Salvati et al. (2004) with call center employees at a large telecommunication company found that they received 27 feedback sessions a year. The more "feedback overloaded" people felt, the more stressed they became and the lower their performance fell, as evaluated by their bosses. More interestingly, the study found that the amount of feedback received by the employees was the same for everybody, but some employees felt particularly overwhelmed. Another study by Green et al. (2017) found that after receiving negative feedback some people preferred to look for new relationships and to interact only with people offering positive feedback. We might guess based on our results that among the overwhelmed employees and the ones looking for more friendly partners, there is a disproportionate number with a prevention focus. Organizations need to take into account not only the characteristics of feedback itself, or the way feedback is delivered, but also the psychology of the recipients—in particular, their regulatory focus. In the same way, individuals

seeking out feedback to grow personally and improve their interpersonal skills should first be aware of their self-regulatory style. Prevention-focused individuals might need preparation to receive feedback, or they could face a negative and stressful experience with undesirable consequences including social anxiety and depression (Nepon et al., 2011)

Limitations and Future Research

Our study has limitations that suggest avenues for future research. We have focused on three dimensions of team leadership in small groups (direction, motivation, and coaching). However, there might be other aspects of the personal and social dynamics of teams that might affect how participants behave in their new teams. For example, we did not explore the communication process, decision-making styles, or participants' other emotional reactions to the feedback provided. In addition, the feedback survey items that were measured using a Likert scale constrained the evaluations of participants. It might be that other aspects of leadership were relevant to team dynamics but not captured with our survey. Perhaps other methodologies using qualitative feedback could provide additional information about how promotion- and prevention-focused individuals influence their teams and receive feedback from their peers.

We have outlined several practical implications for leadership development in professional and educational organizations and we foresee no problems extrapolating our results to other educational settings with similar designs. However, uncertainty remains about applicability to work settings. Performance appraisals are highly emotional events in organizations, with significant implications for employees. The peer-feedback exercise conducted in our study took place in an educational setting which is a relatively safe environment for students. Students received feedback to improve their skills, but there were not implications for their future career or even their grades in the program. In contrast, the feedback received in work settings could have long-term implications for employees' monetary

rewards and professional careers. In addition, we conducted peer feedback in teams that had worked together but were disbanded. While this context facilitates the exchange of honest feedback, it might not be comparable to professional teams working together for longer periods of time. The short-term nature of our teams might influence their internal dynamics, so different results could arise in more stable teams. For example, production teams with a constant membership might have a different team dynamic which might increase the social cost of straightforward communication and feedback. It would be illuminating to test these ideas in work settings with stable teams.

Future studies also could explore how different reactions to positive and negative feedback translate into behavioral changes for promotion- and prevention-focused individuals. Our results show that high promotion-focused students were satisfied and exhibited noticeable improvements in leadership skills after receiving positive feedback. Promotion focus is associated with attitudes and behaviors that are consistent with team leadership prototypes, and it might be easy for such students to improve because they are playing on their strengths. Prevention-focused students, however, were equally satisfied with positive feedback but failed to improve their team leadership skills after one semester. Did they lack the motivation to improve? Or did they lack the skills to implement leadership behavioral strategies unfamiliar to them? Other studies should explore these questions as they are theoretically relevant and have many practical implications for leadership development programs.

Conclusion

Multisource feedback programs have become widespread in business and educational institutions as important tools to develop leadership competences. However, most feedback programs have overlooked the role of individual differences in the acceptance and response to feedback. We explored the role of self-regulatory focus on individuals' self-assessment and reactions to peer feedback. Promotion-focused students both gave themselves and received

from peers higher ratings of team leadership. They reported more satisfaction with the feedback received and showed greater improvements in their team leadership skills four months later. In contrast, prevention-focused students gave themselves and received from peers lower ratings of team leadership. These students declared high satisfaction only when they received positive feedback, and they did not show any improvement in leadership skills four months later. Furthermore, high prevention students reported the lowest levels of satisfaction when confronted with negative feedback. Taken as a whole, our findings suggest that learning from feedback is a complex process that requires more attention to the recipients of feedback. Developmental feedback elicits strong emotions in individuals who might perceive threats to their personal value and competence. Leadership and developmental programs that take into account these individual differences can greatly improve their effectiveness. For example, offering feedback recipients the possibility to decide how they want to receive their feedback can mitigate some of the negative effects and improve the acceptance of feedback.

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TABLE 1

Means, Standard Deviations (SD) and Inter-correlations for Study Variables

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Gender											
2. Age	-.22**										
3. Job experience	-.12*	.78**									
4. Individualism	-.01	.01	.00								
5. Promotion focus	.02	-.08	-.10	.15*	(.74)						
6. Prevention focus	-.04	.06	.04	-.09	.18**	(.76)					
7. Satisfaction	.03	-.06	-.09	-.10	.22**	.07	(.80)				
8. Self-ratings T1	-.10	-.47	-.02	.06	.20**	-.17**	-.01	(.97)			
9. Self-ratings T2	-.07	.07	.04	.14*	.33**	-.10	.02	.49**	(.98)		
10. Peer ratings T1	-.17**	-.14*	-.16**	.10	.19**	-.11	.07	.29**	.19**	(.98)	
11. Peer ratings T2	-.08	-.03	-.08	.06	.17**	-.03	-.09	.09	.34**	.26**	(.98)
Means	*1.26*	*29.54*	*6.20*	*46.7*	*4.02*	*3.40*	*3.82*	*4.06*	*4.21*	*3.96*	*4.15*
SD	*.43*	*2.98*	*2.25*	*23.8*	*.38*	*.54*	*.81*	*.54*	*.55*	*.46*	*.54*

Note: N = 285; *p < .05; **p < .01

TABLE 2

Means and Standard Deviations (SD) for the Pooled Sample and across Gender and Section Groups

Team Leadership Ratings	Self-Ratings T1 Mean (SD)	Self-Ratings T2 Mean (SD)	Peer Ratings T1 Mean (SD)	Peer Ratings T2 Mean (SD)
Pooled sample	4.06 (.54)	4.21 (.55)	3.96 (.46)	4.15 (.54)
Men (N=213)	4.10 (.57)	4.23 (.51)	4.01 (.48)	4.18 (.54)
Women (N=72)	3.96 (.46)	4.16 (.54)	3.81 (.38)	4.08 (.50)
t-test	*2.15**	*0.94 ns*	*3.50***	*1.31 ns*
Section 1 (N=57)	4.02 (.46)	4.28 (.43)	3.89 (.43)	4.23 (.51)
Section 2 (N=60)	4.03 (.65)	4.20 (.58)	3.80 (.49)	4.16 (.46)
Section 3 (N=60)	4.06 (.56)	4.38 (.40)	3.98 (.45)	4.37 (.42)
Section 4 (N=52)	3.98 (.50)	3.84 (.48)	3.94 (.38)	3.73 (.49)
Section 5 (N=54)	4.23 (.51)	4.34 (.51)	4.23 (.42)	4.22 (.59)
F test	*1.78 ns*	*10.72***	*7.31***	*12.84***

*Note: *p < .05; **p < .01*

TABLE 3

Hierarchical Regression Equations Predicting Self- and Peer Ratings of Team Leadership Skills and Satisfaction with Feedback Process

	Self-Ratings		Peer Ratings		Satisfaction
	Time 1	*Time 2*	*Time 1*	*Time 2*	*Time 1*
Gender	-.07	-.04	-.21**	-.04	.00
Age	-.09	.01	-.07	-.08	.10
Work experience	.11	.09	-.09	-.01	-.13
Individualism	.04	.08	.08	.01	-.14*
Section 1	-.07	-.04	-.26**	.09	.13*
Section 2	-.02	-.05	-.33**	.05	.34**
Section 3	-.06	-.01	-.20**	.17**	.21**
Section 4	-.07	-.25**	-.16**	-.27**	.43**
Peer ratings T1	.23**			.26**	.10*
Peer ratings T2		.22**			
Promotion focus	.19**	.27**	.20**	-.02	.32**
Prevention focus	-.18**	-.16**	-.10*	.06	-.05
Peer ratings T1 x Promotion				.17**	-.16**
Peer ratings T1 x Prevention				-.13**	.17**
F total	*4.48***	*9.35***	*7.13***	*8.86***	*5.13***
Adjusted R^2	*.12*	*.26*	*.17*	*.23*	*.21*
F change	*7.79***	*13.59***	*5.91***	*3.03**	*9.57***
Change in R^2	*.05*	*.08*	*.04*	*.04*	*.11*

*Note: N = 285; *p < .05; **p < .01*

FIGURES 1a & 1b

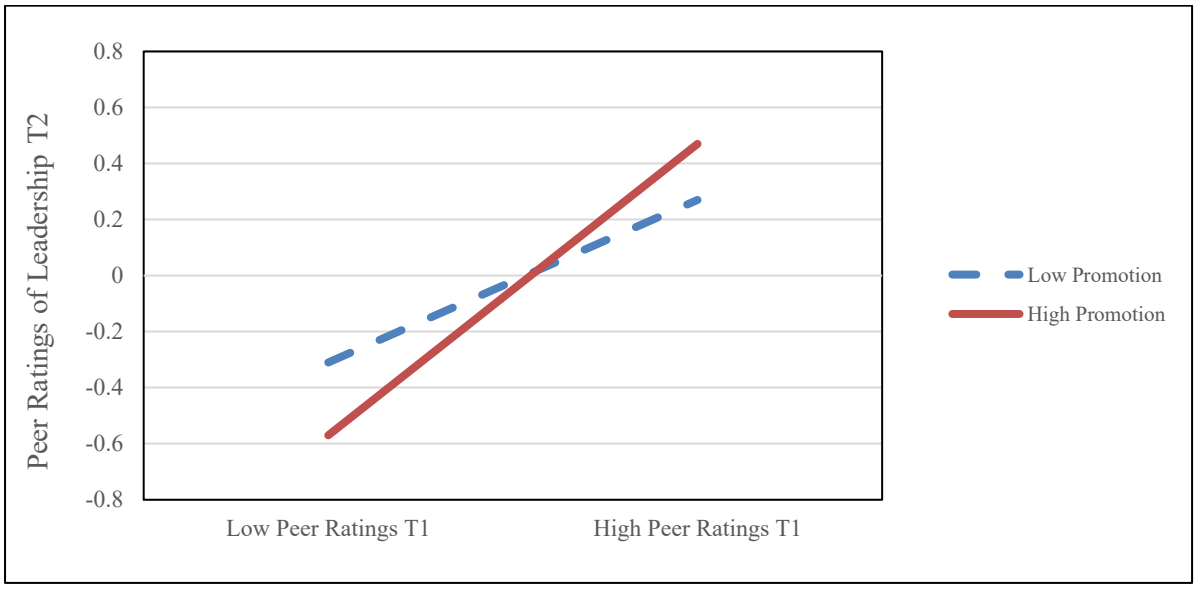

Figure 1a. Interaction between promotion focus and type of feedback received at T1 (Negative-low peer ratings and Positive-high peer ratings) predicting ratings of team leadership at T2. Standardized simple slopes are presented.

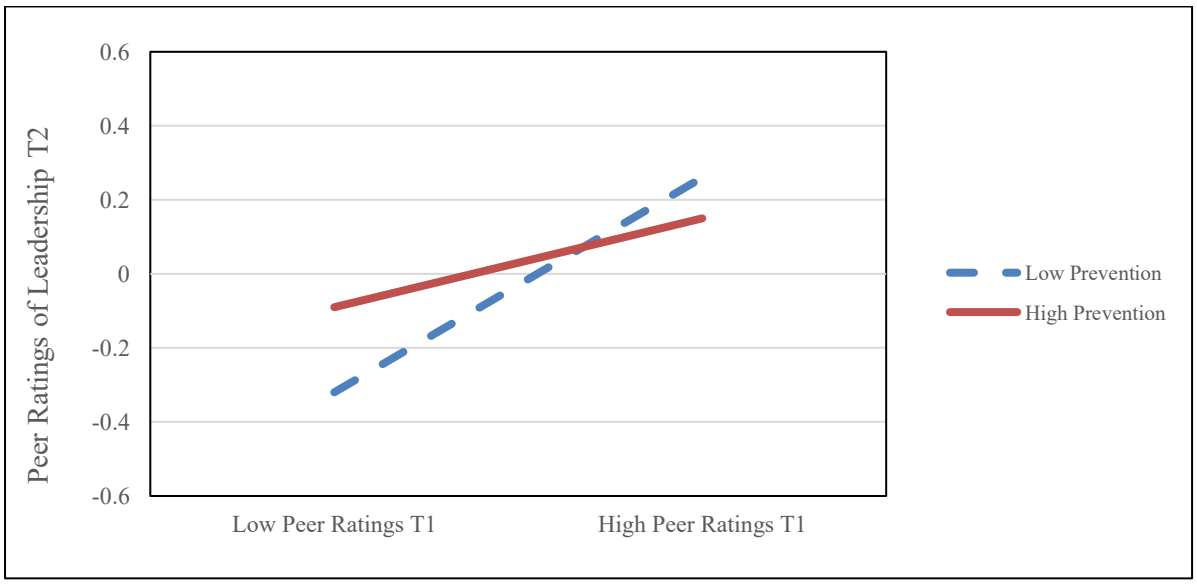

Figure 1b. Interaction between prevention focus and type of feedback received at T1 (Negative-low peer ratings and Positive-high peer ratings) predicting ratings of team leadership at T2. Standardized simple slopes are presented.

FIGURES 2a & 2b

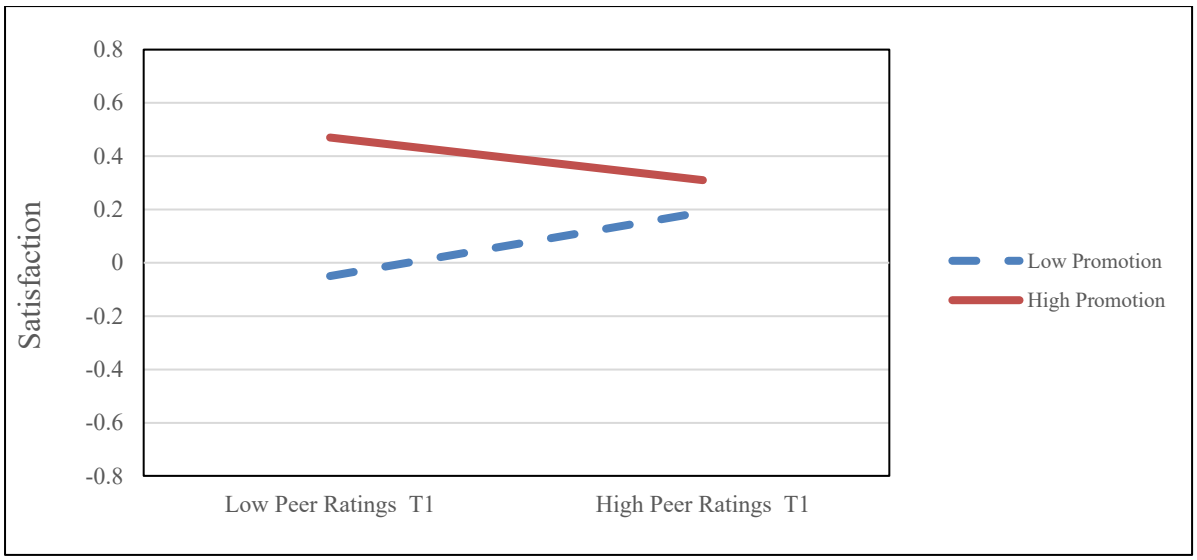

Figure 2a. Interaction between promotion focus and type of feedback received at T1 (Negative-low peer ratings and Positive-high peer ratings) predicting satisfaction with the feedback process. Standardized simple slopes are presented.

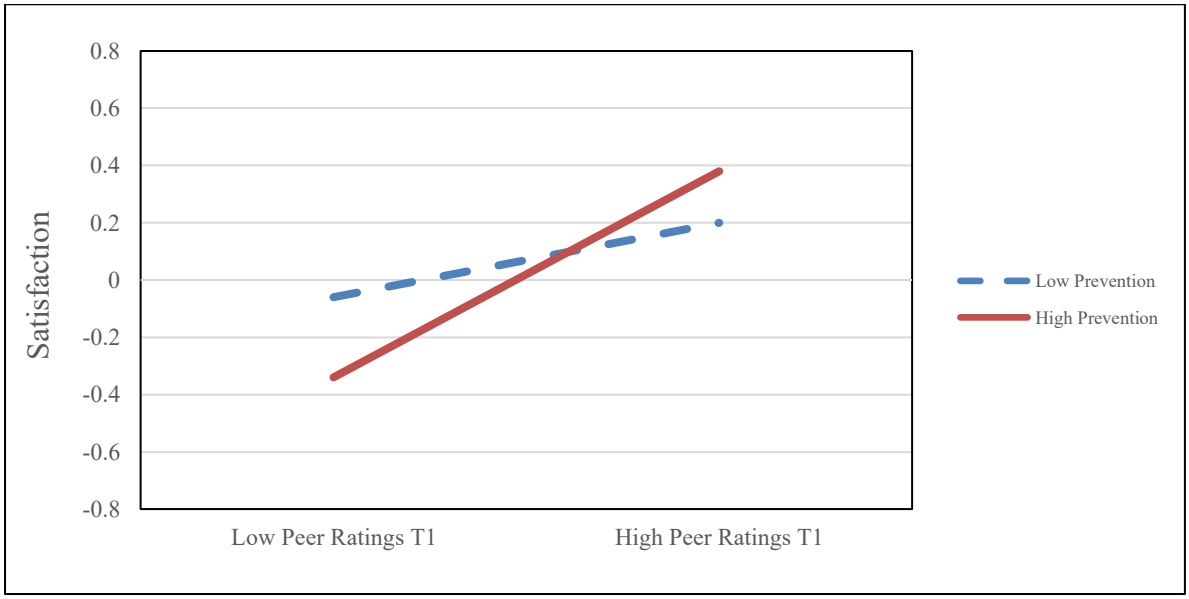

Figure 2b. Interaction between prevention focus and type of feedback received at T1 (Negative-low peer ratings and Positive-high peer ratings) predicting satisfaction with feedback process. Standardized simple slopes are presented.

APPENDIX A

This table summarizes the procedure that was followed during the Assessment and Development Workshop and the Data Collection Process.

1.- Module I (3 hours during the first week of the second semester)

- Lecture on Feedback (observation skills and evaluation skills).
- Information about workshop and online Peer Evaluation Survey (PES).
- Survey 1 (paper and pencil): Regulatory Focus measure, Personal Information data and Consent Form.

2.- Interim Period from Module I to Module II (1 week)

- Survey 2 (online): First PES assessment (students evaluate learning teammates from first semester).

3.- Module II (4.5 hours during the second week of the second semester)

- Distribution of Individual Reports.
- Feedback Review and Practice.
- First "Peer Feedback Exercise" with learning teams from first Semester.
- Survey 3 (paper and pencil): Satisfaction Questionnaire.

4.- Interim Period from Module II to Module III (first week of the third semester)

- Survey 4 (online): Second PES assessment (students evaluate learning teammates from second semester).

5.- Module III: (1.5 hours during the second week of the third semester)

- Distribution of individual reports.
- Second Peer Feedback Exercise with learning teams from second semester.