PAPERS

Social and Behavioral Influences on Team Process

Susan L. Adams, *QPM Consulting, LLC, Raleigh, NC, USA*
Vittal Anantatmula, *Western Carolina University, Cullowhee, NC, USA*

ABSTRACT

Individual team members can be instrumental to the success or failure of a project. This article will explore social and behavioral influences of an individual on the project team and how those behaviors impact the team's social behaviors. Literature review is used to present a discussion of the development of self-identity and an explanation of how an individual's social and behavioral tendencies can influence the formation of social identity, group emotion, group mood, and emotional intelligence. Using literature review findings, a model is developed to demonstrate the progressive stages of social and behavioral development from the self to the team, as related to team process development. In conclusion, a list of recommendations for managing team members at each stage of team development is presented.

KEYWORDS: self-identity; social identity; group emotion; emotional intelligence; project teams; project management

Project Management Journal, Vol. 41, No. 4, 89–98
© 2010 by the Project Management Institute
View this article online at wileyonlinelibrary.com.
DOI: 10.1002/pmj.20192

INTRODUCTION

When project managers focus primarily on hard business tools, such as schedule, budget, and scope, they can lose sight of a more subjective aspect of the project—the team member. Each person brings a unique set of experiences and knowledge to the project team. Equally important are the social and behavioral skills that each individual uses to interact with other team members in forming a cohesive and productive team. A project manager may spend significant effort and funds on team building, only to find that the team still does not reach its full potential due to one or more team members who, either consciously or unconsciously, do not integrate with the team.

A significant amount of research has been published on the overall team process and team building (Jehn & Shah, 1997; Mattick & Miller, 2006; Miller, 2007; Preston, 2005; Simon & Pettigrew, 1990; Todryk, 1990; Verma, 1996). Though much research is documented on the basic social and behavioral development of the individual, no social or behavioral publications were discovered that analyzed the individual's role with respect to the development of the team process. Conversely, project management publications focused on team process, but none were found to link the team process to the team member's behavioral contribution. The purpose of this article is to analyze, using literature review, the social and behavioral influences of an individual on the project team and how those behaviors impact the team's social behaviors.

The next section of this article will present information from published social and behavioral literature on the role of the individual, with respect to team process development. Literature review discussion will begin with the topic of self-identity development, followed by social identity, group emotion, group mood, and emotional intelligence. Using the literature review findings, a graphic model is constructed to demonstrate team process developmental stages. A listing of management guidelines, matched to the team developmental stages, will follow. The article concludes with a detailed discussion of the recommendations to improve team effectiveness.

Literature Review

Kezsbom (1995, p. 480) describes a team as a group of individuals who "work together under a unity of purpose, as a united front." At a team's inception, individuals do not instantly become a cohesive and unified group. Each person has a personal history that dictates his or her self-perceptions and exhibited behaviors in social settings. In a group, an individual uses these learned behaviors to influence others and, in turn, is influenced by other individuals on the team (Simon & Pettigrew, 1990). As teams mature, the emotional reactions of team members tend to become synchronized. This literature review describes the individual's social and behavioral journey, starting with the development of a unique self-identity and ending with full team integration in a state of emotional intelligence.

Development of Self-Identity

The development of social skills begins from birth with family interactions. Thomas and Hynes (2007) compare an individual's behaviors in early life, as a child, to his later role as a member of a social or work group. Right from birth, the individual strives to learn acceptable social skills, which are unique to his family structure, ethnic culture, and socioeconomic situation. In adulthood, as part of a group, the individual may unconsciously revert back to a role held within the family group, using the social skills learned in early life. For example, the team leader at work may be viewed by the team member as a parent, with the team member acting out in the same positive or negative ways that were exhibited as a child to fit into the family group. Negative and destructive behaviors such as aggression, envy, and scapegoating may be projected onto the team leader as a surrogate parent, and if not controlled, can lead to stress within the team. In effect, the individual may attempt to transfer the blame for any shortcomings to the team leader or even to the organization (Thomas & Hynes, 2007).

In addition to family influences, an individual's innate needs can influence interactions with the team. Two types of needs that are relevant to social behaviors are the need for affiliation and the need for achievement (Hill, 1987; Mathieu, 1990). The need for affiliation is "the tendency to receive gratification from harmonious relationships and from a sense of communion" (Hill, 1987, p. 1009). It is viewed as the level of personal satisfaction an individual derives from social relationships (Mathieu, 1990). According to Mathieu (1990), individuals with a high need for affiliation are normally motivated by social comparison, emotional support, positive stimulation, and attention. In contrast, the need for achievement is focused on gaining personal satisfaction from accomplishing tasks (Mathieu, 1990).

Mathieu (1990) theorized that the differences between the need for affiliation and the need for achievement could predict how well an individual will relate to the team leader. In his study, however, individuals with both types of needs responded best to the instructional leader, thereby demonstrating that all individuals prefer some level of direction when undertaking new tasks (Mathieu, 1990).

Birth order within the family can also predict need tendencies and how much effort an individual will expend to fit into a team. Only and firstborn children are shown to have a greater need to be integrated into a group than do siblings that are born later into a family (Conners, 1963). Since only and firstborn children receive a greater amount of attention and affection from their parents, they tend to seek out a similar level of attention as adults in teams. As a result, only or firstborn children will readily conform and assimilate to the team and will have a greater need for affiliation. Children who are later born, with multiple siblings, do not have the same need for affection or group affiliation and will not conform to the social pressures of a team. These children, when they become adults, are more independent. Having been deprived of parental attention, they have learned to be content as individuals without the support of a team (Conners, 1963).

Different combinations of events in an individual's life can influence his or her behavior; therefore, the reader is cautioned against forming stereotypical conclusions about an individual with respect to familial background. However, the discussion, thus far, suggests that self-identity is a person's way of defining who he or she is as a unique individual in relationship to the rest of the world. Influences such as family interactions and birth order can affect an individual's social and behavioral actions toward the team. The team, however, can also impact the social behaviors of the individual.

Development of Social Identity

As individuals begin to participate in a team, their social and behavioral tendencies become intertwined with the other team members. Social identity is the process of deriving one's self-perceptions from an affiliation with a group. Simon and Pettigrew (1990) described the delicate balance between self-identity and social identity. They found that an individual associated with a strong and positive group would internalize the positive attributes of the group as part of self-identity. In general, though, if the group with which the individual affiliates is weak or has negative attributes, the individual will disassociate from the group and will revert back to a previous self-identity.

Team factors outside of an individual's control, such as being a member of a minority group, can also influence social identity. Individuals, as members of a minority group, felt trust and acceptance toward the minority group but did not extend that trust when dealing with a majority group (Tropp, Stout, Boatswain, Wright, & Pettigrew, 2006). The individuals felt especially distrustful when members of the majority group made reference to their membership in the minority group, even when no negative connotations were expressed. Individuals in majority groups, however, did not feel a similar distrust toward any other groups. This study highlights the overt influence that group membership can unwittingly impose on the individual.

Ridgeway (1982) performed a study that showed a similar tendency of distrust. This study, however, went one step further to demonstrate that a minority individual can consciously modify personal behaviors to overcome the bias and to gain team acceptance. Ridgeway's (1982) study with minority subjects utilized participatory styles of either self-interest or group interest in a group setting. Group members with a perceived lower status, such as females and blacks, were found to have less influence over group decisions than higher-status white males. In all groups, the idea acceptance of white males was high, regardless of the gender/race mix or participatory style used. In contrast,

with all-female groups, idea acceptance was highest with the female who showed the most self-oriented motivation for the decision, being most likely perceived as a power play. In mixed groups, however, idea acceptance was highest when the minority individual clearly showed his reasoning to be in the best interest of the group. Although the minority individual is at an initial disadvantage, this study underscores an important concept that an individual's conscious behavioral modification can be used to improve acceptance of ideas.

The individual's influence on a team is not limited to verbal communication. Ridgeway (1987) argued that individuals could consciously affect the outcomes of group leadership selection through the use of nonverbal cues. In another study on dominance within a group, Ridgeway (1987) found that individuals struggle for power and control when participating in groups. In most groups, a natural leader will emerge as a dominator. The natural leader must walk a fine line between being assertive, aggressive, or submissive. If the potential leader demonstrates, through nonverbal cues, that his or her best interest is in the group, rather than self, other members of the group will defer to that person as the leader.

This research concurs with Ridgeway's earlier findings in 1982 where the author studied interactions of minorities in groups. Subtle but assertive nonverbal cues, like sitting at the head of a table or "a sustained gaze, a quick verbal response, rapid speech, and a confident voice tone" (Ridgeway, 1987, p. 686) create a positive, group-oriented perception. Dominant, aggressive cues, like blatant staring, are perceived as self-serving and threatening, whereas the undesirable cues of averted eyes and slumped posture indicate submissiveness.

When one aspires to a leadership role, an individual can learn to consciously control these nonverbal cues to gain acceptance as a leader (Ridgeway, 1987). Ridgeway and Johnson (1990) further explored the concept of the effects of nonverbal behavior by determining how status hierarchies are developed within a group. They discovered that, when a negative event occurs, the individual will naturally attribute the cause either to him- or herself or to another person. If the individual attributes it to him- or herself, the individual will become depressed and turn it inward; if the individual attributes the cause to another person, the individual will become angry and annoyed. In disagreements, group members who attribute negative events to themselves become the low-status members by projecting a lack of self-confidence. High-status members or appointed leaders attribute the causes of negative events to others. Since low-status individuals lack confidence, they will not challenge the high-status members. As a result of this process, a natural hierarchy emerges. The authors conclude that positive, neutral social behaviors, such as nodding agreement and smiling, do not threaten status hierarchies and, therefore, are most effective for idea acceptance without the potential of threat to either low- or high-status members of the team.

In early team formation, individuals who are not well known to each other often use polite behaviors to interact with the team. Jehn and Mannix (2001, p. 240) suggest that use of this technique may reduce early conflict and that "such norms may reduce the social uncertainty and concern with acceptance that can distract from task performance in newly formed groups." Too much politeness later in the team process, though, can lead to groupthink and hinder healthy debate sessions.

Park (2008) compared politeness to efficiency in the group process. The author predicted that groups of acquaintances that operated under politeness instructions would be more satisfied with the overall group process on a task than groups that strictly operated under efficiency instructions. The study also showed that the groups that were given either politeness or efficiency instructions both expressed more satisfaction with group performance than the group with no instructions. No differences were shown between the politeness or efficiency groups. Park (2008) concluded that the most important outcome of this study was to show that team members who have instruction for team process are more satisfied than those who have no instructions. These findings are in agreement with Mathieu's (1990) earlier study; individuals prefer a directive style of leadership.

Prior relationships between team members can predict team-success and team-member satisfaction with the team process. Prior relations can be either acquaintances or friends. Jehn and Shah (1997, p. 776) define acquaintances as members who lack "a strong bond, past history, and depth of mutual knowledge between the parties." Teams that are composed of friends may have a distinct advantage over those that are composed of acquaintances only. Friendships introduce an element of trust that encourages sharing of information, mutual morale building, commitment, and cooperation (Jehn & Shah, 1997). Of the forming, storming, norming, and performing periods in the team's life cycle (Tuckman, 1965), the first three may not be necessary in this type of team, so the team can quickly move to performing the assigned tasks. Per Jehn and Shah's (1997) observations, groups composed of friends tended to communicate excessively and to spend too much time on morale building, although these teams ultimately used the increased communications to their advantage to be more task-focused and productive than the teams of acquaintances.

Social behaviors, though, are not always positive. Negative social behaviors by an individual, such as social loafing, may also hinder team performance. Blaskovich (2008) and Latané, Williams, and Harkins (1979) describe the phenomenon of social loafing as a reduced work effort on the part of the individual

when participating in a group. Total decision quality (Blaskovich, 2008) and reduction in human efficiency (Latané et al., 1979), due to social loafing, ensures that group productivity is always less than the sum of the individuals' potential productivity.

Latané et al. (1979) found that social loafing results from an individual's unfounded perceptions that are attributed to the team. Loafing begins when individuals feel diminished by the size of the team, perceive that others on the team put forth less effort than they do, or believe that their contribution to the team will seem larger than it actually is when combined with the team's efforts. George (1992) approached the topic from a more personal perspective and tied the underlying reasons to personal satisfaction with the task to be accomplished. George concluded that when an individual has a sense of visibility, meaningfulness, or reward, he or she will be self-motivated to perform the task for the group, and social loafing will be low.

With the recent development of electronic technology, Blaskovich (2008) identifies the virtual team as a third reason for social loafing. Virtual teams create isolation and deprive the individual of personal contact. A lack of socialization and team building can mean that team members literally work with strangers, resulting in a team that lacks cohesion. Individuals can feel that their work is not visible or valuable and, in response, put forth less effort. Blaskovich (2008) concluded that the decisions made by virtual teams can be inferior in quality, since team cohesion and individual familiarity are lacking.

To sum up, an individual turns inward for social and behavioral tendencies in self-identity, whereas social identity is developed from interactions with a team. Although the individual is influenced by the team, studies prove that the individual can also consciously modify personal verbal and nonverbal behaviors in social settings to influence the team (Ridgeway, 1982, 1987). This two-way exchange begins the real process of team building and cohesion.

Group Emotions

Personal emotions can be elevated to a group level to transform into group emotion. Positive emotions, such as happiness, when expressed by individuals, will lead to group closeness and bind the groups together. Negative emotions, such as anger, will increase anxiety and fear and lead to a desire for avoidance (Rhee, 2006) and a disassociation from the group identity (Smith, Seger, & Mackie, 2007). This finding resembles the 1990 study of negative group emotions described by Simon and Pettigrew.

Whether positive or negative, group emotions are separate from individual emotions. Individuals can feel and share emotions related to the group, without becoming personally involved (Smith et al., 2007). Shared emotions can make the individual feel "closeness and interpersonal intimacy" with the group (Smith et al., 2007, p. 443). As an example of group emotion, Smith et al. (2007) discuss a situation where an individual is present at a major sporting event where his team wins. The elated individual exchanges positive conversation and hugs with the associated team supporters, even though he does not know them personally.

Individuals may perceive the group emotions as being larger and more important than their individual emotions. This sense of shared importance can inspire an individual to take action on behalf of the group when the same action would not be attempted as a lone individual (Smith et al., 2007). Lovaglia and Houser (1996) found that group leaders are perceived to have more positive emotions, with positive emotions being attributed to high status within a group. Since emotional status is mostly a matter of perception, the authors suggest that individuals can consciously use their own positive emotions to gain status and to influence decisions within the group.

Positive group emotions are beneficial to the team in creating a safe environment that encourages interest and learning (Rhee, 2006). The individual, feeling trust and safety, feels embraced by the team. As the team members continue to share and recognize mutual emotions, team cohesion and efficiency one's elevated.

Discussion of the past research on group emotions, thus far, suggests that individuals influence and are influenced by group emotions. Positive group emotions often lead to beneficial results for teams. As a leader, one must display positive emotion not only to influence others in the team, but also to elevate one's status.

Group Mood

Group mood is a natural extension of group emotion that moves teams to the next level. Emotions are temporary, quick, and reactive, whereas moods last for an extended period of time (Bartel & Saavedra, 2000). As an established member of a team, an individual will, over time, detect subtle changes in the nonverbal expressions, gestures, or speech of other team members. When a team works together for a period of time, the individual will learn to interpret expressions of fellow team members and will associate them with feelings or emotions (Bartel & Saavedra, 2000; Gummer, 2001). The individual will then unconsciously mimic expressions in an effort to maintain status within the team, referred to as "emotional contagion" (Bartel & Saavedra, 2000). As team members continue to develop and mimic this awareness of each other, the team develops a group mood. Verbal and nonverbal cues are emphasized, recognized, and acted upon similarly by each team member.

Bartel and Saavedra (2000, p. 198) discovered that "coordinated action is best accomplished when individuals can synchronize their thoughts, feelings and behavior." Likewise, Gummer (2001) found that successful teams exhibit a unified perspective and familiarity

among team members. As individuals in teams develop an overall positive mood state, they tend to become more helpful to others and volunteer for additional work outside of their assignments (George, 1991). Managers can learn to observe and interpret group mood to assess the group's level of cohesiveness, commitment, and arousal state (Bartel & Saavedra, 2000; Gummer, 2001).

When teams reach a state of group mood, they surpass the temporary and fleeting state of emotions. As the team member unconsciously synchronizes his self- and social behaviors with those of his teammates, the focus shifts from the self to the team. At this stage in the team process life cycle, team cohesion is fully functional.

Emotional Intelligence

As teams continue to mature, group mood can be elevated even further to the level of emotional intelligence. When a team reaches a state of emotional intelligence, individuals learn not only to observe and to mimic but to harness and control the team's emotions to aid in their thought processes (Druskat & Wolff, 1999). The team operates as an entity. Individuals move upward from self-awareness and self-motivation (personal competence) to the use of social awareness and social skills (social competence; Druskat & Wolff, 1999). In this elevated social state, the team, feeling safety and trust among the members, is comfortable not only in setting standards on positive and negative behaviors but in how the team, as a unit, will react to emotional stress as well.

The focus of the team is turned back to the individual's perspective, interpreting and reacting to the individual's behaviors while maintaining emotional balance. A team that is able to achieve this level becomes self-managed. Team members work more efficiently together as a group than they would as individuals. The team then becomes highly productive while remaining acutely aware of individual needs (Druskat & Wolff, 2001).

Literature Review Summary

Literature review findings were presented using five stages of social and behavioral development of individuals and teams (Table 1).

Every team progresses through stages of social and behavioral development. The stages are shaped by the self-identity characteristics that the team members bring to the team. These characteristics have been developed within the family unit and through life experiences and make each team member unique. When team members interact with other individuals in a team setting, they project these characteristics in

Factor	Definition	Reference
Self-Identity	Self-identity is a person's way of defining who he or she is as a unique individual in relationship to the rest of the world.	Conners (1963), Hill (1987), Mathieu (1990), Thomas and Hynes (2007)
Social Identity	Social identity is developed from interactions with a team wherein both individuals and the team influence each other.	Blaskovich (2008), George (1992), Jehn and Mannix (2001), Jehn and Shah (1997), Latané et al. (1979), Park (2008), Ridgeway (1982), Ridgeway (1987), Ridgeway and Johnson (1990), Simon and Pettigrew (1990), Tropp et al. (2006), Verma (1996)
Group Emotion	Personal emotions can be elevated to a group level to become group emotion. Individuals may perceive the group emotions as being larger and more important than their individual emotions.	Lovaglia and Houser (1996), Rhee (2006), Smith et al. (2007)
Group Mood	Group mood is a natural extension of group emotion. Emotions are temporary, quick, and reactive, whereas a mood lasts for an extended period of time.	Bartel and Saavedra (2000), George (1991), Gummer (2001)
Emotional Intelligence	Emotional intelligence is a state where individuals learn not only to observe and to mimic but also to harness and control the team's emotions to aid in their thought processes. Complete trust is established at this stage.	Druskat and Wolff (1999), (2001)

Table 1: Literature review summary.

both verbal and nonverbal mannerisms and communications to shape the structure and behavioral personality of the team. The team then contributes to the individual's development of social identity. Studies show that an individual can consciously exhibit social behaviors, verbally or nonverbally, that influence acceptance, leadership, and team-status hierarchies. As a team continues to mature, transition to group emotion, group mood, and finally to emotional intelligence takes place.

It can be deduced that since every team is composed of unique individuals, the team itself will also be unique to all other teams. Research, however, also points to the fact that, although each team is unique, the process of team development repeatedly conforms to the same pattern. Predictable stages of team development, with respect to the social and behavioral progression, can be delineated with characteristics.

Analysis and Discussion

Analysis

Past research focused on understanding global relationships in building and developing the whole team as a unit. For example, Preston (2005) focused on transitioning groups from individuals to teams through collaboration and development of trust. As another example, Mattick and Miller (2006) discussed the measurable benefits of effective teamwork. An article by Miller (2007) outlined strategies for team-building exercises. The relationship between the individual team member and his or her influential power on the team or, conversely, the team's influence on the individual, however, are areas that were not addressed. Specifically, the extent of influence a person can have on team function has primarily been unrecognized and underestimated. It is realistic to say that an individual who lacks positive social and behavioral skills can destroy team unity and cohesion, resulting in team process failure.

The literature review illustrates the individual's role in developing a relationship with the team and suggests a series of progressive stages in team development. As the individual strengthens his self-perceptions and self-identity, the individual begins to relate to and mold the development of the team's social and behavioral identity. At the same time, the team influences the individual's social identity. Individuals then begin to integrate in a higher state of team development, group emotion, where a unified team identity begins to emerge. Over time, team members learn to decode the verbal and nonverbal expressions of their teammates as they collectively move to group mood. At full maturity, with the continued oversight of the project manager, the team operates independently, as though it is one individual, in emotional intelligence. The transition to the highest level, it appears, is a function of time; the longer the team works together, the greater the probability to reach this stage.

This staged progression of team development is similar to Maslow's theory on the Hierarchy of Needs. Maslow's theory is organized with the most basic human biological needs (such as food, drink, shelter, sleep, and sex) at the bottom of a pyramid, progressing up through a series of levels to self-actualization (such as awareness and meaning) at the apex (Zalenski & Raspa, 2006). A similar model is constructed with self-identity at the base and emotional intelligence at the apex. This progressive relationship can also be correlated to the forming, storming, norming, and performing phases of the team life-cycle framework (Tuckman, 1965) and is depicted in Figure 1.

The pyramid model makes sense, similar to Maslow's theory. Every individual begins with self-identity at the base level and transitions to social identity in teams, but few teams will reach the level of emotional intelligence.

Implications for Project Management

Each phase of the individual's social and behavioral development presents a

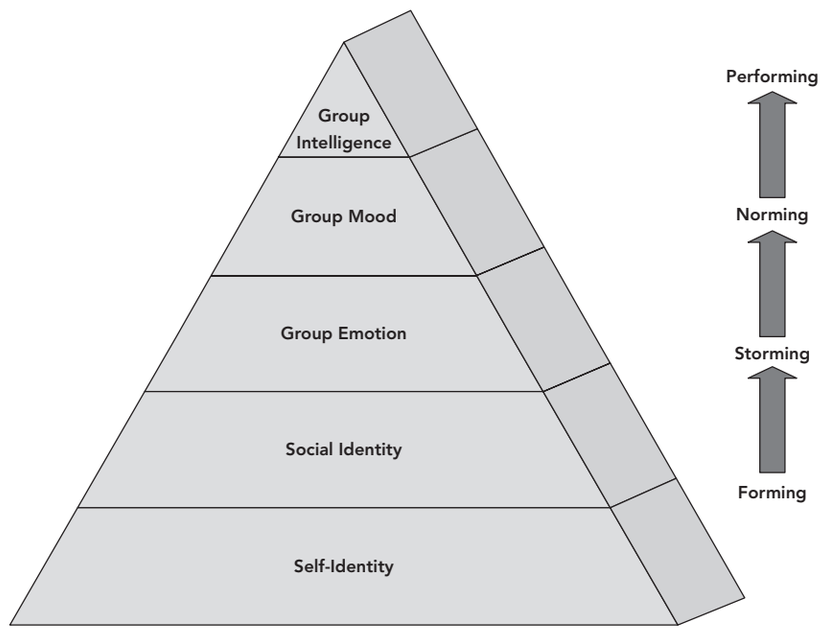

Figure 1: Hierarchy of social and behavioral development.

challenge to the project manager. Todryk (1990) proposed that, under strong leadership, team members can gain personal insight from issues surrounding the project. The experience of working through the issues "can become a source of strength for the team if dealt with in an open and effective and problem-solving manner" (Todryk, 1990, p. 18). As such, the project manager should assess each team member to determine his background and maturity level in social and behavioral skills. The information the project manager gains from this assessment will strengthen both the individual and the team for project success. The research presented in this article provides valuable insight for this process. Table 2 presents a compilation of the information gathered from the literature into a set of global recommendations for project team process management, based on each social/behavioral stage of the team.

Discussion

Table 2 shows self-identity as the first developmental stage and the most basic form of social and behavioral development within the context of a team setting. The self-identity stage is prevalent during the forming phase of the team and may require a more directive management style (Verma, 1996). Gersick's (1988) two-stage approach to team development states that the first team meeting sets the framework for

Social/Behavioral Stage	Individual/Team Characteristics	Effective Management Style	Project Manager's Role
Self-Identity Forming Stage	• Individual focuses on self • Low team cohesion	High-directive management	• Meet one-on-one to assess skill levels • Use assertive social behaviors to establish leadership • Establish clear social and behavioral rules and expectations • Encourage politeness • Demonstrate intolerance for minority bias and nonacceptance of ideas
Social Identity Storming Stage	• Individual focuses on other team members • Low team cohesion	High-directive and low-supportive management	• Demonstrate positive emotions to convey leadership • Address negative behaviors that result in power or status struggles • Maintain awareness of individual's tendency to withdraw from team • Match individual's social and behavioral attributes to meaningful tasks
Group Emotion Norming Stage	• Individual focuses on team members but starts to shift to team process • Medium team cohesion	Medium-directive and medium-supportive management	• Encourage formation of friendships • Create opportunities for increased interaction on virtual teams • Maintain personal positive emotion to maintain leadership status • Encourage positive emotions and discourage negative emotions
Group Mood Norming Stage/ Performing Stage	• Individual focuses on team process • Medium team cohesion	Low-directive and high-supportive management	• Monitor team for signs of emerging negative behaviors and high/low emotional states • Intervene when negative behaviors are exhibited • Maintain awareness of social loafing tendencies
Emotional Intelligence Performing Stage	• Team focuses on individual's thoughts/feelings • High team cohesion • Team functions as one entity	Team is self-managed	• Monitor team behaviors and promote creativity • Maintain team awareness of project mission • Minimize intervention to allow for natural progression of team process

Table 2: Team process characteristics and management guidelines.

the first half of the project. The author advises the project manager to use restraint when intervening in the team-development process.

In this stage, the project manager can promote team development by using a more directive leadership style. Communicating clear expectations and reinforcing the team mission while encouraging the team to evolve as a unique group should be a priority. The project manager should meet with each team member to understand the individual's background and motivation, to assess the individual's strengths, and to determine their potential contribution to the team. The project manager must also demonstrate a heightened awareness during initial meetings to derail any negative tendencies toward social, behavioral, or minority-biased issues. The project manager must also insist on and reinforce positive social behaviors, such as politeness, as the team starts to build relationships, and to minimize conflicts arising from personal differences (Jehn & Mannix, 2001; Park, 2008).

As individuals progress in the team process to the storming phase, social identity with the team will begin to emerge. To engage team members, the project manager should be selective in matching team members to specific activities that will spur interest and professional growth, as well as provide a sense of personal satisfaction. For example, individuals who are identified as having a high need for affiliation can be used to promote team-building activities, while individuals with a high need for achievement can be requested to contribute to the development of task-oriented activities.

In the social identity stage, the project manager may be subjected to hidden competition for leadership power and should use assertive, nonverbal, and verbal cues to establish authority over the team (Todryk, 1990). He should monitor the cues of team members to assure that power struggles for status among team members do not ensue. Rickards and Moger (2000, p. 277) propose a potential barrier to Tuckman's (1965) model, caused by "interpersonal and intra-personal forces." If not managed properly, this barrier may prevent a team from moving out of the storming phase. The expectations for team performance and team mission should be reemphasized frequently. As management style gradually becomes evenly directive and supportive, the continued use of positive social behaviors should be monitored, and demonstrations of negative social behaviors should be dealt with swiftly on an individual basis to avoid disruption to the team. If any individual exhibits a tendency to withdraw from the team, the project manager should discover and correct the cause to prevent disassociation. Use of a facilitative and creative leadership style can encourage team members to eliminate dysfunctional behaviors in moving forward to the next phase.

When the team moves to the group emotion stage, the norming phase begins. At this time, the project manager should be cognizant of his personal emotions, since the demonstration of positive emotions is important to being perceived as the leader. In addition, the project manager should assure that the group emotion level remains positive to keep all team members highly motivated. When negative emotions surface, the project manager should allow for team reaction but then take measures to bring the team back to a positive state. During this stage, the project manager should introduce social opportunities to encourage the formation of friendships because teams that are composed of friends use enhanced communications to accelerate the team process.

As the team enters the group mood stage, team members and the project manager should be attuned to each other's behaviors. Occurring in the late-norming phase, the project manager's management style should become increasingly more supportive, rather than directive (Verma, 1996). The team should be functioning smoothly as a group, with the majority of emotions being displayed as positive. Rickards and Moger (2000) propose a second barrier that may prevent the team from moving to the performing phase. This barrier or boundary is inflicted by company culture or expectations and may prevent the team from evolving to a higher level of performance. The project manager's role at this stage is to facilitate development of the creative side of the team.

The project manager should be vigilant for any signs of negative behaviors that might be exhibited when monitoring the team process. If these types of behaviors are observed, it is a sign of digression to an earlier stage, and the project manager should again intervene to identify and eliminate the cause. Gersick (1988) notes that, in Stage 2 of the two-stage process, behavior patterns normally disappear, as the team becomes primarily focused on meeting the project deadline. Additionally, the project manager should watch for signs of social loafing, as individuals may be overwhelmed by or hide within the group to avoid assigned tasks.

Once the team matures to the emotional intelligence stage, the project manager will have minimal influence over the team process. The team will be in the performing phase, operating as a unit, and will be self-managed. In this stage, the team unit turns attention back to the individual. Since the team sets norms for behaviors and emotions, any negative behaviors will be dealt with quickly by the team in a caring manner. The project manager should continue to monitor the team's social behaviors but should not be too quick to intervene, so as to prevent disruption of the natural team process.

Conclusions and Future Direction

Teams are composed of many individuals, each with a unique identity, behavioral style, and motivation. Social behaviors and interactions exhibited by the individual can be positive or negative, either contributing to or detracting from the

team. Negative social behaviors by an individual can derail the team process. Using literature review analysis, this study attempted to link the progress of the individual's social and behavioral development to successful team process development.

The hierarchy of social and behavioral development model was developed to demonstrate the team member's progression of social and behavioral maturity in relation to team process development. Self-identity was identified as the lowest form of social interaction, and emotional intelligence was identified as the highest. The model demonstrates that individuals in a team at the lowest level seek self-identity, but few groups reach the peak of emotional intelligence. This article presents an opportunity to develop a detailed and comprehensive research to validate the model.

A more detailed development of the team process model was limited by the lack of available research in this field. An untapped opportunity for study exists in applying basic sociology and behavioral psychology principles to assess the implications on project management team processes. This article initiates the process of merging the two fields. As the social sciences begin to converge with the business processes of project management, an improved understanding of the individual's role in contributing to those processes will open new doors to effective team management. ■

References

Bartel, C. A., & Saavedra, R. (2000). The collective construction of work group moods. *Administrative Science Quarterly, 45,* 197–231.

Blaskovich, J. L. (2008). Exploring the effect of distance: An experimental investigation of virtual collaboration, social loafing, and group decisions. *Journal of Information Systems, 22*(1), 27–46.

Conners, C. (1963). Birth order and needs for affiliation. *Journal of Personality, 31,* 408–416.

Druskat, V. U., & Wolff, S. B. (1999). The link between emotions and team effectiveness: How teams engage members and build effective task processes. In *Academy of Management Proceedings & Membership Directory* (pp. L1–L6).

Druskat, V. U., & Wolff, S. B. (2001). Building the emotional intelligence of groups. *Harvard Business Review, 79*(3), 80–90.

George, J. M. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. *Journal of Applied Psychology, 76,* 299–307.

George, J. M. (1992). Extrinsic and intrinsic origins of perceived social loafing in organizations. *Academy of Management Journal, 35,* 191–202.

Gersick, C. J. G. (1988). Time and transition in work teams: Toward a new model of group development. *Academy of Management Journal, 31,* 9–41.

Gummer, B. (2001). I'm in the mood for work: Current perspectives on work group dynamics. *Administration in Social Work, 25*(2), 81–101.

Hill, C. A. (1987). Affiliation motivation: People who need people . . . but in different ways. *Journal of Personality and Social Psychology, 52,* 1008–1018.

Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal, 44,* 238–251.

Jehn, K. A., & Shah, P. P. (1997). Interpersonal relationships and task performance: An examination of mediating processes in friendship and acquaintance groups. *Journal of Personality and Social Psychology, 72,* 775–790.

Kezsbom, D. (1995). Team work: The magic of interaction. In *Proceedings of the 1995 Annual Seminar Symposium–Project Management Institute* (pp. 477–481). Upper Darby, PA: Project Management Institute.

Latané, B., Williams, K., & Harkins, S. (1979). Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology, 37,* 822–832.

Lovaglia, M. J., & Houser, J. A. (1996). Emotional reactions and status in groups. *American Sociological Review, 61,* 867–883.

Mathieu, J. E. (1990). A test of subordinates' achievement and affiliation needs as moderators of leader path-goal relationships. *Basic and Applied Psychology, 11*(2), 179–189.

Mattick, B., & Miller, D. G. (2006, Winter). Teamwork pays. *Journal for Quality & Participation, 29*(4), 30–33.

Miller, B. C. (2007). Quick activities to improve your team: How to run a successful team-building activity. *Journal for Quality & Participation, 30*(3), 28–32.

Park, H. S. (2008). The effects of shared cognition on group satisfaction and performance: Politeness and efficiency in group interaction. *Communication Research, 35,* 88–108.

Preston, P. (2005). Teams as the key to organizational communication. *Journal of Healthcare Management, 50*(1), 16–18.

Rhee, S. (2006). Shared emotions and group effectiveness: The role of broadening-and-building interactions. In *Academy of Management Proceedings* (pp. B1–B6).

Rickards, T., & Moger, S. (2000). Creative leadership processes in project team development: An alternative to Tuckman's stage model. *British Journal of Management, 11,* 273–283.

Ridgeway, C. L. (1982). Status in groups: The importance of motivation. *American Sociological Review, 47,* 76–88.

Ridgeway, C. L. (1987). Nonverbal behavior, dominance, and the basis of status in task groups. *American Sociological Review, 52,* 683–694.

Ridgeway, C., & Johnson, C. (1990). What is the relationship between socioemotional behavior and status in task groups? *American Journal of Sociology, 95,* 1189–1212.

PMJ414_09_20192.qxd 8/5/10 7:31 AM Page 98

Simon, B., & Pettigrew, T. F. (1990). Social identity and perceived group homogeneity: Evidence for the ingroup homogeneity effect. *European Journal of Social Psychology, 20,* 269–286.

Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can emotions be truly group level? Evidence regarding four social criteria. *Journal of Personality and Social Psychology, 93,* 431–446.

Thomas, M., & Hynes, C. (2007). The darker side of groups. *Journal of Nursing Management, 15,* 375–385.

Todryk, L. (1990). The project manager as team builder: Creating an effective team. *Project Management Journal, 21,* 17–22.

Tropp, L. R., Stout, A. M., Boatswain, C., Wright, S., & Pettigrew, T. F. (2006). Trust and acceptance in response to references to group membership: Minority and majority perspectives on cross-group interactions. *Journal of Applied Social Psychology, 36,* 769–794.

Tuckman, B. W. (1965). Development sequence in small groups. *Psychological Bulletin, 63,* 384–399.

Verma, V. (1996). *Human resource skills for the project manager, Volume 2.* Newtown Square, PA: Project Management Institute.

Zalenski, R. J., & Raspa, R. (2006). Maslow's hierarchy of needs: A framework for achieving human potential in hospice. *Journal of Palliative Medicine, 9,* 1120–1127.

Susan L. Adams holds a BS degree in biology from the College of William and Mary and an MPM from Western Carolina University. She is the president and principal consultant of QPM Consulting, LLC, which specializes in quality oversight and project management services for the pharmaceutical industry. As a consultant, she has established compliance systems for her clients, provided mentoring, and led the successful execution of manufacturing process projects. Prior to establishing her consulting firm, she held various roles in the pharmaceutical industry encompassing project management, quality control, quality assurance, manufacturing operations, and technical services.

Vittal Anantatmula, PhD, is an associate professor of project management in the College of Business at Western Carolina University. He is also the director of graduate programs in project management. His current research is focused on project management teams, integrating knowledge management and project management, knowledge management effectiveness, project management performance, and leadership. His work has been published in journals such as *Project Management Journal,* the *Journal of Knowledge Management,* the *International Journal of Knowledge Management,* the *Journal of Information and Knowledge Management Systems (VINE),* and the *International Journal of Knowledge and Learning.* Prior to joining Western Carolina University, he was at the George Washington University teaching and directing a graduate degree program. He has worked in the petroleum and power industries for several years as an electrical engineer and project manager.