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Motivation in Project Management: The Project Manager's Perspective

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COLLEGE OF COMMUNICATION

MOTIVATION IN PROJECT MANAGEMENT:
THE PROJECT MANAGER'S PERSPECTIVE

By

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A Thesis submitted to the
Department of Communication
in partial fulfillment of the
requirements for the degree of
Master of Science

Degree Awarded:
Spring Semester, 2007

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ACKNOWLEDGEMENTS

I would like to acknowledge my committee members, who have not only been extremely supportive throughout my thesis process, but have also been my main source of guidance during my time at Florida State University. I would especially like to thank Dr. Adams who has served as an excellent advisor and mentor throughout my Master's Program in the College of Communication. Special thanks also goes to Dr. DuBard who has helped me deepen my understanding of project management and guided me in the process to attain the highest credential in project management, the Project Management Professional (PMP) certification. Finally, I would like to thank Dr. Grise for keeping my ambitions balanced by pushing me to question the reasons behind my current and future actions and forcing me to asking the question "WHY?" as often as possible.

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ABSTRACT

Successful project management plays an important role in contemporary business. To accomplish successful project delivery, a project manager has to do more than simply work within predefined project management constructs and techniques. One major additional element is team motivation, but understanding how motivation works from the project manager's perspective remains unclear. To gain further insight, the Project Management Institute (PMI) online research network was used to discover currently held perceptions regarding team motivation by project management professionals. Factors that cause low levels of team motivation were explored and perceptions regarding successful motivation techniques were measured. In addition, the study introduced the project stages concept into team motivation theory by assessing perceptions regarding the relation of team motivation factors based on project stage.

INTRODUCTION

Overview of Project Management and Motivation

The financial stability of every company, in every industry, depends upon the successful management of resources dedicated to completing projects within a predetermined budget. According to Schwalbe (2004), nearly \$10 trillion of the world's total domestic product of \$40.7 trillion are attributed to projects of all kinds. The demand for project management has become so pervasive that the Project Management Institute (PMI), recently announced that the number of applicants successfully passing the certification test has grown to almost 25,000 per year. While the total number of Project Management Professionals (PMP) currently registered with the PMI is 202,514 (2006, October), certified project managers are still in high demand because of the training they receive to manage projects successfully. For example, projects hinge on timely delivery, adherence to budget constraints, scope, and quality specifications. A project manager may have skills to guide a project team through various project stages and project life cycles, but team motivation – something far less tangible – is an essential element of a successful project.

PMI's Project Management Body of Knowledge (PMBOK) emphasizes that the ability to motivate a project team and other stakeholders is one of the most important interpersonal skills a project manager should possess. Whether a project team is highly motivated to attain a project's goal can make the difference between a smooth project progress or one that is laden with complications and conflict. The idea of a motivated project team may seem like commonsense, but is difficult for project managers to easily understand because definitions of motivation vary among researchers. While Huszczo (2004) remarked that "motivation is basically a function of two things: expectations and reinforcements" (p. 198), other researchers have explained motivation as a level of energy employees bring to work (Ellemers, De Gilder & Haslam, 2004; Welbourne, Andrews & Andrews, 2005). According to Schwalbe (2004), "psychologists, managers, coworkers, teachers, parents, and most people in general still struggle to understand what motivates people" (p. 346).

When engaging a difficult or complex project, the obvious question a project manager may ask is “How do I motivate my team members?” Interestingly, some research indicates that this question may be a step in the wrong direction. For example, one research study that surveyed 135,000 employees at 40 organizations concluded that asking such a question may be foolish since “most people enter a new organization and a job with enthusiasm, eager to work, to contribute, to feel proud of their work and their organizations” (Sirota, Mischkind, & Meltzer, 2005, p. 15). While research trends have generally avoided creating an overall definition of motivation, focusing instead on specific team tasks or roles (Ambrose & Kulik, 1999), PMBOK defines motivation in project settings as “energizing people to achieve high levels of performance and to overcome barriers to change” (p. 27).

The ability of a project manager to work with a team and achieve goals is critical to the success of an organization. Successful project management is more than simply working within predefined project management constructs and techniques, yet understanding how motivation works from the project manager’s perspective remains unclear. The purpose of the current research, then, is to explore currently-held perceptions by project managers to formulate successful techniques that can help create a motivated team. This research will also shed light on factors which decrease or prohibit team motivation in project settings. The following literature review is organized in three segments. It explores employee motivation from the angle of the project manager, the organization, and then compares and contrasts these two influences.

LITERATURE REVIEW

The Project Manager's Perspective

Leadership, or management in an organization involves getting others to do something that needs done, but not necessarily through coercion (Lewis, 2003 p.3). Schwalbe (2004) explains that any discussion of influence in project management will inevitably lead to the topic of power, which she defined as “the potential ability to influence behavior to get people to do things they would not otherwise do” (p. 351). She characterizes power in five different ways: coercive power (threats, or punishment), legitimate power (based on authority of position), expert power (based on knowledge), reward power (e.g. incentives, recognition), and referent power (based on charisma). While employing one or more of these strategies may result in tasks getting done, the effects they have on the motivation of the team or individual members can be very different. Sirota et al. (2005) demonstrated that the use of autocratic, coercive, or laissez-faire management styles are detrimental to employee satisfaction. The role of a successful team leader, then, may include added roles of “initiator, model, negotiator, and coach” (Luecke, 2004).

One management style that has been proven to enhance motivation is the participative leadership style (Ellemers, De Gilder & Haslam, 2004; Sirota, Mischkind & Meltzer, 2005). Whether team members perceive a manager as a participant or an autocratic leader will guide how they will respond to the manager's attempts to raise motivation. According to Ellemers et al. (2004), “motivation to cooperate with a leader who is seen as an out-group member depends on how rewarding the exchange relationship is for the subordinate – loyalty to an in-group leader emerges more unconditionally” (p. 467). In addition, a manager's ability to create shared identity guides whether attempts to energize the whole team will be successful (Ellemers et al., 2004). Leary-Joyce (2004) refers to the participative leadership style as servant leadership. “For real involvement, people need to see the value, excitement and challenge of what they do. Command-control leaders tell. Servant leaders include, discuss, take ideas, look for ways to help people come on board, and celebrate every success that comes along” (p. 39).

Sources of Motivation

Management styles are inclusive or exclusive, and are thought to change team motivation from internal (intrinsic) or external (extrinsic) sources. Peters & Waterman (1983) found that large organizations with a successful track record over many years distinguish themselves from the rest by focusing on the individual employee and the development of intrinsic motivation. So what exactly is the difference between an extrinsically and an intrinsically motivated employee? Gagne & Deci (2005) put it best when they explain that:

Intrinsic motivation involves people doing an activity because they find it interesting and derive spontaneous satisfaction from the activity itself. Extrinsic motivation, in contrast, requires an instrumentality between the activity and some separable consequences such as tangible or verbal rewards, so satisfaction comes not from the activity itself but rather from the extrinsic consequences to which the activity leads. (p. 331)

The roman phrase *labor ipse voluptas* which stands for *work / labor in itself conveys pleasure* is another way to explain intrinsic motivation (Frey, 1997). To illustrate that motivation can be understood as a continuum between amotivation (lack of motivation) and intrinsic motivation (completely self-determined), Gagne & Deci (2005) related work motivation to self-determination theory (SDT).

At the heart of SDT lies the distinction between autonomous motivation and controlled motivation. Autonomous motivation occurs when the individual has a choice. Gagne & Deci (2005) explain that autonomous motivation is essentially intrinsic motivation since the person engages in an activity volitionally. Controlled motivation, in contrast, implies that the person has to engage in an action due to some outside influence (e.g. Boss says so). The self-determination continuum (Figure 1) illustrates the five different types of motivation SDT describes. Amotivation on the left side completely lacks self-determination. Intrinsic motivation, on the other side of the continuum, is fully

self-determined. Furthermore, self-determination theory distinguishes between four types of extrinsic motivation: external, introjected, identified, and integrated.

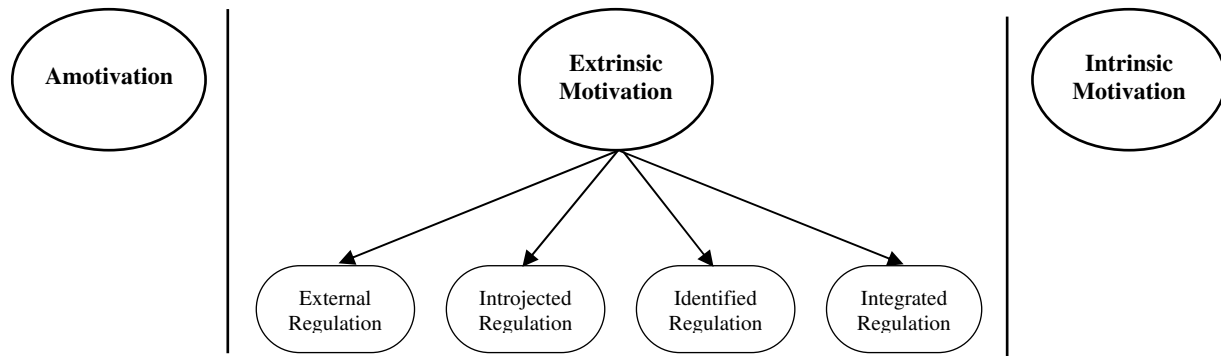


Figure 1. This model by Gagne & Deci (2005) illustrates the continuum from amotivation to intrinsic motivation (p. 336).

External regulation is an example of controlled motivation which lacks self-determination. For example, an externally regulated person might only work for a specific reward or feedback associated with the work. Through a process called internalization a person can turn extrinsically motivating aspects into intrinsically stimulating elements by making them more personal. Internalization is defined as “people taking in values, attitudes, or regulatory structures, such that the external regulation of a behavior is transformed into an internal regulation and thus no longer requires the presence of an external contingency” (Gagne & Deci ,2005, p.334). The three remaining types of regulation: introjected, identified, and integrated represent varying degrees of internalization. An example of introjected regulation is a person who works due to internal pressures of ego. Identified regulation is a less pressurized internalization where people feel free because their behavior is more aligned with their personal goals and values. The following example by Gagne & Deci (2005) explains identified regulation, “if nurses strongly value their patients’ comfort and health and understand the importance of doing their share of the unpleasant tasks for the patients’ well-being, the nurses would feel relatively autonomous while performing such tasks (e.g., bathing patients), even though the activities are not intrinsically interesting” (p. 335).

Finally, integrated regulation is the most autonomous of extrinsic motivations and describes a person who feels that their behavior is an integral part of who they are. If the profession nursing is an integral part of that person's identification, then integrated regulation is present. Integrated regulation is the extrinsic motivation closest to intrinsic motivation. However, Gagne & Deci (2005) caution that although it is an autonomous form of extrinsic motivation, integrated regulation is not intrinsic because "the motivation is characterized not by the person being *interested* in the activity but rather by the activity being *instrumentally important* to personal goals" (p. 335).

Moreover, although the internalization process illustrates different categories of integration, SDT does not propose that a person has to follow through all stages to integrate a regulation. SDT should not be understood as a theory of stages where one level has to be satisfied before the next one can be attained (e.g. Maslow's Hierarchy of Needs, reviewed later on). Rather, SDT proposes that extrinsic motivation can come very close to intrinsic motivation when external factors are internalized (Gagne & Deci, 2005).

Another interesting finding concerning intrinsic motivation is the spill-over effect. Frey (1997) explains that in closed groups such as temporary project teams, but also families, intrinsic motivation can be affected by others in the group. If one person's intrinsic motivation is alienated or "crowded-out" then the lower motivation of that person may spill-over to other project members and thereby lower the overall motivation level of the whole project team.

Frey (1997) also alluded to the fact that employees' work performance may be induced by a mix of intrinsic and extrinsic motivation. Figure 2 illustrates the different effects the various combinations of the two types may have:

		Intrinsic Motivation	
		<i>Low</i>	<i>High</i>
Extrinsic Intervention	<i>Absent</i>	Missing work Incentives	High work morale
	<i>Strong</i>	Extrinsic work incentives	Over-sufficient w. justification

Figure 2. Work performance induced by intrinsic and extrinsic motivation (Frey, 1997, p.90)

Optimizing Energy

Deming (1988) explained that every process in an organization is subject to variation. He stressed that instead of trying to maximize production, morale, or other aspects of organizations, managers should strive to optimize according to natural variation of the processes. Covey (1990) advocated a similar approach, less focused on manufacturing but created for human beings which he called P/PC balance. He explained that for anything to be productive (P) it also has to have production capability (PC maintenance). In other words, mere maximization of employee motivation will bring negative consequences since laws of nature teach us that what goes up must come down.

Welbourne et al. (2005) explored this theory by studying employee motivation as a level of energy that has to be optimized in order to be most effective. Just as over-training in the athletic world will lead to injury, burn-out, or other negative side effects, so will over-motivation take its toll over time. Welbourne et al. (2005) specifically stated that “too much motivation or energy can lead to detriments in long-term performance, as is poignantly captured in the Japanese phenomenon of *karo-jisatsu* (death through overwork)” (p. 56). Welbourne et al. (2005) also found that although the concept of *more is not always better* seems to be commonsense, well-established motivation theories have de-emphasized that aspect of motivation. Gagne & Deci (2005) reported in their meta-review that motivational concepts have been proven to be both additive and subtractive, but did not point to any research that suggests an optimization of employee energy.

The evidence from Welbourne et al's (2005) study shows that there is an optimum zone of employee energy or motivation which should not be surpassed, and that it is unique for each individual. A manager can, however, help an employee stay in the zone or even aide to elevate it a bit. Another insight Welbourne et al. (2005) received from the managers who participated in their study was that simple interventions and an increase of communication with the employee can make tremendous differences in employee energy. Practical advice that can help managers understand and work with employee motivation better will be examined next. Specifically, we will examine areas researchers and management theorists have identified as especially applicable to team-motivation.

Autonomy

Being capable of and allowed to manage themselves is one of the most important needs and requirements of the knowledge worker according to Drucker (1999). When participants were given autonomous control (operator control) in Wall et al's (1990) study, increased performance, increased intrinsic job satisfaction, and decreased job pressure were reported. The finding that autonomy creates greater employee satisfaction is also congruent with studies on the goal-setting theory which found that self-set goals are more desirable (Ambrose & Kulik, 1999). According to Bakke (2005), decisions that are made at the top are basically lost chances to delegate responsibility. Luecke (2004) explains that when a manager specifies ends and means to a task a waste of human resources and decline in motivation occurs.

If the manager instead only specifies ends and allows the individual or team to develop their own means, stronger motivation and a heightened work morale will manifest itself. According to Ambrose & Kulik (1999), research addressing action regulation theory has also found that autonomy (decision latitude) results in maximal motivation. Deci et al. (1989) found that managerial autonomy support, offering choice, and encouraging self-initiation are associated with high levels of job satisfaction. In addition, Deci et al. (1989) report that providing feedback in a non-controlling way can have similar effects. Feedback may therefore be another area where project managers can positively influence motivation.

Feedback

The general consensus regarding effectiveness of feedback is that positive constructive feedback enhances employee motivation (Ambrose & Kulik, 1999; Deci, Koestner, & Ryan, 1999; Gagne & Deci, 2005; Huszyczko, 2004; Lewis, 2003). Lewis (2003) also explains that those who contribute the most in a project are usually the ones most in need of appreciation. Feedback can also enhance positive effects of other motivational techniques such as goal-setting. Latham & Locke (1991) and Locke (1996) found that goal-setting is enhanced when feedback is given in a way that illustrates the progress that has been made towards the goal. The team member's perception of feedback also plays a role in its effectiveness. Just as employee perception of managers plays an integral role in the effectiveness of different management styles, so is the influence of feedback heavily influenced by the receiver's perceptions.

According to Ambrose & Kulik (1999), autonomy also plays a role in feedback since "feedback from an external source is expected to lower intrinsic motivation if it is perceived by the individual as 'controlling,' but not if it is perceived to be 'competence' feedback" (p. 254). Gagne & Deci's (2005) meta-review highlighted that negative feedback can undermine both extrinsic and intrinsic motivation, leaving people amotivated. Negative feedback should therefore be carefully evaluated before it is given.

Whatever the individual approach to feedback, Huszyczko (2004) points out that the "system of reinforcement must be good for the overall organization and not just for the team you are motivating" (p. 204). However, a system of reinforcement does not only include verbal feedback. Tangible rewards can also be considered feedback, but need special attention since their impact can make or break motivation even more than verbal feedback.

Rewards and Recognition

The overall philosophy of rewards (extrinsic motivation) and recognition (intrinsic motivation) is to motivate the employee and to let the employee stand out. Peters & Waterman (1983) found that successful companies make it an organizational goal to let their employees stand out by repeatedly recognizing their contributions. Lewis (2003) points out that showing appreciation through a paycheck alone may not be enough. According to Lewis (2003), rewards create compliance and not commitment. A

meta-review by Deci, Koestner, & Ryan (1999) analyzing 128 laboratory experiments found that while positive feedback increases intrinsic motivation, rewards can significantly undermine it. Frey (1997) relates the latter finding to the situation of being invited to dinner at a friend's house and then offering the friend money afterwards. That offer will not only be declined, but it will more than likely be seen as an insult.

However, Gagne & Deci (2005) report that not all rewards undermine motivation. Specifically Gagne & Deci (2005) state that studies have shown "when rewards are given independent of specific task engagement (as might be the case with salary) or when the rewards were not anticipated (as might be the case with unexpected bonuses), tangible extrinsic rewards did not undermine intrinsic motivation" (p. 332). Luecke (2004) advocates that rewards in a team should give incentives for good performance on the team. Such team rewards should go beyond regular employee recognition and should specifically target accomplishments made in and for the team. Luecke (2004) explains that if used correctly, rewards can be a great tool to help align behavior to team goals. A manager should, however, be aware that team-specific rewards can create potential conflicts.

Team-based rewards can create a conflict with the individual's traditional work assignment, as was pointed out by Luecke (2004) and Dunn (2001). The manager further has to decide whether rewards should be given to all team members or if they should focus on individual contribution. The first approach will bring along the risk of free-riders who may be rewarded without having significantly contributed to the project. However, both Deming (1988) and Drucker (1999) point out that individual rewards will inevitably create competition and will eventually lower productivity and morale. Peters & Waterman (1983) found that successful companies repeatedly make at least 80% of their employees winners, which would also suggest a team-based over an individual reward system.

Rewards should also follow the guidelines of equity theory. According to Ambrose & Kulik (1999), "research in the 1990s consistently demonstrated that underpayment inequity was associated with negative attitudes; however, there continues to be ambiguity about the effects of overpayment inequity" (p. 242). Deming (1988) explained that the popular merit-system is one of the major sources of inequity and

competition. A study by Deckop & Cirka (2000) found that when a merit-pay program was introduced in a non-profit organization, decreased feelings of autonomy and intrinsic motivation were reported. Reward structures and reinforcement systems are therefore areas that can influence employee motivation, both positively and negatively. Project managers will have to judge which approach is most appropriate depending on the make-up of the stakeholders who are involved in a project.

Summary of PM's Perspective

To recap, project managers can influence team motivation through the use of power and the application of various leadership styles. The aim for intrinsic motivation will be most beneficial since the team member will be connected to the cause or goal of the project instead of the reward that is attached to it. In addition, a project manager should attempt to influence motivation in a way that optimizes it instead of trying to maximize motivation. Direct applications that can be used to influence motivation are allowing autonomy, giving feedback, and offering rewards. Although these areas give general directions for how a project manager can influence motivation, they do not point to specific techniques that aim at the development of intrinsic motivation of team members in project settings. Research question two (**R2**) will therefore investigate which techniques project manager's find particularly successful to develop high levels of intrinsic team motivation in project settings.

The discussion of motivation of project teams would be incomplete without the consideration of the organization in which the project team operates. According to PMI, projects operate in hybrid situations where team members belong to a team and an overarching organization at the same time. Both put demands on the team member, and both can influence the motivation level of the individual. Depending on what kind of project type the team operates in (weak or strong project matrix), the influence of the organization can be more or less constraining (2005). Traditional motivation theories have mostly concerned themselves with motivation of employees in a larger organization. The following section examines motivation of individuals from the perspective of the overarching organization and its general impact on employees.

Organizational Perspective on Motivation

According to Drucker (1999), managers have to understand that the vast majority of workers in the 21st century are knowledge workers who have fundamentally different needs than manual workers. Drucker sees the enhancement of knowledge workers' productivity and motivation as the most important challenge of the 21st century. Both Drucker (1999) and Deming (1988) believe that one of the core elements knowledge workers must have is pride of workmanship. It is a challenge for managers to help employees develop such a feeling, especially since knowledge work is usually detached from products that are produced by a company.

The extensive study done by Sirota et al. (2005) found three factors that are strongly associated with employees' overall satisfaction with their organization: equity ($r=.59$), achievement ($r=.43$), and camaraderie ($r=.36$). Equity in this study refers to physiological, economic, and psychological fairness. Achievement stands for pride in one's accomplishments, recognition, and doing things that matter, and camaraderie refers to a cooperative work environment which makes an organization not just a business entity, but turns it into a community. The correlation data was derived from several studies which included a wide demographic and surveyed employees in North America and Europe.

Contrary to the researchers' expectations, these three factors stayed consistently significant, no matter which ethnic, cultural group, gender, or level in an organization individuals belonged to. These findings go along with Ambrose & Kulik's (1999) meta-review which also reported that no consistent patterns of cultural differences or similarities can be found by reviewing motivation research in the 1990s. Sirota et al. (2005) reported that correlation coefficients for equity were consistently in the .50s to .60s, achievement in the .40s, and camaraderie in the .30s to .40s (all beyond the .00001 level of significance, $N=135,000$). However, these studies did not focus primarily on motivation in teams, but also included traditional, hierarchical management structures and satisfaction with employees' day to day work routines. To provide a more thorough picture of motivation research relating to organizational behavior, the following traditional motivation theories are examined next: Motives and Needs, Equity, Goal-Setting, and Cognitive Evaluation Theory.

Motives and Needs

The foundation of theories concerning motives and needs consists of Maslow's Hierarchy of Needs (1954), McClelland's Acquired-Needs Theory (1961), and Herzberg's Motivators and Hygiene factors (1966). Maslow's Hierarchy of Needs explains that a person's motivation is based on a hierarchical structure of needs ranging from very basic physiological needs to the highest need on top of the pyramid, self-actualization. In Maslow's theory, one level has to be completely satisfied before the next one becomes important to a person. McClelland's theory explains that people acquire either a strong need for achievement, affiliation, or power and that normally, one or two of these needs will be particularly dominant in individuals. Herzberg's theory was one of the first ones to distinguish between intrinsic and extrinsic motivational factors, although they were not called either at the time. Herzberg used the term motivators to describe intrinsically motivating factors (such as achievement, recognition, or the work itself) and the term hygiene factors to describe extrinsic motivators (such as salary, or work environment). Herzberg found that when absent, hygiene factors would decrease job satisfaction, but that their presence would not motivate people to do more work.

According to Ellemers et al. (2004), motives and needs are not only important to individuals, but can play an instrumental role in teams since "individual motivation is projected on, informed by, and adapted to the needs, goals, expectations, or rewards of the team or organization in which individuals work" (p. 459). Dunn (2001) related Herzberg's Acquired Needs Theory directly to project management and the difficult task of motivating team members in matrix organizations. The study found that functional managers are perceived to be responsible for providing hygiene factors, and that project managers are responsible for providing motivators. Overall, motives and needs theories were most popular in the 1970s – 1980s and have lost research popularity since then (Ambrose & Kulik, 1999). Motives and needs can be categorized under achievement which was found as an important motivation factor by Sirota et al. (2005). In addition to achievement, Sirota et al. also found that equity appears to be an important factor for employees.

Equity Theory

Equity Theory, first proposed by Adams (1963), focuses on social comparison between coworkers. When employees compare themselves to colleagues and find the comparison inequitable in a negative way, then they will pursue actions to alleviate the state of inequality (e.g. demand a raise). Employees may even go as far as to engage in illegal actions (company theft) to restore a sense of equality (Greenberg,1990). As found by Sirota et al. (2005), the idea of fairness and equality plays a major role in employee satisfaction, but is not just limited to economical equality (salary, bonuses), but is also perceived as important when it comes to physiological (comfortable, healthy environment) and psychological needs (being treated with respect). According to Ambrose & Kulik (1999), equity theory presents a solid foundation for the predictions of effects of under-compensation. Being treated equally is not the only factor that drives overall employee motivation. Next we will take a look at goal-setting from an organizational perspective.

Goal-Setting Theory

Goal-setting theory explores the role goals play in motivation. Particularly, researchers have explored how motivation is impacted depending on the complexity and difficulty of goals. Meta-reviews of goal-setting research by Latham & Locke (1991), and Locke (1996) showed that specific, difficult goals result in better performance than easy goals, or general goals. Their research also found that feedback highlighting goal progress makes goal-setting more effective. However, Ambrose & Kulik (1999) caution that the majority of goal-setting research that was conducted in the 1990s focused on college students, albeit with increasingly difficult tasks and expanded duration of experiments (whole semesters). In contrast to academic lab experiments with students, Peters & Waterman (1983) embarked on an extensive study which consisted of interviews with CEOs and top-level managers of international companies (e.g. 3M, Microsoft) and sought to find key differences between successful organizations and unsuccessful ones. One of the key findings was that management in successful companies attempts to make at least 80% of their employees winners, meaning that goals are set so

that at least 80% of the employees who are given a specific goal are likely to actually attain that goal. Peters & Waterman (1983) did not explicitly report whether or not these goals are usually complex, but the fact that most employees are supposed to attain the goals may indicate that the level of difficulty is at least medium, if not low.

Goal-setting theorists have also explored whether self-set goals create better performance than dictated goals. Again, Peters & Waterman (1983) found that successful large companies tend to allow teams to set their own goals to get a stronger buy-in from all the members of the team. This finding is also congruent with the results of Ambrose & Kulik's (1999) review in which they emphasized that several goal-setting researchers have found that self-set goals are more effective since they automatically provoke stronger commitment. Strong intrinsic commitment not only plays a role in project settings, but it has also been studied in relation to general organizational settings.

Cognitive Evaluation Theory

Cognitive Evaluation Theory (CET) was developed by Deci (1971) and follows Herzberg's hygiene theory in that it explores how motivation, specifically intrinsic motivation, can be undermined through external factors (e.g. rewards, deadlines). Contrary to Herzberg's theory, CET does not suggest that motivation will drop when external factors are absent, but it explains that the mere existence of external factors such as tangible rewards or negative feedback will lower intrinsic motivation. CET further emphasizes that autonomy and feelings of competence are important for intrinsic motivation (Ambrose & Kulik's, 1999; Gagne & Deci, 2005). The majority of studies that tested CET were again laboratory studies and not organizational studies. Gagne & Deci (2005) remarked that one of the downfalls of CET is that it does not recognize that many tasks in work organizations are simply not intrinsically motivating. Organizational researchers have not only found that tasks may be differently suited for the development of intrinsic motivation, but have also highlighted individual differences of employees.

Being aware of personality types

The fact that people have different personality types goes all the way back to Hippocrates (around 370 B.C) according to Keirsey (1998). At the beginning, only four

different temperament types were differentiated: sanguine, melancholic, choleric, and phlegmatic. Over the years, more personality types have been identified by psychologists such as Carl Jung, and new personality identification tools have been developed such as the Myers-Briggs Type Indicator (16 personality types) or the Keirsey Temperament Sorter (4 temperaments) (Lewis, 2003). Among other individual aspects, personality types can reveal motivational patterns that are unique to each individual. Managers who are aware of differences in personality can better address individual differences in motivation (Huszczko, 2004; Lewis, 2003). From interviews for *The Sunday Times 100 Best Companies to Work For*, Leary-Joyce (2004) found that the foundation of great leaders is their high emotional quotient (EQ).

According to Leary-Joyce (2004), great leaders know themselves well, understand that their view is just ‘one view’, and try to understand what makes people tick. Essentially, great leaders are others-centered and engage their coworkers and subordinates in personal talk to discover what they are about. In the same vein, Lewis (2003) explains that the best way to determine what motivates individuals is to look at what motivates them in their private life. Lewis (2003) states that “we tend to engage in the same pattern of activity every time we are motivated, so the key is to examine situations in which people are motivated and determine what they are doing” (p. 51). Individual attention to team members may therefore be one of the strongest keys to revealing which motivational technique will be most effective with a particular individual.

Project Team Motivation vs. Organizational Motivation

What distinguishes management of projects from general management is that it evolves around a temporary team under the guidance of a temporary leader, the project manager. The preceding literature review highlights that motivation can be equally influenced by the project manager and the overall organization. The question resulting from this duality of forces onto the individual team members is: can a project manager influence team motivation positively despite overall organizational influences? In other words, can a project manager encourage high intrinsic team motivation even if the overall organization creates a culture of low motivation (**R3**)?

Another factor that makes project management different from general management is that it goes through various project stages, namely: initiating, planning, executing, monitoring and control, and closing (Project Management Institute, 2005). Since project management and team development evolves around stages, different approaches may have to be taken depending on the current stage a project is in. The progressive stage development nature of projects was also related to the development of the team itself. Tuckman (1965) found that small groups go through four stages (forming, storming, norming, and performing) during the course of the group's existence to accomplish a task or project. With this model of team-building in mind, Huszczo (2004) proposed that a project manager should recognize that different motivational approaches may be called for depending on what stage the team is in. The current investigation of project managers' perceptions will also address different stages and how they may relate to motivation of project teams (**R4**).

RESEARCH QUESTIONS

Based on the preceding review of motivational research regarding a project manager's ability to influence motivation, one can see that much research has been done in the general area of motivation and its more specific applications in organizational behavior. Both Gagne & Deci (2005), and Welbourne et al. (2005), remarked that more research is needed to understand managers' perceptions regarding their ability to influence motivation. The current study more specifically focuses on the micro-level project team and project managers' perceptions regarding motivation in project settings and attempts to shed light onto the following research questions:

1. Which factors most commonly provoke low levels of team motivation in projects?
2. What are successful motivation techniques for project settings that focus on the development of intrinsic motivation?
3. Can a project manager motivate a team despite the overall organizational culture?
4. Should motivation techniques be applied differently depending on the stage of a project?

METHODOLOGY

As stated above, the goal of the current research is to assess project managers' perceptions of team motivation. To gather this information, a multi-part questionnaire (see Appendix) was developed that included a number of questions in a Likert scale format, force-choice questions and a section that allowed respondents to write statements to clarify their checkbox answers. Finally, demographic information was collected in order to profile the respondents. Once the questionnaire was completed, a field test was conducted by asking several industry experts to examine the questionnaire and provide feedback. These comments served to strengthen the quality of the instrument.

The questionnaire was written in an HTML format and made available through SurveyZ.com, an online survey-distribution service. Because of the difficulties associated with identifying and contacting project managers individually, an invitation to participate in a research study was drafted and distributed through the PMI online research network. A link to the online survey was established in the research section of the PMI website which is available to members of PMI and project managers who are interested in research regarding project management. To increase the reach of the survey, PMI chapter presidents were asked to distribute the questionnaire through the mailing lists associated with their regional chapters.

Response rates were monitored through page views, the number of started questionnaires and the number of completed questionnaires. Features available on the SurveyZ.com website allowed the researcher to prevent ballot stuffing and to track the IP addresses of the respondents as an added measure. Tracking this information allowed the researcher to purge duplicate IP addresses (and the related questionnaire responses) from the data set used in analysis of the results.

The qualitative statements were collected and compiled in a single data file. The statements made by the respondents were analyzed for thematic uses of phrases and keywords by the use of CATPAC, a qualitative research tool that creates frequencies of keywords and illustrates contextual relationships. The keyword frequencies were used to create thematic categories, or groupings to add context to the checkbox answers.

RESULTS

The goal of the questionnaire was to reach professional project managers who possess considerable experience in the field. Utilizing the PMI online network for survey distribution turned out to be an excellent approach to reach that audience. Because invitations to participate in the questionnaire were sent to electronic mailing lists, it was not possible to determine how many of the email addresses were valid, the number of people who received the mail, or in the case of the regional mailing lists, the number of members. Using the features available through SurveyZ.com, the researcher devised a method of calculating a response rate based on the number of page views, partially completed questionnaires and completed questionnaires. By using this method, 343 unique page views were noted with 115 respondents who completed all survey questions, making a response rate of 34% (252 respondents answered the survey at least partially, but only respondents who completed all questions were considered in this study).

Of the 115 respondents who completed all questions of the survey, 64 % were male and 36 % were female. Since the PMI network spans the whole globe, respondents were asked to identify which continent their organization resides in. An overwhelming majority of respondents were from North America (77%), followed by 13 % from Asia. The rest of the respondents were from Europe, Australia, and Africa. There was a relatively even split between respondents who operate in the private sector (54%) and those who work in the public sector (46%). The business areas of the respondents ranged from aerospace to warehousing. The only business areas that stood out were Information Technology (15%) and Consulting Services (10%).

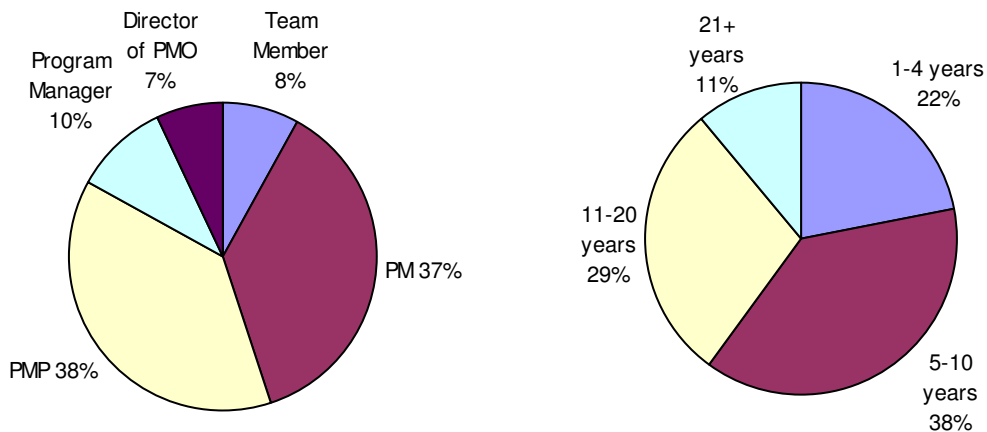
Although the sample size of 115 respondents is small compared to the current number of 202,514 project management professionals who are registered with PMI, the sample percentages per continent match the overall statistics of PMI. The following chart illustrates the close match of the survey sample compared to the October 2006 PMI membership fact sheet data.

Table 1: Region and industry demographics

Region / Industry	Survey Sample	PMI Membership
North America	77%	72%
Asia	13%	13%
EMEA	10%	11%
Latin America	0 %	4 %
PMs in the IT Industry	15%	11%

The project manager respondents tended to be very experienced, and work in environments that handle large-scale projects. The majority of respondents (78%) had more than five years of experience in project management. In more detail, 38 % had worked as project managers for 5-10 years, 29% 11-20 years, and 11% more than 21 years. Only 22% of respondents had 1-4 years of experience in project management. Respondents were also asked to identify their project management rank. The majority of respondents (75%) were project managers with or without PMP certification: 8% Project Team Members, 37% PMs, 38% PMPs, 10 % Program Managers, and 7 % were Directors of a Project Management Office (PMO).

Table 2: Project management rank and years of experience demographics



Since the majority of questions required the respondents to consider the last project they were involved in, the questionnaire also requested them to identify background information on that project such as number of core team members, type of organizational structure, and monetary value of the project. The majority of respondents managed projects with ten or fewer team members (70%). In more detail, 30% had 1-5

team members, 40 % had 6-10, and 17% had 11-20 team members. The remaining 13% indicated that they worked on a project that had a core team of more than 20 team members. To measure the organizational authority the project manager was given in the last project, respondents indicated their project organization type. A substantial majority (59%) reported that they worked in an environment that gives the project manager little legitimate authority (functional organization or a weak matrix). Only 22% reported that they worked in an environment with strong legitimate authority (strong matrix or project organization). The remainder (19%) worked in a balanced matrix environment where the project manager splits authority with the functional manager. Finally, to gain insight into the importance of the project, respondents indicated the size of the project in monetary terms. Over a third of the respondents (34%) managed projects worth more than one million dollars. Only (19%) reported that their project was worth less than \$100,000. The majority of the remaining respondents (37%) indicated projects ranging from \$100,000 to \$600,000.

Factors that lower motivation in projects

As the literature review highlighted, there are many aspects that affect the motivation level of a project member. Research question one (**R1**) explores which factors most commonly provoke low levels of team motivation in project settings. Table 3 illustrates which factors project managers indicated as most important.

Table 3: Percentages in this table do not add up to 100 since respondents were allowed to pick more than one factor.

Factors Lowering Team Motivation in Projects	Frequency	Percentage
Missing top management support	74	64%
Personal conflicts between team members	48	42%
Inequity in reward system	37	32%
Increase of project scope	35	30%
PMs inability to keep team motivation up	36	31%
Schedule conflicts	32	28%
Time overruns	19	17%

In addition to the factors listed above, respondents expressed individual thoughts by filling out the “other” box. Three respondents indicated that poor communication lowers motivation in project settings. Mismatches of expectations between the team and the project manager, or the fact the team may perceive the project manager as a person who is wasting “stakeholders time” by communicating ineffectively and running poor meetings are examples of poor communication that were given. Two respondents also expressed that individual traits such as a lack of humor or ego problems of team members or project managers will have a negative impact on team motivation.

Organizational problems surrounding the project goal were also mentioned by several project managers. Factors that were pointed out included a lack of organizational strategy, unclear project purpose, ill-defined objectives, and a lack of commitment to project goals. One respondent explained that a change of requirements will also have a negative impact. That factor will be evaluated more in the next table.

The following table shows how project managers perceive the impact of change in project constraints on motivation. Based on the PMBOK’s triple constraint (scope, time, cost) and the additional element quality, PMs were asked to identify for which constraint change will have the greatest negative impact on team motivation.

Table 4: Percentages in this table do not add up to 100 since respondents were allowed to pick more than one factor.

Change in Project Constraints (Negative Impact)	Frequency	Percentage
Scope	74	64%
Time	51	44%
Quality	24	21%
Cost	10	9%
Changes in constraints don’t affect motivation	7	6%

Although it is the nature of the triple constraint that changes in one constraint will inevitably provoke changes in the other constraints, it appears that changes in scope can have the greatest negative impact on team motivation.

Successful motivation techniques to increase intrinsic motivation

Research question two (**R2**) explores motivation techniques that current project managers find particularly successful. Respondents were initially asked to think about the last time they were involved in a highly-motivated project team and to describe what it was that promoted the high motivation of the team. The word cluster gained from the keyword analysis indicated the following word group as occurring most frequently: *communication, project team, understanding, members.*

The keyword *communication* along with *project team* appeared in statements that referred to transparent communication with all stakeholders, and more specifically stressed the fact that the project manager has to be a good communicator, both formally and informally. Good meeting management and the ability to create a shared goal with buy-in from all team members were two examples that were given. The word cluster gained from the qualitative analysis was reinforced by the fact that an overwhelming majority (93%) of respondents agreed that providing positive, constructive feedback is a successful motivation technique. Engaging team members in personal conversations was also seen as a strong motivational technique by a majority of respondents (77%).

The keywords *understanding* and *members* were other aspects associated with team communication. The theme emerging from this word group pointed to early participation of team members. This theme was also confirmed by a large majority (90%) who believed that having team members participate in the creation of the work breakdown structure is a strong technique for motivation. The following statements were made by project managers who believed that early participation of team members was the most important element in the creation of a highly motivated team:

“Team members were involved in all stages of planning and execution. They understood the integration of all components and the effect their role had on the success of the whole project.”

“Each team member was a stakeholder in the success of the project. They were there from kickoff to closure.”

“Engaging the project team in the decision-making as much as realistically possible. Setting their expectations properly right from day one & ensure transparency / accountability in all activities.”

“Well scoped project that fit the skills and professional desires of individual team members.”

“We need to involve everyone in the process so that they take ownership of whatever results the project may bring.”

The sense of ownership of tasks and the overall project goal through a shared vision was also expressed as influential in highly-motivated project teams. One project manager remarked that it is important that team members *“own the overall project goal and not just the part of the goal they were involved with.”* Another PM expressed that his team was highly motivated due to a *“shared vision for the end result. Strong affiliation with achieving the project's intended results.”*

The last theme that emerged from the successful motivation technique analysis was the trust and how project members can convey it. A majority (59%) of the participating project managers agreed that letting team members develop their own ways to produce deliverables is a good way to create a motivated team. One project manager found it important to *“give [the team] responsibility and trust. Accept errors and giving them the chance to fix it.”*

PM vs. Organizational Culture

Despite the fact that top management support and other environmental factors of an organization such as frequent scope changes may have a negative impact on project team motivation, an overwhelming majority (63%) of the respondents reported that a project manager can motivate a project team even if the overall organizational culture has a negative effect on employee motivation (**R3**). This number may provoke the thought that the other 37% simply do not know how to motivate a team, but the following table illustrates that a majority of project managers (63%) believe that it is possible to maintain positive team motivation despite the overall organizational environment, even if they found team motivation to be difficult on their last project. In addition, no significant variations could be found regarding R3 when compared to other demographic data.

Table 5: How to use this table (example): 65.7% of PMs who agree that it was easy to motivate their last project team also agree that a project manager can motivate a team despite the overall organizational culture.

Motivation difficulty in last project and opinion about PM's ability to motivate team

		It was easy to motivate the team			Total
		Disagree	Neutral	Agree	
PM can motivate team despite the overall organizational culture	Disagree	7 29.2%	5 21.7%	11 16.4%	23 20.2%
	Neutral	2 8.3%	7 30.4%	12 17.9%	21 18.4%
	Agree	15 62.5%	11 47.8%	44 65.7%	70 61.4%
Total		24 100.0%	23 100.0%	67 100.0%	114 100.0%

To gain further insight into how exactly a project manager can create such team-based environment, the statements supplied by the respondents were analyzed for contextual keyword groups. The strongest, most frequently occurring word cluster that emerged from this analysis highlighted the fact that a focus on the team’s goals will help maintain team motivation. The cluster contained the keywords *focus, goals, members, team, will, help, and project*. The following two statements express how strongly respondents felt about the fact that a project manager can motivate a team despite the overall organizational culture:

”Even in a negative organization a PM can ‘sell’ the goal of the project to the team. Then he must ensure that the goal is the focus of the team, not the negativity of the organizational culture. Great teams can provide great results despite the culture of the organization.”

“The project manager can have his own culture within the project environment. That can make up for the negative culture organization wide. He needs to stay by & support his team members when required. I believe he & his team can even change/impact the organizational culture to a certain extent.”

Another respondent alluded to the fact that the team is fundamentally different from the overall organization,” *The team is a relatively small group with well-defined objectives. Often, members can find success and recognition in a project that they cannot achieve in the context of the larger organization”*.

The recurring theme ”scope change” also appeared in the explanations,” *a demoralizing workplace is difficult to counter, but team members rally around a natural, sincere leader who believes in his or her team and does his/her best to shield the team from unnecessary tasks or derailing influence. Strong leaders that care will inspire their team”*.

Team Motivation and Project Stages

Since projects evolve around stages, the amount of motivation in a team may fluctuate based on the stage a current project is in. Research question four (R4) investigates the importance of project stages in team motivation. The following chart illustrates the perceived amount of motivation based on the three general project stages start (initiating, planning), intermediate (executing), and closing. The chart shows that motivation generally declines as the project progresses. A large majority (88%) of the respondents agreed that motivation is high during the start of a project. Contrary, less than half (44%) of the respondents found team motivation to be high towards the closing stage of a project.

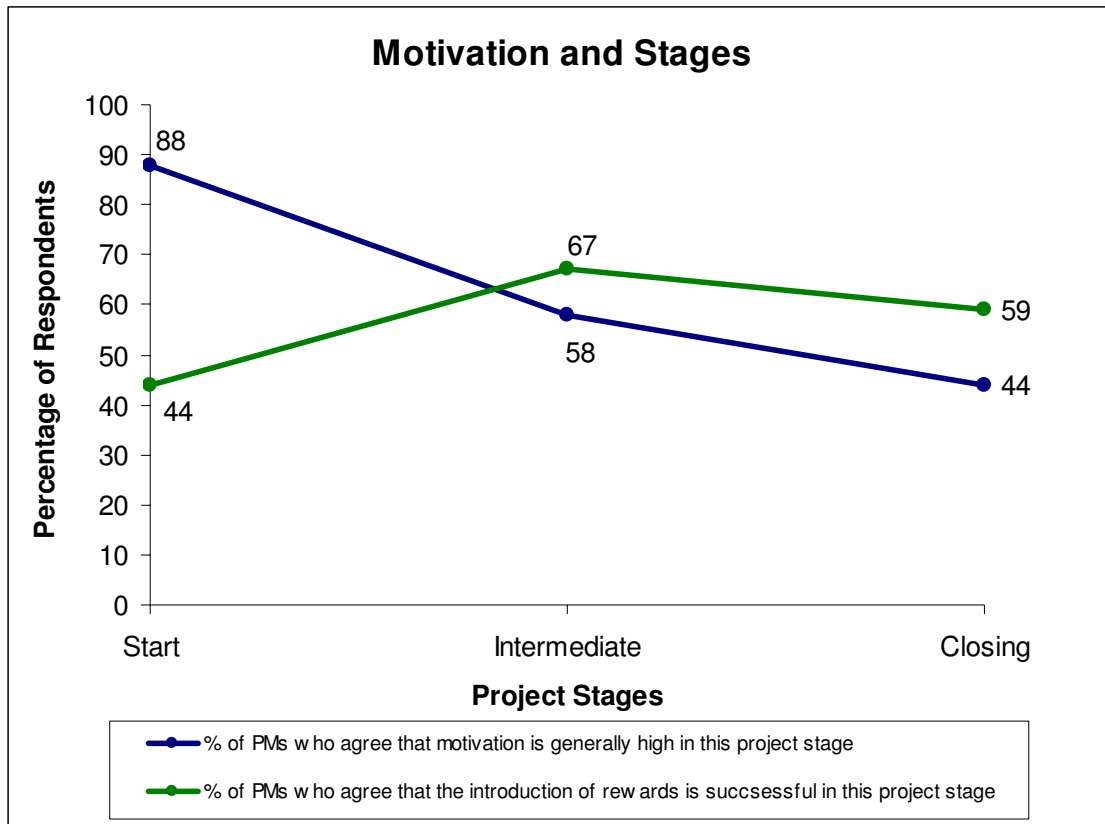


Figure 3: Motivation and stages

The chart also illustrates the effectiveness of rewards based on the three global stages. It appears that the introduction of rewards is more successful during the intermediate and closing stage of a project than during the project start.

The following chart illustrates project manager's perceptions regarding the responsibility of team motivation based on the three project stages.

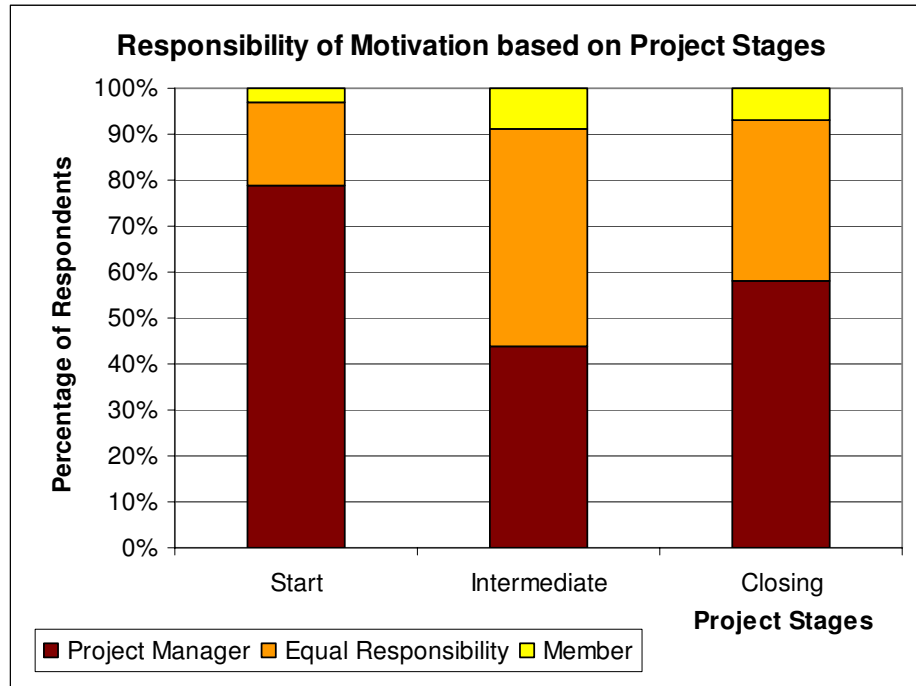


Figure 4: Responsibility of motivation based on project stages

The chart above shows that a majority of respondents (79%) believed that it is the project manager's responsibility to stir team motivation at the beginning of a project. During the intermediate phase, this number declines to 44%, moving the responsibility to both the project manager and the individual team member. Towards the end of the project, slightly more than half (58%) of the respondents expressed that the responsibility lies with the project manager.

DISCUSSION

The project manager's role in team motivation

Team motivation plays an instrumental role in any project and the project manager's knowledge of motivation dynamics and techniques to influence team motivation can lead a project on a successful path. The results of this study show that effective team motivation hinges on many factors ranging from team specific elements to organizational influences. One of the salient findings of this study is that current project management professionals believe that they can create their own subculture within an organization and that they can motivate a team despite the overall climate in a company (**R3**). This finding was reemphasized by the fact that not only successful project managers believe that they can create such a subculture, but even managers who were struggling with team motivation on their last project (63 %) believed that it is possible to create a positive project environment in a negative organization. Project managers, therefore, play a key role in the creation of a positive, highly-motivated project environment.

Factors that most commonly impact team motivation

Although projects are by nature unique endeavors with a limited time span, they all follow similar structures in the achievement of their goals. Being aware of recurring motivational influences in project settings can help a project manager prevent falling team motivation, without having to consult a bag of motivation tricks. As Sirota, Mischkind, & Meltzer (2005) pointed out, most project members enter a new project fully motivated due to the novelty and excitement that comes along with a new endeavor. The results of this study (**R1**) showed that the factors that most commonly provoke a decrease of team motivation are:

- Missing top management support
- Personal conflicts between team members
- Increase of project scope

The qualitative content analysis also showed that these factors are closely related and are directly tied to the project manager's ability to communicate effectively. Clear communication is important from the very beginning and appears to be most important when it comes to the creation of top management support. Without support from upper management, personal conflicts may inevitably arise due to member's responsibilities within the company. When project members feel more loyal to their regular activities within the organization than to the project, conflicts may arise.

Changes in scope, time, cost, and quality can also directly impact the emotional state of a project team. The results showed that among these four project constraints, changes in scope have the strongest negative impact on team motivation. Focusing on clear scope definitions at the beginning of the project and managing client's expectations throughout the development of the project will therefore help prevent a decline of motivation within the project team.

Creating intrinsic motivation

The best situation a project manager can wish for is a project team that wants to achieve the project's goal because the team members feel personally connected to the outcome of the project. They will do anything needed to make the project work because they receive personal satisfaction from the results of the project. Research question two (**R2**) explored how the creation of such buy-in is possible in project settings.

The main theme emerging from the quantitative and qualitative results of this study is early involvement of all stakeholders. Team members must be involved in the project from the early kick-off stage to develop a sense of belonging and owning. An overwhelming majority of the project manager respondents (90 %) believed that having team members participate in the creation of the work breakdown structure is essential to keeping team motivation up. A project manager should strive to instill a sense of project ownership in all stakeholders and early involvement appears to be the best way to accomplish that.

The second most salient theme emerging from the content analysis of (**R2**) was "understanding of team members" which is essential in the creation of a good match of skills to tasks. A project manager has to be careful in assigning tasks to members.

Expectations have to be clearly communicated and project members should be chosen wisely so that project tasks fit the desires of individual team members. Lewis (2003) pointed in the right direction for general managers when he said that it is important for a manager to find out what motivates people in their private lives. Understanding what the individual desires of team members are will give any project manager a leg up in motivating a project team from an intrinsic point of view.

Timing is essential

A project manager guides the team through various stages throughout a project life cycle and the results of this study show that attention to motivation techniques appears to be mostly called for at the beginning of a project. The more a project progresses, the more project managers believe that team motivation is a shared responsibility of the team member and the project manager. The importance of early involvement of stakeholders was highlighted in the analysis of project stages and their relation to team motivation. The majority of respondents agreed that team motivation is high at the beginning of a project (88 %) and that it is the responsibility of the project manager to introduce a high level of team motivation during the start of the project (79 %). To create a sense of ownership and to attempt to instill intrinsic motivation in the team, a project manager should focus most of his motivating efforts on the beginning of the project.

Key Findings and Research Limitations

The goal of this study was to explore the project manager's perspective on team motivation by exploring successful motivation techniques and determining important factors that decrease team motivation. Taken together, the findings of this study emphasize that team motivation can be heavily influenced by the project manager, especially during early stages in the project. It appears that project managers have the ability to create a subculture within an overarching organization in which team dynamics can lead to higher levels of motivation than in the encompassing organization.

To achieve a project environment where the majority of the members involved are motivated about the project, project managers have to be sensitive during the early stages

of a project. Clear communication at the beginning of projects appears to be the key in the development of high motivation throughout the whole project. At the beginning of a project, the project manager should strive for top management support, establish clear scope requirements with the client and/or sponsor, and involve team members as early as possible to ensure project buy-in from the most important stakeholders in a project.

The results of this study merely highlight trends in current opinions and should not be interpreted in other ways. By asking current professionals in the field about their opinion, the forgoing trends could be identified. However, the current research should not be interpreted as a representative sample of the overall population of project managers worldwide. The sample chosen for the questionnaire was a sample of convenience due to the busy schedule of project management professionals. The trends expressed in the current research should be followed up with case studies or ethnographic analyses to create a more thorough picture of the project manager's perspective.

APPENDIX

For all following questions, please consider the last major project you have been involved with. We are specifically interested in your personal opinions.

Demographics

Please specify your project management position:

- Member of a project team
- Project manager
- PMP certified project manager
- Program / Portfolio Manager
- Director of Project Management Office (PMO)

3.

How many years of experience do you possess in project management?

- 1-4
- 5-10
- 11-20
- 21+

4.

What is the approximate total number of employees in your organization?

- 1-10
- 11-49

50-99

100-249

250+

5.

Are you Male or Female?

6.

Where does your organization reside?

7.

Is the organization you work for in the public or private sector?

8.

What is your organization's primary business area?

9.

For the following questions please consider the last complete project for which you were project manager.

Please indicate the type of organizational structure of your last project. The project manager's authority ranges from weak (functional organization) to absolute (project organization).

- Functional Organization
- Weak Matrix
- Balanced Matrix
- Strong Matrix
- Project Organization

10.

How many core project team members did you have (only count main contributors)?

- 1-5
- 6-10
- 11-20
- 21-50
- 51-99
- 100+

11.

What was the size of your last project as measured in monetary terms (in US Dollar)?

- Less than 100,000

- 100,000 - 200,000
- 200,000 - 400,000
- 400,000 - 600,000
- 600,000 - 800,000
- 800,000 - 1,000,000
- more than 1,000,000

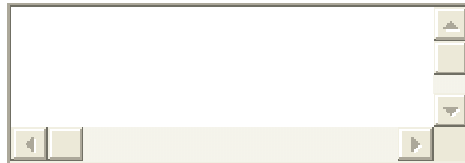
12.

Overall, it was easy to motivate the team.

- Strongly Disagree Disagree Neutral Agree Strongly Agree

13.

Think about the last time you were involved in a highly motivated project team. What do you believe was most influential in the high motivation of the team.



14.

A low level of team motivation can usually be attributed to which of the following areas?

- Inequity in reward system
- Personal conflicts between team members
- Schedule conflicts

- Due to time overruns
- Project manager's inability to keep team motivation up
- Missing top management support
- Increase of project scope
- Other

15.

Which of the four major project constraints can have the strongest negative impact on team motivation?

- Scope changes
- Time changes
- Cost changes
- Quality changes
- Changes in project constraints don't affect motivation

16.

The following questions concern project phases and their relation to team motivation. Please indicate your personal opinion for each project phase:

Team motivation is generally high during the:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Project Start (Initiating/Planning)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate Phase (Executing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

End of Project (Closing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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17. The introduction of rewards is usually effective during the:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Project Start (Initiating/Planning)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate Phase (Executing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
End of Project (Closing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

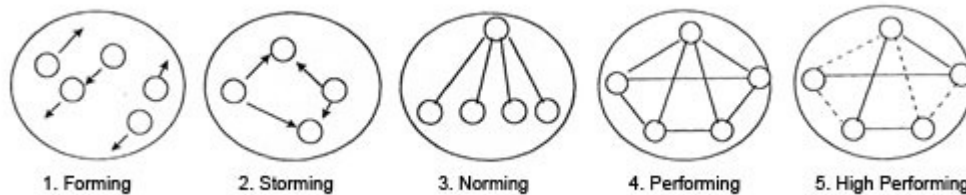
18. The person who is responsible for team motivation is (based on project phase):

	PM's Responsibility 1	2	Equal Responsibility 3	4	Member's Responsibility 5
Project Start (Initiating/Planning)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Intermediate Phase (Executing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
End of Project (Closing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19.

For the following questions please consider these stages of team development:



Forming: Initial formation of project team.

Storming: Conflict stage where team members are testing each other.

Norming: Rules and responsibilities are established and become accepted.

Performing: Team members interact and proceed with project tasks.

High Performing: Advanced performing stage (free of mistrust, emotional baggage, excessive ego needs, miscommunication, self-centeredness).

Which of the following stages of team development do you believe to be most typical for the executing (intermediate) phase of your projects?

<input type="checkbox"/>	1.	<input type="checkbox"/>	2.	<input type="checkbox"/>	3.	<input type="checkbox"/>	4.	<input type="checkbox"/>	5.
Forming		Storming		Norming		Performing		High Perf.	

20.

In which of the following stages of team development is team motivation the highest in your projects?

<input type="checkbox"/>	1.	<input type="checkbox"/>	2.	<input type="checkbox"/>	3.	<input type="checkbox"/>	4.	<input type="checkbox"/>	5.
Forming		Storming		Norming		Performing		High Perf.	

21.

Please identify any additional factors that prevent your team from achieving the high performing stage.

22.

The following questions concern team motivation techniques:

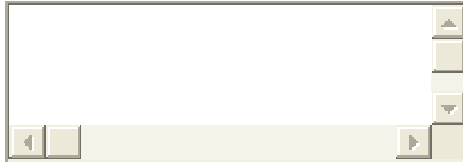
In your opinion, in which area(s) regarding motivation of project teams do you believe many current project managers need more training? Please check all that apply.

- Use of power
- Focus on individual needs of team members
- Use of monetary rewards (e.g. Equal Distribution)
- Conveying trust to team members
- Delegating responsibility to increase autonomy
- Resolving Conflict
- Managing the Triple Constraint (Scope,Time,Cost)
- Use of other rewards (e.g. Recognition, Corner Office)
- Other

23.

Please identify any additional motivational techniques you find particularly effective in project team

settings.



24.

Please indicate if you believe that the following techniques are effective for team motivation.

Letting team members develop their own ways to produce deliverables.

Strongly Disagree Disagree Neutral Agree Strongly Agree

25.

Having team members participate in the creation of the work breakdown structure.

Strongly Disagree Disagree Neutral Agree Strongly Agree

26.

Using team related rewards.

Strongly Disagree Disagree Neutral Agree Strongly Agree

27.

Providing positive, constructive feedback.

Strongly Disagree Disagree Neutral Agree Strongly Agree

28.

Engaging team members in personal conversations.

Strongly Disagree Disagree Neutral Agree Strongly Agree

29.

Allowing flexible schedules to accomodate team members.

Strongly Disagree Disagree Neutral Agree Strongly Agree

30.

Focusing on the development of intrinsic motivation instead of offering extrinsic rewards.

Strongly Disagree Disagree Neutral Agree Strongly Agree

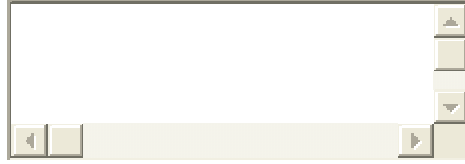
31.

A project manager can motivate a project team even if the overall organizational culture has a negative effect on employee motivation.

Strongly Disagree Disagree Neutral Agree Strongly Agree

32.

If yes, please explain what you believe promotes that kind of motivation in a team.



33.

Please use the following optional comment box to provide comments or any additional feedback in relation to the study.

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BIOGRAPHICAL SKETCH

Bernhard Schmid was born on December 24, 1981 in Vienna, Austria. After receiving an associate's degree equivalent from the technical college HTL Ungargasse in Vienna, he moved to upstate New York and attended Mansfield University of Pennsylvania across the border in pursuit of a bachelor's degree in Mass Communication. During his time in the Master's program in Interactive and New Communication Technologies at Florida State University he attained the international credential Project Management Professional (PMP). His main areas of interest are new media and project management.