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# Highly Effective Teams: A Relational Analysis of Group Potency and Perceived Organizational Support

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## Abstract

Group potency is one key determinant shown to positively influence the effectiveness and performance of groups and teams. This article presents research on potency of work groups in higher education and perceived organizational support as an antecedent. A total of 192 working professionals who were either holding or earning advanced degrees in human resource development, education, or consumer and family sciences completed questionnaires to determine the association of these two variables. The data were analyzed at the individual and group levels, and findings reveal there is a significant positive relationship between group potency and perceived organizational support.

## Keywords

group potency, perceived organizational support (POS), teams, survey

Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organizational objectives. It is the fuel that allows common people to attain uncommon results.

Andrew Carnegie

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Organizations embark on efforts to improve organizational performance to be successful and gain a competitive advantage in today's global marketplace. They employ groups and teams—work groups—to increase the efficiency and effectiveness of work processes, innovate, and solve problems. Furthermore, organizations increasingly use communities of practice to enhance performance (Lesser & Storck, 2001) and exert leverage for strategic advantage by integrating them into their knowledge management systems (Wenger, 2004). Executives, academicians, and performance consultants alike seek to better understand work groups given the critical role they play in efficiently delivering cost-effective, high-quality products and services that meet customer needs.

The assurance of success with which a work group approaches its tasks is an important factor that influences performance. Guzzo, Yost, Cambell, and Shea (1993) referred to this concept as *group potency* (GP), defined as “the collective belief in a group that it can be effective (Guzzo, 1986; Shea & Guzzo, 1987a)” (p. 87). Numerous reports indicated that GP is positively correlated with work group effectiveness and team performance (Campion et al., 1997; Campion, Medsker, & Higgs, 1993; Campion, Papper, & Medsker, 1996; Gully, Incalcaterra, Joshi, & Beaubien, 2002; Guzzo et al., 1993; Hecht, Allen, Klammer, & Kelly, 2002; Mathieu, Maynard, Rapp, & Gilson, 2008; Stajkovic, Lee, & Nyberg, 2009). Team performance pertains to the outcomes of the team's actions, whereas team effectiveness considers whether the team completed its tasks *and* how the team interacted during that time (Liu, Magjuka, & Lee, 2008). It is because of this relationship potency has been studied within business, educational (Gibson, 1999; Lester, Meglino, & Korsgaard, 2002; Sivasubramaniam, Murry, Avolio, & Jung, 2002; Van den Bossche, Gijsselaers, Segers, & Kirschner, 2006), and virtual (Hardin, Fuller, & Davison, 2007; Hardin, Fuller, & Valacich, 2006; Liu et al., 2008) settings and in a wide array of occupations, such as nursing and teaching (Gibson, 1999), transportation engineering (Tesluk & Mathieu, 1999), law enforcement (Rhoades, Eisenberger, & Armeli, 2001), the military (Hecht et al., 2002; Hirschfeld, Jordan, Feild, Giles, & Armenakis, 2005), banking (de Jong, de Ruyter, & Wetzels, 2005), and software development (Akgun, Keskin, Burne & Imamoglu, 2007).

It stands to reason that organizations can enhance work group performance and overall success by elevating levels of potency. Indeed, studies showed beneficial consequences, such as group satisfaction (Lester et al., 2002), stronger customer-perceived service quality (de Jong et al., 2005), and team leadership (Gil, Rico, Alcover, & Barrasa, 2005; Sivasubramaniam et al., 2002). In an educational context, performance measures to assess GP included grades, attrition, and success in knowledge-based exams (e.g., the bar or state licensing exams). However, less is known about the antecedents of GP (Lester et al., 2002) in today's highly competitive, dynamic environment. Research has only just begun uncovering some of the conditions necessary to heighten levels of this complex albeit measurable construct (Eisenberger, Huntington, Hutchison, & Sowa, 1986) and sustain it as needed.

Another well-documented predictor of team effectiveness is *perceived organizational support* (POS; de Jong et al., 2005, p. 1611), explained as employees' “global beliefs concerning their organization's commitment to them” (Eisenberger et al., 1986, p. 506).

Such support can be demonstrated in valuing employees' input and listening to their suggestions, as two examples. As with GP, considerable attention has been given to examining antecedents and consequences of POS. Yet little is known about the effects of POS on GP. There are theoretical and practical advantages in empirically examining the relationship between these two variables. Understanding the link between POS and GP enhances human resource development (HRD) practices and decisions about team development. Furthermore, exploring the association of these two constructs makes a unique contribution to the literature that HRD scholars and practitioners can take and apply to increase the performance capacity of teams in any given domain.

The purpose of this article is to explore how GP is influenced by POS in the context of a learning environment. Specifically, learning communities composed of mostly adult learners who were also working professionals with full-time employment were the focus of this study. The study addresses the principal research question, What is the relationship between perceived organizational support and group potency? This article begins by providing (a) definitions of work groups and teams, (b) a historical perspective on potency and a discussion on the fundamental differences between GP and group efficacy, and (c) an overview on POS. Next, it presents results from a survey administered to students affiliated with four universities to measure the impact of POS on GP. Findings lend insight to indicators of GP so that an infrastructure to maximize work group effectiveness can be developed. The article concludes with a discussion and implications for theory, research, and practice.

## Work Groups and Teams

Words used to describe a group of individuals vary extensively in the literature for several reasons, such as a group's purpose for coming together, the nature of tasks, the duration of its existence, and size. There are product development teams, virtual teams, task forces, committees, learning communities, strategic alliances, industry consortia, and quality circles, combat units, sports teams, just to name a few. Many investigators fail to define such groups in their studies perhaps because there is a lack of widely accepted, universal definitions. One explanation for the inconsistencies may be that scholars and practitioners who study these arrangements come from disparate fields, including business, psychology, sociology, human resources development, and more recently, information technology. In any event, these informal and formal arrangements are becoming ever more popular.

Guzzo and Dickson (1996) confirmed that there are definitional struggles in the literature with work groups and teams but ultimately adopted two definitions to make a distinction between them in their review on performance and effectiveness of teams. They ascribed their definition of *work group* to Alderfer (1977) and Hackman (1987); that is, "a 'work group' is made up of individuals who see themselves and who are seen by others as a social entity, who are interdependent because of the tasks they perform as members of a group, who are embedded in one or more larger social systems (e.g., community, organization), and who perform tasks that affect others (such as

customers or coworkers)” (Guzzo & Dickson, 1996, pp. 308-309). Tesluk and Mathieu (1999) used *work groups* synonymously with *groups* and *teams*. Guzzo and Dickson (1996) suggested that *team* has largely replaced *group* in the field of organizational psychology but they acknowledged that *group*, in a general sense, predominates in the research literature.

It should be noted for the purposes of this research, the terms *teams*, *groups*, *student cohorts*, and *learning communities* are used interchangeably and referred to generally as work groups. *Work group* means a group of individuals with an assumed common goal of learning within a graduate education framework. Reviewing the extensive literature with respect to their more general uses and clearly delineating among them are beyond the scope of this article (readers are referred elsewhere in this issue).

## Potency

### *Historical Perspective*

The psychologist Carl Jung initially defined the term *collective unconscious*, which is now considered a component of GP. Jung’s early definition of collective thoughts of groups gave way to later studies in this area. The recently published book *The Archetypes and the Collective Unconscious* with Jung’s work described the collective unconscious as a deeper layer than individual consciousness. In many instances, this collective unconscious is universal and is “more or less the same everywhere and in all individuals” (Jung, 1990, p. 104). Over time, Jung’s theory of collective unconscious formed the basis of the theory of GP.

Sayles (1958) investigated work groups in an industrial plant and found they could be distinguished on the basis of a team’s collective unconscious about success. Sayles did not use the term potency, yet by today’s definition, this was what he referred to. The work groups possessed the jointly held belief in their ability to effect changes, which transcended the individual members’ beliefs about the team’s success. Sayles used strength of belief as a measure, and he used the word *apathetic* to describe members without belief in success of their group.

Shea and Guzzo (1987) deemed potency as a measurable and significant construct that can be assessed by observation, surveys, or informal interviews. They developed a scale that has been shown to accurately measure levels of GP over various types of respondents (Guzzo et al., 1993; Shea & Guzzo, 1987). Since this time, measuring GP through questionnaires has become commonplace.

Hackman (1992) performed qualitative research on GP, which indicated “strong beliefs in the potential for effectiveness resulted in better performance” (de Jong et al., 2005, p. 1611).

### *Distinctions Between Potency and Efficacy*

Potency and efficacy are motivational constructs “that reflect appraisals of capabilities (Gulley et al., 2002; Lee et al. 2002)” (de Jong et al., 2005, p. 1611). Although seemingly

**Table 1.** Comparison of Group Potency, Group Efficacy, and Self-Efficacy

Characteristics	Group Potency	Group Efficacy	Self-Efficacy
Perceptions of success	Group's perception about the group's ability to succeed Example: "We can succeed."	Individual's perception about the group's ability to succeed Example: "I believe the group can succeed at this task."	Individual's perception about own ability to succeed Example: "I believe I can succeed at this task."
Nature of task	Non-task-specific (general) belief of success Example: "No matter the task, we can do it."	Task-specific belief of success Example: "Within our area of expertise, we can do it."	Task-specific belief of success Example: "Within my area of expertise, I can do it."
Construct level	Group-level construct	Individual- and group-level construct	Individual-level construct

similar by the earliest definitions (Stajkovic et al., 2009) and used interchangeably in the extant literature, these two terms are quite distinct in three important respects: perceptions of success, nature of task, and construct level. The distinctions between GP, group efficacy, and self-efficacy are summarized and a comparison is provided in Table 1. It should be noted that the terms *potency* and *group (team) potency* have the same meanings in the context of this research.

*GP.* It is not solely external motivation that affects performance. It is also the internal belief that the group can and will achieve its intended goal (Lee, Tinsley, & Bobko, 2002). This is the essence of GP. GP is commonly defined as the communal belief that a group is effective in achieving positive outcomes (Guzzo et al., 1993); that is, potency is the group's collective belief in itself. Potency reflects the group's perception of its competency as a whole.

GP is rooted in the theory of social cognition (de Jong et al., 2005). Stajkovic et al. (2009) listed 10 definitions of GP and suggested the earliest ones (up until the early 1990s) do not clearly differentiate between this term and collective efficacy. Their comparison emphasized the general nature of GP (task-general) and the task-specific nature of efficacy (task-specific). From the more recent definitions, they suggested, "it appears clear(er) that group potency shall be considered as a general characteristic regarding a group's enduring ability to perform a wide range of tasks across different activities" (Stajkovic et al., 2009, p. 816). When a group believes it can be successful regardless of circumstance, it can be assigned tasks outside its normal purview and the group remains confident in its ability to succeed. Task variability (e.g., problem solving, information gathering, self-managing) gives rise to employees having to multitask and assume different responsibilities (de Jong et al., 2005).

Lastly, potency is a group-level construct because it pertains to a belief that is shared by group members (de Jong et al., 2005).

**Group efficacy.** GP differs from *group efficacy*, which is often referred to as *collective efficacy*. Collective efficacy focuses on an individual's perception about group success (Stajkovic et al., 2009). Whereas GP as task-general represents a group's general belief of success, group efficacy as task-specific is a transactional group-level construct that focuses on a group's task-specific belief of goal attainment (Gully et al., 2002). When a group has its beliefs rooted in transactional, task-specific areas, the group loses confidence in itself if a task outside of its normal responsibilities is assigned. Group efficacy operates at two levels, the individual and the group, as it represents an individual belief but about the group.

**Self-efficacy.** A third construct, *self-efficacy*, describes an individual's belief in himself or herself of success (Bandura, 1982). Self-efficacy reflects the individual's perception about his or her own success. Kirkman and Rosen (1999) highlighted the difference between GP and self-efficacy and suggested that potency has a direct effect on team empowerment. In empowerment, higher levels of potency lead to greater team empowerment because the confidence of the team succeeding transcends a specific job or task. Self-efficacy is an individual-level construct because it is an individual belief about one's self.

In summary, potency is the collective belief of a group that it can succeed, achieve, and be effective in its endeavor. This differs from a group member's individual belief that he or she can be effective. Guzzo et al. (1993) used the example of a sports team. An individual team member can have a strong belief in his or her personal efficacy and ability to be effective. Yet the individual might have a weak belief that the sports team can be successful or effective. The reverse can also be true.

## **Antecedents of GP**

Size or number of members in a work group is one antecedent that can influence members' beliefs about the value of their contributions to said group. Aside from the key finding that being "watched" had an effect on workers' performance, the Hawthorne studies showed that individual contributions of women who worked in smaller groups had a greater impact on the final product.

Duration or length of time of group membership, whether in months or years, is another antecedent that can impact perceptions of work group success. Groups that have early successes build GP. And, elevated levels of GP have a positive relationship with team output (Guzzo et al., 1993). Sayles (1958) suggested that development of potency can occur immediately. Lester et al. (2002) demonstrated that if a group is successful during its formative period (in the beginning), it is more likely to obtain higher levels of GP. Participants ( $n = 692$ ) in their study were from the Junior Achievement Applied Economics Program (a college preparatory course) in 32 high schools. Although time in group was not specifically tested, they discovered that potency declined over time unless the group possessed charismatic leadership. In the presence of the latter, GP increased over time (Lester et al., 2002). Wheelan (1990) posited that there are four stages of group development: dependency/inclusion, counterdependency/

flight, trust/structure, and work/productivity. Time in and/or progress through these four stages is dependent on the work group. As time passes, dynamics within the work group change and, therefore, levels of potency fluctuate.

## *Consequences of GP*

Working together is one of the greatest strengths of a team. One reason for a team or learning community to exist is to work together on projects and have input from multiple people to form the best, or highest quality, output. Behavior can directly affect a team's performance and individual perceptions of how much the organization supports them. These behaviors are measurable and observable (Bartel & Saavedra, 2000). In some instances, the term *champion behavior* is used to describe beneficial behavior in a workplace. Champion behavior is defined as the behavior of individuals who informally rise and provide leadership or "champion a cause" (Howell & Shea, 2006). In a study of manufacturing firms from 19 multidivisional organizations, a positive relationship between the occurrence of a champion and team potency was found (Howell & Shea, 2006). The findings showed that champion behavior influenced, albeit indirectly, team performance and team potency (Howell & Shea, 2006).

## **POS**

POS has its roots in social exchange theory (Wayne, Shore, & Liden, 1997). Social exchange theory stems from the norm of *reciprocity*; that is, if one person does another a favor, there is a felt obligation to return the favor (Gouldner, 1960). It assumes that "the reciprocation of valued resources fosters the initiation, strengthening, and maintenance of interpersonal relationships" (Lynch, Eisenberger, & Armeli, 1999). Two types of social exchange ideologies have received significant attention: the first is leader-member exchange (LMX) between an immediate supervisor and employee (Graen & Scandura, 1987; Wayne et al., 1997) and the second is POS between an organization and employee (Eisenberger et al., 1986; Wayne et al., 1997). The latter is the focus of this research.

Eisenberger and coworkers (1986) suggested that employees seek a balance in their social exchanges with organizations; that is, the level of employees' commitment to an organization is commensurate with their beliefs of being valued and cared for by the organization. They referred to these global beliefs as POS, a term used while investigating absenteeism and employees' dedication to the organization. Similar processes to infer the commitment of another individual, work group, or organization to social exchanges are in play, such as the frequency of exchanges, perceived sincerity with which actions are carried out (Blau, 1964), and longevity of the relationships. The effects can be positive but also negative depending on whether the exchanges are perceived as equitable. Lynch et al. (1999) indicated that a relationship can be jeopardized if an individual experiences repeated disappointment when things or results that are expected do not come to pass.



To the extent these “exchanges” are dynamic and indeed reciprocal, the notion that POS evolves, and can thus be developed, is held. Meyer and Allen (1984) defined *affective commitment* as an employee’s emotional orientation or attachment to the organization and identification with its goals. They distinguished this term from *continuance commitment*, “commitment to continue a certain line of action” (Meyer & Allen, 1984, p. 373), and examined the side-bet theory of organizational commitment (i.e., a commitment that develops with the accumulation of side bets or investments; Becker, 1960). In the context of organizational commitment, this indicates the propensity of an individual to maintain employment as a result of the accumulation of side bets (e.g., time, effort, money) that would otherwise be lost if he or she were to leave. For the purposes of this article, we will use the term *organizational commitment* to describe the reciprocal relationship that is felt when an employee perceives that its organization supports him or her. Eisenberger et al. (1986) described *affective attachment* as an employee’s emotional bond to the organization that results from having a sense of belonging and identification when his or her needs for rewards are met. Their study of POS reported the positive effects of this factor on absenteeism, and suggested that POS increases affective attachment and possibly employees’ work efforts to meet organizational goals. Organizational support theory has been used to explain employees’ personification of the organization in relation to social exchanges as they develop (Eisenberger, Cummings, Armeli, & Lynch, 1997).

## *Antecedents of POS*

As with any construct, POS is not developed without influence from other variables. Rhoades and Eisenberger (2002) conducted a literature review of POS and aggregated findings from 73 empirical studies. Their literature review showed that there are certain antecedents to POS influencing perceptions of the individual. Antecedents are what the organization provides the employees. The authors reported fairness, supervisor support, job conditions, and organizational rewards (Rhoades & Eisenberger, 2002).

According to Rhoades and Eisenberger (2002), fairness is the perception of justice within the group. A fair supervisor can influence this perception only so much as the group sees the supervisor as an extension of the organization. In other words, if the supervisor is perceived as “fair” but is not viewed as the embodiment of the organization, this perception will have little impact on belief in the organization. Furthermore, the occurrence of fair decision making should occur over time and over multiple situations to help create the perception of fairness (Rhoades & Eisenberger, 2002).

Supervisor support is the general perception of how supervisors value the contributions of a group and its team members. Employees attribute humanlike characteristics to the organization, which may influence POS. Many times, the actions by an agent of the organization that directs and evaluates employees are interpreted by subordinates to represent the organization’s intent (Levinson, 1965). Because most group members view their supervisor as the agent of the organization, employees view the supervisor’s favor or disfavor as coming directly from the organization (Rhoades &

Eisenberger, 2002). Organizational support has been shown to be distinct from other constructs within social exchange theory, such as supervisory support (Wayne et al., 1997). Nevertheless, a report of three studies suggested that “supervisors, to the extent they are identified with the organization, contribute to POS and, ultimately, to job retention” (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). In turn, a separate study of retail employees and their supervisors indicated that supervisors exhibit more supportive tendencies of reciprocity toward subordinates if they themselves feel supported by the organization (Rhoades, Shanock, & Eisenberger, 2006).

Job conditions act as antecedents to the level of POS and how individuals believe the organization values them. Examples of job conditions include autonomy, job enrichment, influence over organizational policies, role stressors (i.e., environmental factors within which an individual cannot work), training, and organizational size (Rhoades & Eisenberger, 2002).

Rewards also play a significant role in POS. Promotion, pay, recognition, and job security are all components of organizational reward systems (Rhoades & Eisenberger, 2002). They further stated, “Favorable opportunities for rewards serve to communicate a positive valuation of employees’ contributions and thus contribute to POS” (p. 700). An employee’s view of actions and policies with respect to his or her organization is shaped over time, depending on one’s history of rewards or punishments (Wayne et al., 1997). Shore and Shore (1995) discussed two types of human resource practices associated with POS: discretionary rewards (e.g., time off for education and employee development, discretionary-based bonuses) and organizational recognition (e.g., merit pay increases, promotions). Wayne et al. differentiated informal rewards (e.g., approval, praise, coaching, mentoring, feedback) and formal rewards (e.g., merit pay increases, promotions). Other terms used to describe motivational stimuli are extrinsic rewards or tangible resources and self-administered intrinsic rewards. Extrinsic rewards are provided by someone other than the employee as an incentive for certain behaviors; they are “valued outcomes for a job well done” (Quatro, 2009, p. 130). Self-administered intrinsic rewards (e.g., feelings of competence, personal development, autonomy) are “valued emotional states experienced in relationship to the job itself” (Quatro, 2009, p. 130).

POS has been found to positively relate to obligation (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). In higher education, it stands to reason that increasing a student’s felt obligation toward a learning community will have a positive effect on the student reciprocating goodwill by doing positive work and/or continuing in the learning community. Rousseau (1989) contended that if the employer supports the employee, the employee will exhibit greater work effort and loyalty.

Members of work groups share experiences with others and may influence one another through their shared interpersonal environments (Feld, 1997). One study researched how team leadership and GP influenced group performance (Sivasubramaniam et al., 2002) and showed that collaboration occurs among members of the group and between the group and the leader. Collective thought by members and leaders can help

improve levels of potency. This collective perception can only occur when support is perceived.

## *Consequences of POS*

Rhoades and Eisenberger (2002) noted that with increased levels of POS, there are consequences or outcomes. These outcomes are what employees give back to the organization and represent their responses to the organization. A lot of the research on POS has focused on predicting outcomes relevant to the organization, such as team effectiveness and performance. Examples having strong to moderate positive associations with POS are affective commitment, job-related affect (e.g., job satisfaction, positive mood), job involvement, extra-role (i.e., activities that fall outside the scope of assigned job responsibilities to help coworkers or the organization) performance, and desire to remain with the organization (Rhoades & Eisenberger, 2002). Moreover, positive associations have been made between POS and employee attitudes, fulfillment of socioemotional needs (e.g., esteem, approval, affiliation; Armeli, Eisenberger, Fasolo, & Lynch, 1998), conscientiousness in performing job responsibilities (Eisenberger, Fasolo, & Davis-LaMastro, 1990), and enhanced trust by employees when their organizations have met their exchange obligations.

To the contrary, publicity given to layoffs and reduction of employee benefits has led to employees' mistrust of organizations (Lynch et al., 1999) because they find that the exchange of job security for dedication and loyalty is no longer one of parity. Other examples having moderate negative relationships with POS include strains to stressors and withdraw behaviors, such as tardiness and absenteeism, suggesting perhaps a buffering effect (Rhoades & Eisenberger, 2002). Byrne and Hochwarter (2008) examined organizational cynicism with mixed results. Bedeian (2007) defined cynicism as "an attitude resulting from a critical appraisal of the motives, actions, and values, of one's employing organization" (p. 11). Results suggested that cynics performed highest when POS was at moderate levels and they performed lowest when perceived support was either high or low (Byrne & Hochwarter, 2008).

Organizational support, which is a benefit that arises from social exchanges (Rhoades & Eisenberger, 2002), can influence levels of GP. For example, if an employee has positive social exchanges with the employer, the belief that the organization supports the employee increases. If negative exchanges occur, the opposite may be true. This positive relationship was established in one large bank in the Netherlands with 58,000 employees. The study tested the relationship between management support and employee beliefs of GP (de Jong et al., 2005). In addition, the investigators tested intrateam support and levels of GP. Intrateam support, the perception that team members value each individual team member, is an aspect of organizational support. The findings indicated a positive correlation between GP and quality of work (de Jong et al., 2005). This suggested, for this bank, GP can be increased or decreased as it relates to organizational support. Control of potency did have a positive correlation with quality of work produced by the groups.

## Research Method

Descriptions of GP and qualitative research examining the “feelings” or “perspectives” of GP and POS are extensive. However, measuring potency and its relationship to POS has not been extensively studied in a quantifiable manner. The level of analysis for this research focused on two levels: individual and group. Mierlo, Vermunt, and Rutte (2008) showed that group-level constructs can be correctly derived from individual level survey data. In addition, Shea and Guzzo (1987) suggested that the most frequent method to gather information on GP is through questionnaires.

### *Instrument*

A three-part instrument, which included two scales previously used in similar studies, was administered. Its components were GP as designed by Guzzo et al. (1993) and POS as developed by Eisenberger et al. (1986). The final component was a descriptive section addressing demographic data.

*Measures of GP.* The scale measuring GP was derived from Guzzo et al.’s (1993) work as the most common approach to assess potency. The reliabilities over different samples and industries are high and the scale distinguishes among group ratings. Shea and Guzzo (1987) established the reliability by conducting a correlation among responses of similar group members. In addition, they correlated responses among groups, establishing a high reliability. This robust questionnaire can reasonably be used with the participants from teams/student cohorts in graduate school of mostly working adults. The data also showed that it is reasonable to study GP by studying individual data.

The GP level was measured using a 5-point Likert-type scale to indicate how participants felt about the group. The responses ranged from 1 (*to no extent*) to 5 (*to great extent*), with higher scores indicating greater presence of the described belief.

*Measures of POS.* The second section of the questionnaire focused on POS. This scale was selected because of the well-established reliability and validity of the POS scale. The scale was scored on a 6-point Likert-type scale. The responses ranged from 1 (*strongly disagree*) to 6 (*strongly agree*), with the higher value indicating greater agreement with the opinion about the learning community.

### *Sample*

Respondents were males and females of graduate school learning communities at four 4-year universities (two public and two private) in the Midwest region of the United States. They either had already earned or were currently working toward advanced degrees in human resource development, education, or consumer and family sciences at the time of this study (Shelton, 2008). Most members, although master’s and doctoral students, were also working professionals with full-time employment. Purposive sampling was used to determine whom to include. Selection criterion was based on participants’ affiliation with and experience as a member of a learning community.

Specifically, this sample was chosen because the participants were enrolled in educational programs that followed a cohort model. Student cohorts and learning communities are groups of students who are placed together with the assumed goal of learning. The individuals within the learning communities shared three commonalities: the focus of the group was on intentional learning to complete required assignments, membership of the group was based on program enrollment, and the learning community shared resources under the instruction of a facilitator.

During the course of one month, individuals received either an e-mail or a link from respective program representatives requesting their participation in the study. Two institutions forwarded the cover letter and questionnaire link to current and former students. The third university posted the cover letter and questionnaire link in an “electronic” classroom for one learning community and forwarded these same materials through a list server to potential participants of another program. In the fourth situation, students voluntarily provided their e-mail addresses. A response rate could not be calculated because some of the program representatives serving as gatekeepers did not acknowledge the total number of potential respondents.

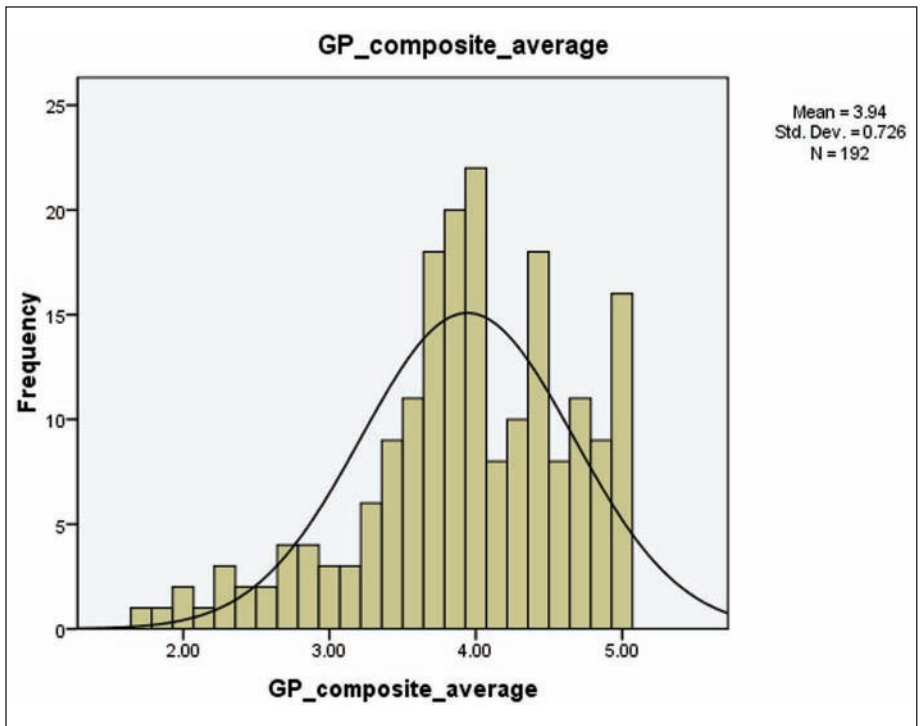
## Research Findings

The sample size for the survey population was 192; 30.2% of respondents were male, 69.3% were female, and 0.5% did not report. The age range varied; 28 participants were between 18 and 30 years of age (14.7%), 53 were 31 to 40 (27.7%), 62 were 41 to 50 (32.5%), and 48 were 51 or older (25.1%). Respondents identified their programs of study as human resource development (75.0%), education (22.9%), and consumer and family sciences (2.1%). More than two thirds of them, 132 (68.8%), were obtaining their master’s degree. Respondents indicated that they had been in one or two learning communities (75.9%) and three or four learning communities (24.1%), which included the one under review.

A positive correlation ( $r = .589$ ,  $p < .001$ ) was found between GP and POS. The study showed that collaboration occurs among members of the group and between the group and its leader. Collective thought by members and leaders can improve or influence levels of potency. Means and standard deviations were calculated for GP (see Figure 1) and POS (see Figure 2).

Gender of participants was also noted. There were no differences between gender and GP and gender and POS. Although research has illustrated men and women work differently within a workplace or educational setting, this study did not find any significant differences even at the  $p = .1$  level (see Table 2).

Responses were also analyzed to discover if there were differences in GP and POS with respect to the respondents’ ages. Although it may appear that age plays a role in people’s perspectives of how work is accomplished or their beliefs in group success, this study did not find any correlation between a participant’s age and level of GP or POS (see Table 3).



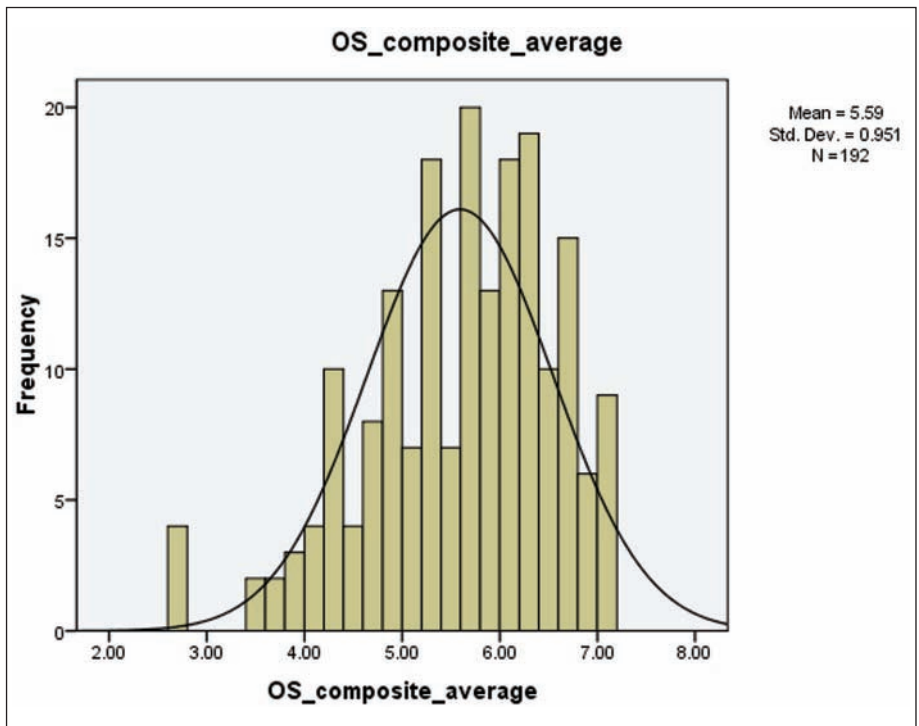
**Figure 1.** Group Potency Composite

## **Discussion**

The findings of this study support the expectation that GP and POS are positively related and influence each other. Organizations are moving toward team-based work structures (Sivasubramaniam et al., 2002). Understanding how to create and manage teams/work groups that are high-functioning can help an organization increase performance and become more competitive. GP has been found to be positively related to team performance (Campion et al., 1997; Lester et al., 2002; Sivasubramaniam et al., 2002). Therefore, increasing a team's potency can increase their output.

### *Implications for HRD Theory and Research*

GP has been shown to increase performance. More and more companies are turning to groups as their basic work unit (Sivasubramaniam et al., 2002). Understanding how teams function and what antecedents influence GP and team performance, such as



**Figure 2.** Organizational Support Composite

**Table 2.** Differences in Composite Group Potency (GP) and Perceived Organizational Support (POS) Scores Across Gender

Gender	GP Composite Score		POS Composite Score	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Female	3.90	0.735	5.56	0.989
Male	4.03	0.696	5.67	0.869

Note: No significant difference at the .1 level.

POS, are becoming increasingly important. Through continued examination of work groups, and through an understanding of the precursors associated with high levels of GP that lead to success, teams, learning communities, and other types of work groups will continue to thrive in their forever-changing environments.

There is considerable literature supporting how connectedness enhances performance (Baldwin, Bedell, & Johnson, 1997; Chaddock, & Saltiel, 2003; Teitel, 1997)

**Table 3.** Differences in Composite Group Potency (GP) and Perceived Organizational Support (POS) Scores Across Age Ranges

Age Range (years)	GP Composite Score		POS Composite Score	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
18-30	3.97	0.562	5.60	0.900
31-40	3.89	0.823	5.41	1.008
41-50	4.02	0.735	5.69	0.938
>51	3.88	0.702	5.64	0.921

Note: No significant difference at the .1 level.

and ensures engagement. Interaction within teams has been determined to increase performance outcomes (Baldwin et al., 1997). In fact, one of the main reasons for the existence of teams is peer support offered through long-term relationships and developed during the experience (Teitel, 1997). Despite the extensive body of research on teams, studies have yet to answer the all-important question, What truly makes a high performing team? This broad question offers theorists and scholars many opportunities for future research. Initially, attempting to control levels of POS and measuring the resulting levels of GP is an area that directly affects HRD theory and research. One particular study perspective is to analyze data using multiple variables and identifying and measuring the interactions. Another area for future research is to identify and measure moderating variables that influence the relationship between GP and organizational support, group size, and duration of group membership. Therefore, HRD theorists and scholars can discover what antecedents influence POS and GP. Some suggestions on influencing variables are leadership, communication, homogeneity or heterogeneity of the group, and culture. Leadership could also have a relationship with scores on the GP scale. Communication, such as openness in communication or access to communicating with others, may be associated with potency levels. Group issues, such as how similar or different a group is, that is, heterogeneous or homogeneous, might affect potency levels. Lastly, organizational culture could influence levels of GP by creating an environment that encourages beliefs of success. This study focused on quantifying responses to questionnaires. Theorists and scholars could conduct interviews, observations, or other qualitative strategies as possible next steps to this topic. Identifying what the participants find to be highly influential in their beliefs in group success could help to identify possible antecedents. In addition, interviews can help the field of HRD determine why the participants perceived GP. Longitudinal research should be undertaken in this area. Identifying a group and following the group's potency levels, perceptions of support, and other variables could illuminate key factors that exist in creating a group with high potency. This longitudinal research could be similar to Sayles (1958) in following a work group throughout membership and leadership changes. Finally, additional research should include group structure,



developmental stages, and leadership within the group as an antecedent to GP. Comparing individual GP scores with the group's collective assessment is another area that could be important in future research.

### *Implications for HRD Practice*

Implications from this research may be that leadership can influence GP levels. Also, as new teams are formed, GP might not transfer from one team to the next. Therefore, each team must receive organizational support and attention to develop its own potency. Potency development is not a single event; rather, it must be cultivated for each team and maintained by each team.

What does this mean to the practicing leader or manager? Creating a culture whereby employees or students feel the organization and team support them can help increase GP. Because GP has been proven to be positively correlated with group performance (Campion et al., 1997; Gibson, 1999), focusing on potency's antecedents can help group output.

Furthermore, this knowledge can be gainfully used to integrate activities that help foster a perception about whether a leader supports his or her followers. Activities such as team building, trust building, or other interventions that help to increase positive perceptions of the leader and organization can influence POS, which in turn correlates to levels of GP. In addition, GP has been established to increase performance and outputs of groups; a leader or manager may use resources and measure outcomes or increases of productivity by using metrics or benchmarks and can reasonably expect a return on the investment of increasing POS and GP.

The HRD professional can certainly utilize this knowledge in a similar fashion as the leader and manager. In addition, as the HRD practitioner conducts interventions and/or other strategies to increase human performance, POS can be targeted as an area of need. Along with an HRD intervention, the HRD practitioner can also identify key aspects of POS (even using the POS scale) to benchmark levels. As either an internal or external consultant, the HRD practitioner might consider another outcome of a team-building exercise or activity as increasing GP or POS. This in turn could help to create another avenue of intervention strategies beyond traditional methods.

Although the focus of this study was not specifically on gender or age, this information was collected and shared here. There appeared to be no difference in POS or GP or their relationship with gender or age ranges. This can be extremely important to the HRD practitioner and leader in the workplace. As differences in gender and age are more prevalent in the workplace, finding constructs or techniques that are effective across them are important. The relationship between GP and POS appears to be one relationship that is free from influence by gender and age.

As previously reported, fairness, supervisor support, job conditions, and organizational rewards have positive relationships with POS (Rhoades & Eisenberger, 2002). Therefore, HRD professionals could use an intervention that affects these areas, which in turn would affect POS and GP. For example, using an intervention that improves

job or organizational rewards and leadership development with a focus on leader fairness may have a positive impact on the POS of individuals within the targeted organization. As this research found, POS and GP are positively correlated. Therefore, as POS increases, GP is likely to increase, as is group performance (efficiency and effectiveness).

## *Limitations*

As with any study, this one has limitations. A weakness in this study is it only examined POS and GP, and it did not examine other constructs that may also be important. Other variables, such as leadership member exchange, organizational culture, and organizational citizenship behavior, may play a large role in determining the level of potency exhibited by teams.

Another area of limitation is the sample. Although the participants were for the most part employed full-time, the study was conducted in an educational setting. There is an inherent homogeneity among graduate students and this might affect generalizability. This homogeneity could affect how the participants work in groups.

Lastly, because of privacy concerns from the universities, we were unable to obtain specific student and alumni information. Therefore, response rates could not be estimated. In addition, with some of the less recent graduates, e-mail addresses may have been incorrect. As the program representatives forwarded the messages, it was not possible to determine how many e-mails were returned undeliverable. In the future, identifying methods to capture response rates will be important to discuss with gatekeepers while ensuring participant anonymity.

## **Conclusions**

GP has been shown to increase performance. Understanding how to create, lead and manage work groups to ensure their success is becoming ever more important. Learning how to lead or provide the best possibility of success is the goal. This research has identified two constructs, POS and GP, which have positive relationships with work group/team and individual performance.

As organizations focus on ways to improve organizational performance and gain a competitive advantage in today's global marketplace, GP and POS play a vital role. Organizations use teams to increase production and improve work processes, innovate, and solve problems. Furthermore, many organizations use communities of practice to enhance performance (Lesser & Storck, 2001) and create strategic advantage by integrating them into their knowledge management systems (Wenger, 2004). Teams form the basis for much of how our work is accomplished, and our ability to create, motivate, and manage ever more efficient and effective teams is becoming imperative. Andrew Carnegie's perspective on teams is as appropriate today as it used to be. Teamwork "is the fuel that allows common people to attain uncommon results."

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