IN A KNOWLEDGE-BASED economy where teams have become a pervasive phenomenon in organizations, achieving high performance in a team setting remains one of the most illusive and underdeveloped areas of organizational work life. Even though organizations promote and encourage teamwork, and credit teams as dominant players in their business operations, little is known about what drives their success. According to Allen (1998), there is limited empirical research to support the value of teams, with Gadeken (2002) claiming that knowledge about teams is anecdotal. However, the use of teams has been steadily escalating as a result of international competition pressuring organizations to employ more efficient ways of doing business in order to compete in the global market. Devine & Clayton (1999), report that 48% of American organizations have integrated teams into their organizational structures with most employees holding membership in more than one team. Effective teams have a proven track record for resilience in times of change, especially given their ability to collectively pool resources to manage transitions (Hackman, 2002).

The factors that contribute to team effectiveness are extensively documented in the literature. Most frequently cited factors are: facilitative leadership focused on developing increasingly self-managing work teams (Hackman, 2002; and Laiken, 1998); organizational culture fostering interdependence, decentralized decision-making, information sharing, and ongoing professional development (Axelrod, 2002); job design built on autonomy, and clear role and performance expectations (Pagell & Le Pine, 2002); team composition, including advantages of heterogeneous work groups (Athanasaw, 2003; and Munro, 1979); team generated mission statements and strategic plans (Bart, Bontis, & Taggar, 2001); cohesion and synergy emerging when teams value and manage conflict as a rich resource for learning (Laiken, 1994); and the ability to reflect on team process in order to increase continuous learning and improvement (Laiken, 2002).

THE CHALLENGE

Traditionally, employees are grouped into teams with minimal, if any, planning for their integration into the organization. Consequently, many teams experience communication and cultural barriers, difficulty fostering trust, and unfulfilled individual, team and organizational goals (Govindarajan & Gupta, 2001). Especially disconcerting are the conflicts arising from personality style and other differences which ultimately derail working relationships. Organizations that value high involvement need to equip teams with the skills to function to their full capacity and manage the differences inherent in working with others.
RATIONALE FOR THE TEAM DEVELOPMENT MODEL

This article introduces a model (Rekar Munro, 2001) designed to help organizations develop and sustain high performance teams. It is based on recent research, which demonstrates qualitatively and quantitatively that helping a team to reflect on its process through an action research approach – particularly in the light of personality style differences, measurably increases both its productivity and member satisfaction. According to Coe (1992), more investigation is needed on the behavioural changes that emerge as a result of incorporating knowledge of personality types into team building. The model presented here responds by amalgamating three areas currently underrepresented in the literature on team training, and consequently, limited in practice: managing personality diversity, using action research as a team-building intervention, and ensuring transfer of learning to the workplace.

Research suggests that heterogeneous teams create more innovative solutions to complex problems and have stronger decision-making capabilities because of the mix of ideas generated as different backgrounds and approaches merge (Athanasaw, 2003; Laiken, 1994; Munro, 1979). The second area requiring further study is team performance self-assessment and its impact on productivity and member satisfaction. Teams typically become entrenched in their daily activities battling deadlines and constant change, and consequently, little if any collective consultation takes place on how the team is functioning until performance is severely skewed (Rekar Munro, 2001). For teams to develop effectively and to efficiently reach their own and others’ performance standards, regular self-assessment of their progress, followed by modifications to their process is critical. The action research component of the team development model responds to this need through an organic approach that involves proposing, evaluating and modifying actions taken to solve team identified problems. The third area requiring further study is team performance self-assessment and its impact on productivity and member satisfaction. The research, employing quantitative and qualitative approaches, was conducted with 118 participants from the Durham and Scarborough regions of Ontario, randomly assigned to control and experimental teams.

The sample population consisted of 68 females and 50 males, representing a variety of professional disciplines from different organizational sectors and ranging in age from 21 to 65. A representative sample was sought in order to test the transferability of the investigator’s model to various professional disciplines and organizational settings. Random sampling, by drawing names, permitted a mix of personality profiles and differences in gender, race, culture, and socio-economic backgrounds, so that the experimental condition would replicate the diversity found in most organizational work teams.

In terms of task-related activities, the experimental and control teams were exposed to the same conditions and procedures. Teams in both groups participated in four experiential decision-making exercises administered weekly over a four-week period. Team members individually completed each exercise and then worked in a four or five-member team to reach consensus on the correct answers. After each activity, team performance scores were calculated and surveys, allowing team performance and participant satisfaction. The research, employing quantitative and qualitative approaches, was conducted with 118 participants from the Durham and Scarborough regions of Ontario, randomly assigned to control and experimental teams.

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members to individually rate their satisfaction, were administered. The performance scores and survey results served as a basis of comparison between teams in the experimental and control condition. The only difference between the experimental and control teams was that The Team Development Model was used exclusively with the experimental groups. The control groups, which functioned without the model, served as the benchmark against which the results from the experimental groups were measured.

## STEPS IN THE TEAM DEVELOPMENT MODEL

The first step in this model is the assessment of each team member’s personality style using the Keirsey Temperament Sorter, a simplified yet equally valid and reliable version of the Myers-Briggs Type Indicator (MBTI) (Quinn, Lewis & Fischer, 1992, Myers & McCaulley, 1985). In this phase, team members are encouraged to reflect on their personality profiles and share their results and observations with their team. It should be noted here that the results from the personality assessment were not used to group participants into teams. The assessment was used exclusively to heighten awareness of differences inherent in personality profiles and to stimulate discussion on how teams can effectively manage these differences.

In the second step, teams are introduced to the theory on Myers-Briggs personality types, with a focus on the similarities and differences between type profiles and how they can interact positively or create barriers to team functioning.

Based on the information generated in the first two steps, teams then proceed to the third step where they develop their own unique action plan outlining the behaviours that they want to see demonstrated in their team when they are effectively managing personality style differences. Guidelines for creating the plan focus on the identification of behaviours that are observable, measurable, and achievable.

It is important to acknowledge here that the managing of personality style difference is only one of many factors affecting functional or dysfunctional team behaviour. Attention to difference in culture, race, gender, socio-economic background, etc. is equally influential in shaping team dynamics. The significance of these diversities is recognized, but only one variable, that of personality style, has been isolated as a focus for the proposed model in order to help teams manage this specific difference. It is anticipated that strategies used to deal with style differences may be transferable to teams that are learning to manage other diversities among members, and would provide fertile ground for further research.

Once the action plan has been created, teams proceed to the fourth step where they work on the first assigned experiential exercise. Prior to beginning each of the remaining three exercises during the research process, members are asked to discuss the degree to which their action plan is serving as a vehicle to assess team performance and satisfaction. The action plan is continuously modified to reflect the behaviours that will lead to the team’s effectiveness, and can be influenced by changes in team composition, individual needs and expectations, task restructuring, and organizational context.

Before teams end their training, there is a final discussion about their perceptions of effective and ineffective approaches to dealing with style differences, and the strategies members will try to implement when participating in other teams.

## ANALYSIS OF RESEARCH RESULTS

### Analysis Featuring Quantitative Methods

A battery of statistical tests was conducted to draw conclusions about the degree to which there were statistically significant differences in the performance and satisfaction of participants in the experimental and control groups (analysis of variance, t-testing, item analysis, and the calculation of correlations).

Results indicated that ten of the fourteen experimental teams had higher performance scores on the experiential exercises and experienced greater satisfaction with their process, as compared to the control groups. Correlations between participant satisfaction and team performance for the experimental group ranged from .53 to .81 and from .12 to .27 for the control group. The greatest variance in performance scores was found in two of the four activities where the experimental group means were 17.05 and 7.11 and the control group means.
were -2.25 and -.35. The results were statistically significant at the .01 and .001 levels, indicating that there is a less than 1% probability that the results occurred by chance. Hence, the acceptance of the alternative hypotheses, stating that there is a marked difference between team performance and participant satisfaction in teams that had been trained using The Team Development Model and those teams that had not been exposed to the model.

The high satisfaction and performance scores attained by teams in the experimental condition may be attributed to the action-planning component of the model. As previously noted, the action planning process is a built-in dialogue enabling team members to discuss their effectiveness in managing personality style differences, and to chart strategies for resolving difficulties that may be interfering with performance. Regularly voicing concerns and working toward minimizing performance barriers may have decreased the probability of problems festering and eventually eroding satisfaction and performance. The group discussions seem to have facilitated the management of such team member interactions, and consequently, progress made in this area was reflected in the high satisfaction and performance scores.

Since teams in the control condition were not encouraged to dialogue about process-related issues, there was a higher probability that obstacles to team functioning were not addressed. These unresolved issues may have been reflected in the low satisfaction ratings on the surveys and, in many cases, “ineffective” performance scores on the group exercises. For these teams, a final investigator-led focus group was their first chance to discuss process-related issues and consequently, they vented opinions and emotions that, up to that time, had had no outlet.

Analysis Featuring Qualitative Methods

In the qualitative segment of this study, thirty-one volunteers from the experimental and control groups participated in semi-structured focus group interviews aimed at eliciting experiences, opinions, and observations. Participants discussed challenges they faced, the changes they experienced, and their significant learnings as they progressed through the process. Emerging from these discussions were insights within the following common thematic areas: planning and implementing change; developing effective team member interactions (including managing the stages of team development, dealing with team member status, establishing effective communication patterns, developing role clarity, setting goals and evaluating progress); valuing personality diversity; managing conflict; and successfully transferring the learning.

In each of these five areas, the experimental groups’ experiences were more positive, and they made substantially more progress in developing the competencies associated with each area, as compared to the control groups. Teams in the experimental condition credited The Team Development Model for these outcomes and for their strong scores on the group exercises. Specifically, training in personality types helped them comprehend the complexities of style differences and their impact on team performance, and the action research process steered them toward the formulation of action plans to manage differences and enhance interpersonal relationships. The model equipped the team with an approach to integrating personality diversity into the team culture instead of reflexively building barriers that harm solidarity. It helped open communication channels so that any emerging conflicts had a forum within which to be addressed. This prevented conflicts from becoming dysfunctional and helped members develop ways to embrace diversity.

An introduction to personality types paved the way for comprehending and managing style dynamics. Participants became more cognizant of their own profiles, and how perception of self and perceptions held by others are often dissimilar, which leads to problems when people fail to recognize how their personality and corresponding behaviour affect their interactions. This being the case, participants found it beneficial to critique their own behaviours and identify those which hinder and promote positive team dynamics. Dialogue regarding joint accountability for team success heightened awareness of individual responsibility for shaping interpersonal relations.

Optimizing team effectiveness was also accomplished through action research. The action plan signified the agreed-upon behavioural norms to be practiced within the team and became the benchmark against which the teams assessed their progress. Regular “process checks” enabled the teams to discuss their strengths and the changes needed to align behaviour with performance goals. These dialogues kept communication channels open so that members could freely offer insights, comments, and recommendations for change. Since the model encourages collaboration, the action plan became the glue that bound the team together. It provided a systematic process for replacing original behaviours with new and more effective approaches.

Participants also noted the merit of the concluding step in the model, which addresses the transfer of learning from the training session to the workplace. This phase of the process engaged team members in reflection about significant learnings from the team event, and how they could incorporate best practices into other teams with which they are involved. This step was identified as a rare addition to organizational training, which, according to the participants, was much needed, especially with the preponderance of organizational barriers that threaten the integration of new skills and practices.

In contrast, the control groups had a higher degree of dissatisfaction, with many of their performance scores plummeting into the “ineffective” category. Lack of formal training and guidelines for team functioning were cited as principal reasons for their substandard performance and declining levels of satisfaction. Following several abortive attempts to harmonize battling coalitions, many members chose to avoid or suppress conflict in order to stumble to the end of the task. In their opinion,
if armed with mutually agreed-upon guidelines to combat interpersonal skirmishes, they would have been able to intervene more expeditiously and thwart conflicts from reaching potentially destructive levels.

The inclusion of quantitative and qualitative methodologies in the collection and analysis of the data produced a clear picture of The Team Development Model’s value in optimizing team performance and participant satisfaction. Quantitative analysis of the team scores on each of the four exercises and the survey results depicted the statistically significant differences between the teams, and the focus group interviews supplemented the statistics with rich descriptions of the participants’ lived experiences.

**IMPLICATIONS FOR PRACTICE**

We believe that the applicability of this model spans organizational settings and occupations, with implications for any organization integrating teams into its structure. Some potential applications include:

- **Curriculum for Leadership Development**—The Team Development Model could complement the existing curriculum in leadership development programs. With the influx of teams virtually as well as on-site in organizations, leaders need to be well versed in the facilitation of cooperative work ventures so that they can coach teams to function more autonomously and effectively. The model provides an approach that can be used with a team to quickly develop capacity for self-management and continuous improvement.

- **Change Management**—One measure of success in the new economy is the ability to adapt to intense competition and deal with the staggering rate of change. Through ongoing inquiry and dialogue, members forecast changes that are imminent from sources that are internal and external to the organization, and critically assess the corresponding changes required in their operations.

- **Conflicts Management**—Through training in conflict personality type differences and conducting action research, team members begin to conceptualize conflict, not as destructive, but as integral to ensuring representation of diverse viewpoints. Recognizing the potential benefits of difference ignites the team’s search for ways to integrate these so that members gain from the knowledge, experience, and insights of others.

- **Union-Management Negotiations**—The model may enhance mutual gains bargaining by helping union and management personnel, who are committed to finding mutually satisfying solutions to organizational issues, develop skills to deal with the personality differences that often obstruct negotiations. The management of style differences enables both parties to merge insights from people with diverse viewpoints, and enhances interpersonal relations so that a conciliatory work environment can be sustained.

- **Team Performance Assessment**—The research results demonstrate a clear correlation between skillful attention to process and success in task completion. The action research component of the model provides the structure by which teams can regularly critique their progress and make modifications as needed. This type of reflection encourages collective accountability for ensuring that team strengths are maintained, and for exploring and solving problems. As it is a continual process of performance assessment, team members can review previously recommended changes and, over a period of time, see the effects of these recommendations on their daily functioning.

- **Transfer of Learning to the Workplace**—Most current training focuses on ensuring adequate coverage of the content, and the methods are mainly conducive to the acquisition of knowledge and skills. Insufficient attention is given to initiatives that would enhance the application of learning to people’s daily lives, and this puts the usefulness of training under legitimate scrutiny. The model attempts to bridge the gap between theory-based learning and application. In the final step, team members are invited to discuss strategies they will attempt to implement and behaviours they will encourage when working with their teams in the future. The collective brainstorming of strategies provides team members with appropriate responses to potential organizational barriers, and boosts their confidence in managing change initiatives.

- **Fostering Team Culture**—With training in personality types followed by collectively working through the challenges inherent in managing personality differences, teams begin to show the signs of increased cohesion, more risk-taking behaviour and conflict tolerance, and independence which are characteristic of strong team cultures (Yeatts & Hyten, 1998).

- **Personal Growth and Development**—Within the framework of constructing a team action plan lies the potential for reflection about one’s personal accountability. Taking individual responsibility for one’s own actions in helping teams function effectively ultimately enriches the learning and working experience for everyone involved.

**CONCLUSION**

In an era when the use of team structures is endemic within organizations, it is imperative that we develop ways to optimize team performance. Practitioners involved in organizational change have always known from experience that process reflection is a critical component of effective team functioning. However, the “leap of faith” required of increasingly action-oriented organizational cultures to associate this activity with
enhanced productivity has mainly precluded their willingness to engage. Additionally, apart from a devaluing of reflective activities, a lack of skill in conducting process-oriented discussions has contributed to an almost exclusive focus on task completion within organizational teams (Laiken, 2002).

The research presented in this article substantiates convincingly the direct correlation between integrating a reflective action research component into teamwork, and a significantly increased level of productivity and member satisfaction. As teams integrate the action research model into their operations, they develop a means by which they can regularly gauge performance and modify behaviours to perform more effectively, and better accommodate differences among members. With an understanding of and appreciation for the contributions of personality diversity, teams begin the evolutionary process of exploring how to work harmoniously with others. Results from the study reported here strongly support the use of an action research-based team development model in this journey toward achieving the increased levels of productivity and satisfaction associated with high performance teams.

REFERENCES


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