
ADAPTATION OF TRADITIONAL HUMAN RESOURCES PROCESSES FOR TOTAL QUALITY ENVIRONMENTS

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The worldwide total quality (TQ) movement, which emphasizes quality, continuous improvement, empowerment, and teamwork, is redefining the context in which workers behave in organizations. Traditional human resources (HR) processes appear to be more compatible with the bureaucratic organization than with the TQ organization. For instance, some of these HR processes tend to be static rather than dynamic, and oriented to the individual rather than the team. This article addresses the concern of how HR processes, such as job analysis, recruitment, selection, training, performance appraisal, and discipline, should adapt to support the cultural changes occurring in TQ organizations. Implications and directions for future research are also considered.

Key words: appraisal, discipline, job analysis, quality, recruitment, selection, training.

INTRODUCTION

Nadler and Tushman's (1980) congruence model says that organizational effectiveness is contingent upon how well the organization's subsystems fit together as a whole. The human resources (HR) subsystem of the 1970s and 1980s organization typically stressed job analysis, work samples, technical training, top-down appraisals, and progressive discipline. The traditional HR subsystem seems to be incongruent with the total quality (TQ) philosophy because the HR subsystem was originally designed for the bureaucratic organization. Allowing total quality organizations (TQOs) to function with a traditional HR

subsystem is analogous to pouring new wine into old skins. Thus, HR departments in TQOs are scrambling to redefine themselves in the context of TQ.

TQ themes such as continuous improvement, quality, personal growth, self-direction, empowerment, teamwork, and leadership need to be integrated into all organizational subsystems, including HR. The remaining sections of this article will be spent redefining traditional HR processes, such as job analysis, recruitment, selection, training, performance appraisal, and discipline, to make them compatible with TQ themes. First, the prevailing cultural themes operating in TQOs will be briefly reviewed.

W. Edwards Deming, a leader of the worldwide TQ movement, developed 14 points and 7 deadly diseases that have radically altered the look of modern-day organizations (Walton 1990). Deming was highly critical of merit pay, individual bonuses, ranking employees on the basis of overall performance, and management by objectives (Deming 1993; Walton 1986, 1990). Deming believed that ranking and merit pay single individuals out as poor performers and ultimately rob them of their dignity. Merit pay and individual bonuses fuel employees' extrinsic motivation—that is, motivation that comes from external sources such as the boss—but do very little for increasing intrinsic motivation—that is, motivation that comes from liking to perform the

job. The organization's assumption that poorly performing workers are responsible for an organization's lack of profitability is, in his view, terribly misguided (Deming 1975). A fundamental attribution error is oftentimes committed when things go awry, with employees being blamed instead of possible breakdowns in the system.

"Full participation and personal growth" is often used to describe the kind of working environment that TQ workers enjoy. Alderfer's (1972) concept of growth need or Hackman and Oldham's (1976) growth need strength (GNS) is closely related to the intrinsic motivation concept. Persons with high GNS or high intrinsic motivation, working in an enriched environment, have a positive regard for improving the way they perform their work (Hackman and Oldham 1976). They take the initiative on their own to analyze and change work processes. These employees thrive on the organization's push for continuous improvement (Waldman 1994). They strive for excellence, not for extrinsic rewards, but because they feel personal gratification in providing customers with high-quality products and services in a timely fashion and at a low cost.

Management's role in organizations that value continuous improvement is to manage change, meaning that processes need to change and so do the workers (Imai 1986). TQOs ask all levels of employees to become thinking employees, continuously searching for ways to improve the work being done (Deming 1993). Workers at all echelons in TQOs are merging thinking and doing in their work (Senge 1994). Smart employees who work exceedingly hard are desired.

The leadership imperative of upper-level management in TQOs is to be a catalyst for change, articulating a philosophy of management that is no longer driven by control but driven to meet customers' requirements (Anderson, Rungtusanathan, and Schroeder 1994). Upper-level management is to rid the organization of bureaucratic

impediments that, at times, originate in the "policing" activities of quality departments (Senge 1994). Leaders of self-directed teams (SDTs) are to be more facilitative than directive. These leaders are to communicate a clear vision, act on the basis of principle rather than personal gain, empower team members, and listen and ask relevant questions. Leadership within SDTs is the responsibility of each team member. Individual team members assume responsibility for the improvement of one or more of the team's processes (Brower 1994).

Paralleling Trist, Susman, and Brown's (1977) work in the area of sociotechnical systems theory, SDTs have emerged as a powerful force in the TQ movement. SDTs usually have 5-20 rank-and-file workers who are entrusted with the authority and responsibility of overseeing a complete set of work processes (Brower 1994). In time, these teams evolve to a point where they can function without formal supervision. SDTs are capable of studying and improving their processes, conducting effective meetings, and managing conflict effectively. Skill development in each of these areas, as well as knowledge of statistics, quality techniques (for example, cause-and-effect diagrams, flowcharts), and basic computer education, are focal for SDT members (Yeatts, Hipskind, and Barnes 1994). TQOs rely on extensive training and coaching to remove any gaps in these skill and knowledge areas. Once the initial phase of this development process is completed, decisions concerning quality, customer service, and so on can be based on accumulated data, as well as the collective wisdom of SDTs, rather than on hunches and simplifying heuristics (Walton 1986).

In sum, continuous improvement, SDTs, empowerment, leadership, personal growth, and quality are themes that strongly characterize TQOs. Recommendations for redefining HR processes, such as job analysis, recruitment, selection, training, performance appraisal, and discipline, in the light of these themes will now be presented.

JOB ANALYSIS

Job analysis, as traditionally understood, is a process of systematically collecting detailed information, such as tasks, knowledge, skills, and abilities, about a particular job. In the bureaucratic organization, job analysis is the foundation for recruitment, selection, training, performance appraisal, and compensation processes. These HR activities cannot properly proceed without a detailed picture of the job. Existing job analysis methods seem to be incongruent with the needs of TQOs. For instance, the cornerstone of two popular job analysis methods, functional job analysis and task inventory procedure, is the listing of relevant task statements for each job in the organization and then rating each task with appropriate scales (for example, the relative importance of each task). These task statements and ratings are then used for different HR purposes, such as classifying jobs and assigning pay. Jobs with a fixed bundle of tasks and a fixed set of qualifications, however, may be a thing of the past. Job content in TQOs is fluid, not static; broadly defined, not narrowly defined; and team oriented, not focused toward the individual worker. Knowledge, skills, abilities, and other characteristics (KSAOs) necessary to perform yesterday's, and some of today's, jobs may reflect the KSAOs of an obsolescent specialist (Aaron 1994). In some cases, such a specialist may be too rigid and closed-minded for the TQ work setting.

TQOs have some serious choices to make when it comes to the issue of job analysis.

1. Sanchez et al. (1993) suggested that existing methods could be modified by incorporating TQ themes, such as quality, customer service, and continuous improvement. Each task assigned to a worker could be rated not only on scales, such as frequency and importance, but also on TQ scales, such as customer focus, quality, and continuous improvement. For instance, the extent to

which each task involves a customer perspective could be assessed.

2. Instead of highly specific task statements, TQOs could focus attention on broad duty statements providing increased flexibility (Sanchez et al. 1993). A list of general duties and corresponding KSAOs would then be constructed to reflect the work necessary to meet the needs of customers.
3. TQOs could move away from the job analysis concept and toward team analysis and organization analysis. The unit of analysis would no longer be specific activities in a particular job but would be the work assigned to the team. In this way, the team members have the responsibility for performing all of the processes involved in providing a final product or service to customers. Instead of a job description and job specification—that is, a list of KSAOs relevant to a job—a team description and team specification would be produced via team analysis.

Key characteristics of the organization's mission, vision, and culture should also play a role in shaping HR activities. Therefore, a systematic process of identifying key values articulated in the organization's mission and vision statements, as well as values in the organization's informal culture, can be used to specify KSAOs necessary to work effectively across jobs in the organization. This process, referred to as organization analysis (Offermann and Gowing 1993), produces an organization description; that is, a summary of the organization's mission, vision, and culture from the employee perspective and the KSAOs necessary to work effectively in this culture.

Lawler's (1994) notion of moving from job-based to competency-based organizations corresponds to organization analysis. A competency-based orientation focuses on the individual's capabilities and accomplishments

instead of job requirements, allowing for increased flexibility. For instance, the competency-based organization selects individuals who fit the characteristics of the organization and not a specific job.

RECRUITMENT

Recruitment Sources

Most organizations have not scrutinized the effectiveness of their recruitment sources. By default, newspaper advertisements, employment agencies, and internal recruitment are used to attract applications for position openings. After reviewing the recruiting source literature, Wanous and Colella (1989) concluded that different recruitment sources yield different voluntary turnover rates. The results of Conard and Ashworth's (1986) meta-analysis (an analysis of the results of previous studies) revealed that the voluntary turnover rate of employees recruited via employee referral was 24.9 percent and 29.8 percent lower than employment agencies and newspaper ads, respectively. The turnover rate of walk-ins was 19.4 percent and 24.6 percent lower than employees recruited through employment agencies and newspaper ads, respectively. Across occupations, recruitment sources such as employee referral and walk-ins produce the lowest voluntary turnover rates (Wanous 1992).

Breaugh (1981) found that the quality of job performance, measured with supervisory ratings, was higher when research scientists at a midwestern chemical company were initially recruited at a professional convention, through a professional journal ad, or as a walk-in instead of through college recruitment. That is, the mean performance ratings on a five-point quality dimension were 4.15 for scientists recruited at a convention or with a journal ad, 3.94 with walk-ins, and 3.33 with college placement. Considering the sample, this relationship between recruitment sources and quality of job performance makes a great deal of sense.

Heeding Deming's call for data-driven decision making in TQOs, it is recommended that recruitment data in TQOs be analyzed to discover whether certain recruitment sources yield low voluntary turnover and high performance, not only on the quality dimension but also on other TQ dimensions such as adaptability, leadership, and continuous improvement. Following Caldwell and Spivey's (1983) suggestion, this analysis should be done separately for each minority group to develop a high-caliber yet diverse TQ workforce.

Realistic Organization Previews

A realistic job preview (RJP) is a recruitment strategy that provides a realistic picture of the job to applicants (Wanous 1992). Applicants are given accurate job information, which means both positive and negative aspects of the job are shared. One intent of the RJP is to reduce the new hire's initial level of job dissatisfaction. RJP's should theoretically reduce the organization's voluntary turnover rate because there are better matches between the qualifications of the new hires and the requirements of the jobs. Wanous (1992) proposed a model that incorporates four mediating variables. These are met expectations, coping ability, air of honesty, and self-selection. Theoretically, RJP's "vaccinate" applicants with a small dose of the job, lessening the ill effects of unmet expectations. Met expectations are then hypothesized to lead to increased coping ability, increased appreciation of the organization for being honest, and increased number of applicants who decide not to pursue the job opening (that is, self-selection).

As the name implies, RJP's focus on specific jobs. Since jobs in TQOs tend to be fluid as well as broadly defined, RJP's appear less useful than would a realistic organizational preview (ROP). ROP's provide applicants with accurate information about the organization's

culture and climate (Breaugh 1983). Applicants are exposed to the following:

1. Prevailing corporate values; for example, valuing the customer
2. Performance norms; for example, high quality of performance
3. HR strategies unique to TQOs; for example, self-directed teams
4. Appropriate behaviors; for example, cross-functional integration

Similar to RJPs, ROPs are intended to reduce the shock that new hires may encounter in TQ environments and ultimately lead to an improved person-organization fit (Bowen and Lawler 1992). It should be noted that organizations providing RJPs and ROPs are viewed more positively by applicants; according to Wanous and Colella (1989), applicants perceive RJPs and ROPs as the organization's way of showing care and concern. They believe that this care and concern experienced by applicants will in time produce increased commitment to the organization.

Consistent with the call for empowerment in TQOs, employees can be a part of the design and implementation of ROPs. The content of the ROPs could, in part, be developed with input from team members. They might be able to provide applicants with both an organization and work perspective that HR people could not. As for implementation of ROPs, team members could informally meet with applicants to provide realistic organization information. RJP researchers (Breaugh and Billings 1988; Popovich and Wanous 1982) have encouraged the use of job incumbents to deliver RJP information to applicants. Incumbents are perceived by applicants to be trustworthy and knowledgeable sources. Two-way communication in the form of questions and answers between incumbents and applicants is also encouraged.

SELECTION

Some organizations attempt to increase validity (the ability to predict applicant job performance) by utilizing work sample tests. Work samples give applicants the chance to perform the job to determine their suitability for the opening. These tests are content valid, meaning that the content of the test approximates the content of the job. "Seeing is believing" is a saying that applies to work samples. Seeing good performance on the test is believing that applicants will perform well on the job. Since the work assigned to employees in TQOs changes frequently, work samples that are highly specific to a set of tasks in a job may not be suitable. In short, the person-job fit concept is giving way to the person-organization fit concept in TQOs (Bowen, Ledford, and Nathan 1991; Waldman 1994).

Aaron's (1994) KSAOs of a generalist, which are not job-specific but organization-specific, appear compatible with the needs of TQOs. Examples of these KSAOs include clear thinking, adaptability, ability to work in a team environment, leadership, noble character, ability to communicate effectively, and conscientiousness. Considering the speed with which work will change in TQ environments, KSAOs of the generalist, rather than the KSAOs of an obsolescent specialist, may make greater sense. KSAOs appropriate for enhancing the person-TQO fit, such as quick learning, high GNS, and ability to relate effectively with others, are not easily assessable with work samples since there would likely be a low correspondence between test content and work content. By default, other selection devices such as biographical data (biodata), structured interviews, personality tests, and cognitive ability tests may be more appropriate for TQ environments.

Quick Learners

Hunter and Hunter's (1984) review of selection processes provides a strong clue to the assessment of one's ability to

learn quickly. They reported that cognitive ability tests measuring numerical ability, verbal reasoning, verbal comprehension, and similar skills have an excellent record in predicting performance across many kinds of entry-level jobs. Specifically, Hunter and Hunter (1984) looked at 425 validation studies and found a mean corrected validity of 0.53. This was corrected for both unreliability in the criterion and range restriction. This validity coefficient of 0.53 is the correlation between cognitive ability test scores and performance scores. Considering that validity coefficients can range from -1 to $+1$, this particular validity coefficient is impressive relative to other workplace predictors. There is, however, a downside to these tests. Cognitive test scores for some minority groups are historically lower than scores for nonminority groups. Organizational goals of increasing workforce diversity and increasing the cognitive abilities of the workforce may, at times, be at odds (Hunter and Hunter 1984).

In Mayfield's (1964) review of the interviewing literature, he concluded that interviewers are particularly adept at assessing applicant intelligence. In a reanalysis of Hunter and Hunter's (1984) data, Huffcutt and Arthur (1994) found that the more structured interviews, versus the less structured, produced a mean corrected validity of 0.56. This validity is comparable to the validity of the cognitive ability tests. Hence, structured interviews appear to be another way of predicting performance in TQOs as well as identifying quick learners.

GNS

Biodata items are excellent workplace predictors of performance, especially when they are verifiable and historical (Gatewood and Feild 1990). Schneider and Schmitt (1986) reported biodata validities ranging from 0.25 to a high of 0.50. Likewise, Hunter and Hunter's (1984) review revealed a mean corrected validity for 12 biodata studies

to be an impressive 0.37. Feuer and Lee's (1988) biodata items, such as, "I find it enjoyable to constantly learn new things about my job," may indicate the applicant's GNS and fit for a continuous learning environment.

Ulrich and Trumbo (1965) concluded that the structured interview may be effective in predicting the applicant's motivation. Consistent with TQ's theme of empowerment, team members could be entrusted with the responsibility of constructing and conducting these interviews (Blackburn and Rosen 1993). That is, designing valid, structured interview questions and then interviewing candidates for the team's openings can be effectively accomplished by team members, with appropriate training. The results of Wiesner and Cronshaw's (1988) meta-analysis provided strong evidence for the effectiveness of team interviews. They reported that structured team interviews using a consensus decision-making approach produced a mean corrected validity of 0.64.

The results of Barrick and Mount's (1991) meta-analysis suggest that personality tests assessing the trait of conscientiousness are surprisingly good predictors of performance across job categories. In their sample of 12,893 managers, salespersons, professionals, police officers, and skilled/semiskilled workers, the estimated true score correlation between conscientiousness scores and performance was a statistically significant but modest 0.23. Instruments used to measure applicant conscientiousness include, among others, Personal Characteristics Inventory and Hogan Personality Inventory. There appears to be a relationship between the personality trait of conscientiousness and one's need to grow professionally, that is, GNS. This may be true since Digman's (1989) research indicated that the conscientiousness construct not only reflects dependability but also achievement orientation, perseverance, and intrinsic motivation. Utilizing a reliable personality test measuring conscientiousness with

other selection strategies, such as cognitive ability tests and structured interviews, may prove effective in predicting performance in TQOs.

Interpersonal Skills

Interpersonal skills keenly needed in TQOs are as follows:

1. Ability to work effectively in a team environment
2. Ability to communicate effectively with diverse groups, which also means relating cross-functionally
3. Ability to relate effectively with customers
4. Ability to lead

Structured interviews, such as situational interviews, have long been considered the method of choice when it comes to assessing the applicant's level of interpersonal skills (Ulrich and Trumbo 1965). McDaniel et al.'s (1994) meta-analysis, which included 946 interviews, revealed a mean corrected validity of situational interviews to be an effective 0.50. For instance, interview questions that ask the applicant, "How would you deal with an angry customer who shouted profanities at you?" may be effective in predicting performance. The content of each hypothetical question might reflect the theme expressed in a team or organization KSAO.

Again, biodata items, embedded perhaps in the application form, may assist with the prediction of employee performance on work teams. Wagner and Moch's (1986) individualism-collectivism scale (for example, "I prefer to work with others in a work group rather than to work alone") might be helpful in assessing the applicant's desire to work in a team environment. Items in Feuer and Lee's (1988) inventory (for example, "I believe it's important for hourly workers and managers to work together") might play the same role as Wagner and Moch's (1986) scale. Russell et al. (1990) offer some biodata items that may predict teamwork, such as, "How often have you set aside personal differences in order to get the job done?"

Biodata items in the Russell et al. (1990) study were developed with life-history essays written by job incumbents. Biodata items in their study effectively predicted performance as well as peer ratings of leadership.

TRAINING

Needs Assessment

A prevalent theme in TQOs is lifelong employee learning (Senge 1994). Not only do TQOs expect lifelong learning, but high GNS workers also expect it. Continual employee learning will become a way of organizational life. In line with TQ's empowerment notion, Goff, Sheckley, and Hastings (1994) suggested that TQ workers should become self-directed in their learning. That is, they should be responsible for assessing their own learning needs and initiating action to meet those needs. When employees notice performance slippage or foresee a need for a specific knowledge base or skill, they would initiate corrective action and find suitable training. Self-directed learning should increase employees' acceptance of training content as well as commitment to transfer the training from the classroom to the work setting. This is a positive transfer. Self-directed learning in many ways is no different from the old notion of technical training, except that employees, not supervisors, are responsible for needs assessment. Fellow team members could also be responsible for assessing employee training needs. Research, such as that by Fox, Ben-Nahum, and Yinon (1989) and Kane and Lawler (1978), has shown that peer assessments are generally reliable and valid, especially in noncompetitive work environments.

Training Methods

Considering the emphasis of hiring highly motivated workers in TQOs, training methods suited to adult learners may be especially effective. Methods that are

active, trainee-centered, and team-centered, such as case discussion and behavior modeling, seem appropriate for these continuous learning environments. Such methods complement the more traditional training methods, such as classroom and lecture, best suited for instructing trainees on other TQ concepts, such as cause-and-effect diagrams and Pareto charts.

Mentor programs are typically reserved for the development of managers. These programs allow organizations to meet several needs: meaningful work, career development, and employee acculturation. With personal growth and empowerment as prominent TQ themes, informal mentoring programs that dip into the lower echelon of TQOs may pay off. Creating a mentoring climate that gives rank-and-file workers an opportunity, if they wish, to enhance the meaningfulness of their work, to develop in their careers, and to grow in their understanding of the organization's culture, appears to nicely fit the quality philosophy.

The informal mentorship concept advocated here is distinguished from formal mentorships. Spontaneous mentoring relationships are encouraged in the informal mentoring program, whereas formal mentoring programs are highly structured and managed by the organization (Chao, Walz, and Gardner 1992). These researchers found that protégés in informal mentorships received more career-related support from their mentors than did protégés in formal mentorships. They also reported that protégés in informal mentorships experienced significantly higher job satisfaction as well as organizational socialization than did nonmentored individuals. Thus, the informally mentored protégés learned information necessary to adjust to their role. Since the manager's role in TQOs is evolving into a coaching role, perhaps rank-and-file employees could choose leaders and managers in other departments to be informal mentors.

Evaluation of TQ Training

In the past, corporate training programs have either not been evaluated or have been ineffectively evaluated. At best, the reactions of participants to the training may have been collected and the judgment of the training program's effectiveness based solely on the results of these surveys. Long ago, Kirkpatrick (1959) advised that four criteria be used in the evaluation process.

1. Participant reaction
2. Learning that has occurred because of the training
3. On-the-job behavior changes
4. Positive organization outcomes

Kirkpatrick's last two criteria are considered the best because they indicate whether or not the newly learned skills or knowledge has been transferred to the work setting. Simply put, training is deemed successful when positive on-the-job behavior changes are noted in the latest performance appraisal and when favorable organization outcomes, measured in an objective way, are also noted after training. Considering the money that is being spent on TQ training, the recent push for treating quality programs as investment decisions [for example, Greising's (1994) return on quality], and Deming's call for more data-based decision making, it makes sense to use these criteria—with an appropriate research design—to evaluate the effectiveness of TQ training. Both behavior and outcome criteria could incorporate relevant TQ themes, such as customer service, quality, teamwork, and cost reductions, to ensure that the training effects are consistent with the overall strategy of TQOs.

After receiving training, employees could be empowered to develop appropriate TQ-related criteria to evaluate the training. With such participation, employees would become thoroughly familiar with training objectives and the corresponding measures used to assess whether these

objectives have been met. Their acceptance of, and commitment to, achieving training objectives should increase. The likelihood that the newly learned skill or knowledge is actually transferred to the work setting should be greater as a result. The training content provides employees with shortcuts and strategies to perform exceedingly well against these criteria. Admittedly, it may be difficult to evaluate the effectiveness of training content when trainees are allowed to develop relevant criteria; but this can easily be resolved with an appropriate research design.

PERFORMANCE APPRAISAL

In Deming's view, many traditional appraisal strategies generate humiliation, fear, self-defense, and competition. His disdain for management by objectives (MBO), which emphasizes end results over processes, is extensively reported (Deming 1993). The likelihood of process inefficiencies, a short-term managerial perspective, and unethical conduct is increased when upper-level management is most concerned with the achievement of objectives and the bottom line. Deming contended that performance should not be evaluated for the purpose of dispensing rewards and punishments but for feedback and continuous self-improvement. With this new direction for appraisals in TQOs, supervisors and workers alike could be allowed to participate in the development of the performance appraisal system. Increased employee acceptance of the appraisal process should occur with such participation.

Appraisal Formats

Organizations have shown marginal interest in knowing their raters' preferences for different rating formats. Since the performance appraisal process in TQOs is attempting to foster self-improvement and not the attainment of monetary rewards, it should be a user-friendly system. User-friendliness should be broadened to include not

only the format preferences of managers but also the preferences of those being evaluated. The appraisal format that is best suited to meet the varied needs of both managers and employees should be adopted. The one stipulation that TQOs could make is that the TQ themes of quality, customer service, and teamwork permeate the items in the preferred format.

Moving one step further, TQOs should consider allowing both managerial and nonmanagerial personnel the opportunity to coproduce the format. Utilizing a multi-trait-multimethod approach to assessing validity and error, Friedman and Cornelius (1976) found that raters who constructed either traditional graphic rating scales or Smith and Kendall's (1963) behaviorally anchored rating scales rated with less halo error and more convergent validity (interrater agreement) than did raters who were uninvolved in the scale-construction process. Friedman and Cornelius attributed the improved psychometric quality of ratings to the involved raters' increased understanding of the rating instrument and a better understanding of the job. The benefits attained through this empowerment process (that is, involvement in scale construction) should offset the amount of time and expense involved.

Diary keeping (Balzer 1986; Bernardin and Walter 1977) may be a useful appraisal strategy in TQOs. Both raters and ratees could be taught to keep diaries on their own performance as well as the performance of others. Ongoing accounts of performance, rich with behavioral detail, could provide sound feedback and help with the self-improvement process. Diaries might be formatted along the lines of TQ themes—quality, teamwork, cost consciousness, and customer service—and brief daily entries would then be placed in appropriate TQ categories. Information from the diary would be the basis for the more formal appraisal, improving, it is hoped, the quality of these ratings. In support of diary keeping's

effectiveness, DeNisi, Robbins, and Cafferty (1989) found that performance ratings were more accurate when raters kept diaries than when raters did not keep diaries. Similarly, Bernardin and Walter (1977) reported less leniency, less halo error, and greater interrater agreement when diaries were kept, versus when they were not kept.

Appraisal Training

Performance appraisal researchers have thoroughly evaluated the effectiveness of different rater training programs, such as rater error training, frame-of-reference training, and observation training. In his literature review of rater training programs, Smith (1986) concluded that the more involved participants are in the training program, through discussion, practice, and feedback, the greater the rating accuracy and the lower the leniency error. Training programs that provide raters with a common understanding of the job, of the scales to be used, and a frame of reference of what good, bad, and average performance are, have fared the best in increasing rating accuracy (Smith 1986). In a recent rater training study, Stamoulis and Hauenstein (1993) found that frame-of-reference training, which provides raters with a common understanding of what good, bad, and average performance are, increased raters' differential accuracy relative to a control group not receiving training.

Organizations have not, however, considered the orientation and training needs of the employees who are being evaluated. It is commonly accepted that self-ratings produce leniency error (Harris and Schaubroek 1988; Thornton 1980). TQ employees are frequently being asked to rate themselves (self-ratings) and rate each other (peer ratings), but little effort is made to orient and train them to observe performance from a common frame of reference. Raters in TQOs, which include managerial and nonmanagerial workers, could be given clear behavioral examples depicting excellent performance in a TQ

environment (for example, an employee suggesting a cost-saving idea or helping team members catch up with assignments). Such training should enhance the quality of their ratings as well as increase their acceptance of, and commitment to, the appraisal process.

Sources of Ratings

The best way to provide performance feedback to TQ workers is with 360-degree appraisal feedback (Nowack 1993). Feedback is gathered from "all around" workers. Multiple raters from different organizational perspectives, such as bosses, the workers themselves, co-workers, subordinates, internal customers, and external customers, complete the ratings on all TQ employees. Averages are computed for each employee on each performance dimension and item. These averages can then be charted over time to ascertain whether workers are showing signs of continuous progress. Nowack (1993) referred to charting one's performance progress as *ipsative scoring*. The strength of 360-degree appraisals is having a number of raters from different levels of the organizational hierarchy, as well as raters outside the organization, such as external customers, evaluate workers. With so many raters, the biases of the few idiosyncratic raters have a less dramatic effect on the quality of the ratings.

DISCIPLINE

The progressive-discipline system has historically been used by supervisors to deal with problem employees. Under this system, supervisors hope to cure the low performers' problems by progressively levying more severe penalties when the particular problems persist. These penalties include oral warnings, written warnings, three-day suspensions without pay, and termination. This system treats problem employees in a childlike way, creating an adversarial relationship between supervisors and employees

(Grote 1994). With such a discipline system, fear and failure are emphasized, producing a workplace that is contrary to Deming's ideal.

Since self-direction is a theme in TQOs, an alternative system—discipline without punishment—might be better. Unlike the progressive-discipline system, poor performers in the discipline-without-punishment system take personal responsibility for correcting their own problems (Campbell, Fleming, and Grote 1985; Sherman and Lucia 1992; Grote 1994). They are treated in an adultlike manner by the organization, in the hope that self-discipline, rather than supervisory discipline, will eventually correct substandard performance. Punishment is not emphasized with this approach. Supervisors handle poor performers in a less confrontational manner, coaching rather than forcing behavioral change. They provide reminders instead of warnings and may direct the problem workers to an employee assistance program (EAP), when available. EAPs provide employees with personal counseling in a variety of areas, such as drug and alcohol abuse and family and financial counseling. Undoubtedly, the most controversial aspect of the discipline-without-punishment system is the paid decision-making leave. According to Grote (1994), this one-day paid leave gives problem employees time to reevaluate their future with the company. It also demonstrates the organization's sincerity in wanting to retain these employees. Campbell, Fleming, and Grote (1985) offered anecdotal evidence for the effectiveness of discipline without punishment. At one company, the change to this positive approach from a progressive-discipline approach produced (1) fewer successful unemployment compensation claims after termination; (2) less absenteeism; (3) fewer grievances; and (4) fewer arbitration hearings. In short, discipline without punishment appears to be more in line with the coaching role of managers in TQOs than is the progressive-discipline approach.

CONCLUSION

TQ themes of quality, empowerment, continuous improvement, leadership, personal growth, and teamwork should affect the look of HR processes in quality-minded organizations. The purpose of this article is not to suggest a radical shift in thinking of the HR concept but to suggest modifications in HR processes to make them compatible with TQ themes. Specific modifications and recommendations presented thus far will now be summarized.

First, existing job analysis methods appear to be out of sync with the HR needs of TQOs. These methods, such as functional job analysis and task inventory procedure, appear too job-centered and static. In this article, three alternatives were suggested: (1) incorporate TQ themes into existing methods; (2) use broader duty statements; and (3) focus on teams and/or the organization instead of the job. Another possibility is to ignore the job analysis concept completely. Some of these options are not without risk, especially from a legal perspective. Both the *Americans with Disabilities Act* of 1990 and the *Uniform Guidelines on Employee Selection Procedures* of 1978 emphasize the importance of having job-related selection processes. It is uncertain whether the U.S. Equal Employment Opportunity Commission and the courts will view organization analysis with complete favor.

Second, evaluating the effectiveness of recruitment sources with TQ criteria, as well as adopting ROPs, are recruitment strategies thought to be consistent with the needs of TQOs. Both recommendations involve few costs and have potential in certain key outcome areas.

Third, selection in TQOs tends toward person-organization fit over person-job fit. Therefore, alternative selection processes, such as biodata, that can assess person-organization fit were proposed instead of work sample tests that, by definition, assess the applicant's fit for a specific job.

GNS is an important concept for the enriched work environment within TQOs. If the ideal of continuous employee learning and continuous process improvement is to happen, the makeup of the TQ workforce should consist of high GNS-type individuals. GNS is not only important from a selection perspective but also from other HR perspectives. Training, performance appraisal, and discipline systems have been redefined in this article on the assumption that the TQ workforce consists primarily of high GNS-type people. The success of training's self-directed learning, appraisal's continuous improvement, and even discipline without punishment depends on a workforce that is ready and willing to grow professionally.

Fourth, training programs in traditional, bureaucratic organizations are initiated and evaluated in a top-down fashion. For example, a supervisor identifies a subordinate's training need via the performance appraisal. In this article, how TQ themes of self-direction and empowerment can be integrated into the different phases of training were discussed. Trainees in TQOs might be responsible for assessment of their own training needs as well as for the development of relevant behavioral and outcome criteria to evaluate the effectiveness of the training.

Fifth, it was suggested that empowerment play an integral role in the shaping of performance appraisals. When the purpose of the appraisal changes from an award-dispensing mechanism to a feedback mechanism for the sake of continuous improvement, it makes sense to allow managers and nonmanagers to coproduce the appraisal system (for example, scale construction) and then, with appropriate training, to implement the redesigned system (that is, self- and peer ratings).

FUTURE RESEARCH

On the basis of these five recommendations, directions for future research will now be considered. First, as a

replacement for job analysis, new data collection methods that focus on the work to be done, on the team and in the organization, should be developed. These work analysis methods should be able to quickly identify the team's responsibilities, the organization's mission and culture, and appropriate KSAOs for both the team and the organization. These psychometrically sound methods should also be suitable for the various HR needs of the organization, such as compensation and selection.

Second, continued work in evaluating the effectiveness of alternative recruitment sources, in light of TQ values, should be fruitful. With the arrival of employee leasing and contract workers as sources of labor, scrutinizing their effectiveness is encouraged.

Third, the positive effects of ROPs, such as higher self-selection, higher job satisfaction, and lower voluntary turnover, may prove to be more powerful than the effects of RJPs. Recruiting individuals for the TQ organization rather than a specific job may be an abstract process. Applicants' preconceived notions of the job may generally be more accurate and realistic, thereby limiting the potential benefits of RJPs. On the other hand, applicants' preconceived notions of the organization's work environment may be less clear, thereby enhancing the potential of ROPs. Future research should consider whether ROPs produce more powerful effects, such as higher self-selection, higher job satisfaction, and lower voluntary turnover, than do RJPs.

Fourth, since ROPs and recruitment sources, such as employee referral and walk-ins, are primarily intended to reduce voluntary turnover, it may be of interest to assess the relationship between voluntary turnover in TQOs and a lagged measure of customer satisfaction/customer retention. If, in fact, there is a strong inverse relationship, TQOs would then have an incentive to reduce voluntary turnover to a healthy level.

Fifth, selection strategies developed specially for TQOs should be validated. That is, demonstrating the relationship between these predictors and relevant TQ performance criteria, such as quality of performance, is strongly suggested. Developing biodata items and GNS instruments that are valid across TQ environments would also be constructive research.

Another research issue to consider is the effectiveness of the personality trait of conscientiousness in predicting group performance in TQOs. Recall that the validity of personality tests measuring this trait was statistically significant but modest (that is, 0.23) in predicting individual performance. Hiring more conscientious employees for SDTs should be crucial to the success of these teams. Highly conscientious team members who exert maximum effort to team affairs may enhance group performance, whereas team members low in this trait may look more often for opportunities to loaf, at the expense of the group's performance. Employee conscientiousness may be less crucial in bureaucratic, nonteam environments because supervisors' controlling activities reinforce employees' individual performance obligations.

Seventh, adopting a selection strategy that stresses the person-organization fit, not the person-job fit, may invite more bias into the selection process. Simply put, deciding an applicant's fit to the organization may be less defined and involve more inferences than deciding the applicant's fit to a specific job. If given leeway, decision makers may idiosyncratically interpret each applicant's organizational fit—that is, the right chemistry. Research should consider this possibility and demonstrate whether or not the person-organization fit approach produces more bias than does the person-job fit approach.

Eighth, researchers investigating the effectiveness of traditional training programs have continually expressed concern for the lack of positive transfer of content learned

in the training setting to the job setting. Does self-assessment of training needs improve positive transfer relative to the more traditional needs assessment approaches? Does trainee involvement in the development of evaluation criteria improve positive transfer relative to the more traditional evaluation approaches?

Ninth, performance appraisal researchers should consider the effects of empowerment in a number of appraisal domains. Specifically, empowerment—that is, allowing managers and nonmanagers an opportunity to select or even construct the appraisal system—may lead to improved appraisals in TQOs—that is, increased reliability and validity. Also, just as important, empowerment leads to increased worker acceptance of, and commitment to, the appraisal process. This deserves formal investigation. Furthermore, employee perception of procedural justice might be enhanced because of employee involvement in the appraisal process. Procedural justice concerns the fairness of the process by which personnel decisions are made within organizations (Folger and Greenberg 1985). One of Folger and Greenberg's six rules for attaining procedural justice is the Representativeness Rule, which means that the process addresses the concerns of all affected employees. Co-opting TQ workers with appraisal strategies that solicit their input (for example, scale construction) should not only improve the quality of self- and peer ratings but also, in the eyes of the ratee, increase the perceived fairness of the appraisal process (that is, procedural justice). Job satisfaction and organizational commitment may be increased when ratees perceive the appraisal process to be procedurally just (Folger, Konovsky, and Cropanzano 1992). These appraisal issues are worthy of investigation.

Tenth, the effectiveness of discipline without punishment should be formally evaluated. Determining whether the discipline-without-punishment system is perceived as

more just by workers—that is, with higher procedural justice—than the progressive-discipline system should be examined. The two disciplinary systems could also be contrasted on measures of absenteeism, grievances, arbitration hearings, unemployment compensation claims after termination, job satisfaction, and organizational commitment.

To end on a rather sober note, TQOs that experience success with continuous process improvement (Imai 1986) or reengineering work (Hammer 1990) may, in time, produce a surplus of workers. Paradoxically, problem-solving teams that have been effective in identifying and eliminating processes not adding value to customers may be working themselves out of a job. The temptation will be to downsize, which seems incompatible with the TQ philosophy. Deming (1993) was of the opinion that TQ workers should enjoy an environment that is free from fear and threats. Downsizing or layoffs may only undermine the cultural changes transpiring in TQOs. Based on the responses of 27 MBA students holding midlevel managerial positions (18 of which had personal experience with downsizing), Roth (1993) reported that communication patterns within the organization change when downsizing occurs. To protect themselves, workers in downsized organizations begin to hoard information and often tend to lay personal claim to any successes that the work group experiences (Roth 1993). Instead of working for the good of the team and organization, self-interests may reemerge as the driving force behind workers' behavior. Once this occurs, effective team problem solving may be hard to recapture. Furthermore, if the performance appraisal system is used to identify surplus workers, the underlying purpose of the appraisal is no longer continuous personal improvement but the ranking of workers on the basis of performance. Instead of maintaining cooperation in the appraisal process, defensiveness on the part of ratees will resurface. With downsizing, self-ratings and peer ratings—and perhaps

even customer ratings—may no longer be viable because of the reemergence of political behavior into the process. A strong component of the TQ training process is self-directed learning; needs assessment may become more political with downsizing. Why would employees want to “shoot themselves in the foot” by admitting serious deficiencies? In short, it appears that TQOs have much more to lose with unnecessary downsizing and layoffs than to gain. Irreparable harm may occur if downsizing and layoffs are used injudiciously in such environments.

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