SALESPERSON SELECTION, TRAINING, AND DEVELOPMENT: TRENDS, IMPLICATIONS, AND RESEARCH OPPORTUNITIES

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Building on the forces of change in selling identified in the introductory paper of this Special Issue of *JPSSM,* we identify and explicate trends, managerial implications, and research opportunities in two important domains of the selling field: training and development (TD) and selection. Part One focuses on TD of salespeople, and argues why a fresh perspective on salesperson TD is essential. Then, taking a knowledge, skills, and ability (KSA) approach, a framework for future TD content is proposed around three levels of KSAs: task-related KSAs, growth-related KSAs, and meta-KSAs. Part Two, on selection, focuses on several important predictors of salesperson success: cognitive ability tests, personality inventories, and biodata. Then, assessment methods are reviewed. Finally, we summarize with a discussion of emerging trends and research opportunities. The focus of the discussion is on both enhancing salesperson performance and affording scholars new research opportunities.

This paper builds on the drivers of change in selling and sales management as described in an earlier paper in this issue by Jones et al. (2005, this issue). The underlying theme of their paper (and, indeed, of all the papers in this Special Issue) is that due to a number of changes in the external environment, the nature of the sales position has changed dramatically in the past decade. One of the primary reasons the job has changed is that the relationship between the salesperson and the customer has changed. As detailed by Jones et al. (2005, this issue), customers expect salespeople to be more knowledgeable, respond faster, and provide value-added, custom-ized solutions to their problems. To accomplish this, salespeople must develop closer, longer-term relationships with their customers than in the past. Given that the demands of the job have changed, it follows that the type of person the organization selects for this job and the training he or she receives must also change.

Concurrently, a drastic change has occurred in the nature of the relationship between the salesperson and his or her company. This perspective emerges by rejecting a hierarchical and one-sided view that salespeople are contract employees recruited by an organization to serve its selling goals. Consider, instead, the notion of turning the relationship marketing perspective inside out, to view organization–salesperson contracts as relationships that are entered to serve mutual goals. Viewing salesperson–organization relationships as the focus of interest poses different questions about training and development (TD) efforts. Thus, instead of asking how an organization can train and develop its salesperson resource, this perspective asks us to consider how organizations and salespeople can grow the value of their mutual relationship through development and enhancement of mutual knowledge, skills, and abilities.

Our purpose is twofold. In Part One, we will focus on the trends, implications, and research opportunities in the area of TD of salespeople. In Part Two, our emphasis shifts to similar coverage in the area of salesperson selection. We have chosen this order because the TD a company provides its sales force delineates, to some extent, the type of person the organization should select for its sales positions. A sufficient degree of disparity exists between the research traditions and sources relevant to these two topics that we deemed it most efficient to handle them separately. However, as with all the topical areas represented within this Special Issue, ultimate managerial success is most likely to be derived by

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taking an integrated approach to leading a firm's personal selling initiative.

PART ONE: TRENDS IN SALESPERSON TRAINING AND DEVELOPMENT

Several forces have combined to challenge the foundations of traditional salesperson TD programs. Typically, TD programs have been *standardized* (common to all salespeople), *top-down* (management decides), *mandated* (nonvoluntary), *structured* programs (formal and centralized), and offered in *classroom* settings (by in-house or outside experts). First, in step with the cost-cutting and downsizing pressures of the times, the value of expensive TD efforts is increasingly questioned by management. No longer do salespeople make a career out of selling for one company during their professional life. Instead, most salespeople hold multiple jobs and work for several companies during their lifetime. Companies hesitate to invest resources in TD programs that train salespeople for some other company. Powell observes that management in some companies are working with the heuristic that "if we can't get 20 years ROI [return on investment] from them [salespeople], then why bother to train them" (2001, p. 44). Second, with an increasingly dynamic and competitive market, salespeople are also questioning the value of traditional TD programs. The sales environment today emphasizes solutions, customer relationships, and information. These sales requirements have proven to be less amenable to one-size-fits-all efforts of standardized and structured TD offerings. Consequently, salespeople often believe that they can learn more effectively by interacting with customers than they do in a training room, and that traditional TD programs are "not the best use of their time" (Powell 2001, p. 43).

Third, technology, mobility, and time constraints have led to decreasing dependence on traditional TD programs. Technology has enabled more information to be collected, sorted, and processed in less time than ever before. Absorbing and retaining such information is beyond the memory capacities of most salespeople. Many traditional TD programs heavily involve packaging and disseminating information. Using technology to package information offers an inexpensive alternative to traditional programs. With increased mobility, the feasibility of structured classroom-based training is questionable. Technology is pushing for alternative solutions, including long-distance and e-learning approaches. Moreover, with increased complexity and relational intensity, sales jobs are consuming more time and effort from salespeople. This poses time constraints that crowd out the value of traditional TD programs. Finally, although some TD programs do focus on "solutions selling," in which salespeople are taught to view their products as part of a total solution, there is a growing sense that top-down and mandated TD programs are only

successful in capturing the *lessons of the past;* as such, they are ill-equipped to anticipate and prepare salespeople for future needs. In fact, Hamel and Prahalad (1994) go as far as to say that traditional TD programs lock their employees in the past, curbing creativity, deviation, and risk taking. Recent trends provide evidence that sales training programs are feeling the heat—reportedly, only 30 percent of U.S. companies currently provide sales training, which accounts for only 14 percent of the $57.9 billion corporate training budget (Powell 2001).

Going forward, a fresh perspective on TD programs in selling is sorely needed. As noted earlier, we believe that the relationship between the organization and the salesperson should be viewed from a perspective of serving mutual goals. Within this perspective, TD is not what an organization *mandates* for its salespeople. Rather, TD represents a set of programs that organizations and salespeople negotiate to engage in as equal partners. Salespeople take as much responsibility for their individual training and development needs as do organizations for firm development and growth.

Within this framework, the lines between trainee and trainer are blurred, as both learn and grow through TD programs (Latham and Heslin 2003). As such, these mutually negotiated programs are likely to be individualized, jointly determined, voluntary, tailored to fit mutual needs, and offered in various modes (e.g., classroom, e-learning) that take full advantage of technology. Although such TD programs may appear futuristic and unlikely given opportunistic tendencies, research is beginning to explore and examine these possibilities. In the next section, we develop some possibilities and identify their implications for TD content—that is, the nature and scope of knowledge, skills, and abilities that are relevant for salespeople engaged in relationship selling. In so doing, we compare with current trends in theory and practice, and locate points of contrast and distinction.

The Content of Training and Development Efforts

Two broad issues are relevant in examining the content of TD efforts: (1) identifying the primary emphasis of the TD program and the expected change in salesperson outcomes as a consequence of TD, and (2) matching the emphasis of the TD programs to the salespeople's needs and career stages (Johnston and Marshall 2005). Although these issues are related, it is useful to first examine the diversity of content used in current (traditional) TD programs for salespeople in general. By examining the content diversity of current TD efforts in light of the emerging psychological research on the development and growth of human potential (i.e., in terms of productive knowledge, skills, and abilities), we identify gaps in current TD emphasis and opportunities for future TD efforts. In so doing, we utilize the relationship and strategic role of the future salesperson as the foreground context for our discussion.

Most TD programs focus on a diversity of KSAs—knowledge, skills, and abilities—that are considered relevant for sales effectiveness (Dubinsky 1996). KSAs that are trained are malleable characteristics of individuals, such as their declarative and procedural knowledge, that are open to change and enhancement through various interventions. To provide a framework for a review of current trends, identify gaps, and guide future work, we have categorized KSAs into three categories (see Figure 1): (1) *task-related KSAs* are knowledge, skills, and abilities that are directly and proximally related to the sales function within an organization; (2) *growth-related KSAs* are those a salesperson needs to continuously grow or expand his or her repertoire of task-related KSAs but are distally related to the sales function; and (3) *meta-KSAs* are of a higher order and are needed to facilitate an individual's articulation, cognizing, and manipulation of his or her own KSAs. As with the "learning to learn" skills, meta-KSAs are neither proximal to a particular domain of an individual's activity (e.g., selling) nor easily accessible in an explicit and declarative form. Rather, they are higher-order KSAs that involve an individual's efforts to self-comprehend, self-evaluate, and self-develop his or her own configuration of KSAs. The three KSA domains are portrayed in Figure 1.

Task-Related KSAs: Theory and Practice

Current sales training and development efforts focus mainly on task-related KSAs (Johnston and Marshall 2006). Usually, task-related KSAs pertain to essential elements a salesperson must possess in order to begin selling the company's offerings. The underlying theory supporting such programs is based on a behavioral approach to selling (Rosenbaum 1981). This approach is motivated by affecting a behavioral change in the individual based on modeling, role playing, and reinforcing principles. The focus is not on understanding the attitudinal or motivational underpinnings of this behavioral change. Because these KSAs are directly relevant to the sales task and their effectiveness can be relatively easily determined (and justified internally), it is not surprising that the vast majority of current TD efforts are focused on this category.

In terms of knowledge, essential aspects may include knowledge about products/services, the company, consumers, competitors, markets/industry, and related areas. The focus of task-related knowledge training is on accessibility and usability of knowledge resources—identifying resources that can be accessed to obtain needed essential knowledge, and specifying how the knowledge can be used to enhance sales productivity. In terms of skills, essential aspects include territory/time management, relationship building, selling/closing, and related skills. Effectively managing time, territories, and sales effort requires skills that are essential for a salesperson. Likewise, building relationships with customers and persuading

them to enter into exchange relationships requires people and selling skills. For instance, the popular Xerox PSS (professional selling skills) training approach focuses on a five-step selling skills program that includes (1) opening sales calls, (2) effective listening, (3) objection handling, (4) closing, and (5) follow up. Likewise, the SPIN Selling programs offered by leading sales training organizations primarily emphasize effective selling skills (Rackham 1988).

More recently, in response to the increasing interest in a relationship orientation, task-related TD programs have begun to focus more on people skills (Johnston and Marshall 2005). For instance, the IBM consultative sales training program emphasizes working with clients as consultants to build close ties and work jointly to solve problems. Although many such programs go beyond skills associated with building relationships, the core components involve people and communication skills. Taken in perspective, TD programs that emphasize task-related KSAs depend on drawing out analytical, cognitive, and emotive abilities of salespeople rather than on developing them. Consider as an example, Merrill and Reid's (1981) social style training program, which identifies for salespeople differences in social styles between their customers and themselves and shows them how to alter their style to match that of their customers. Most of the benchmarking, which companies such as GE, ExxonMobil, IBM, and many others are doing, also focuses on specific task-related skills and behaviors (HR Chally Group 2003).

Although task-related KSAs are a good starting point for training salespeople, by themselves they permit only a restricted growth in salespeople's KSAs. They do little for salespeople's attitudes, motivation, and personality development.

Growth-Related KSAs: Theory and Practice

If selling required a small set of KSAs that continued to be effective notwithstanding changes in the sales environment, then growth-related KSAs would be unnecessary. Because it does not, these KSAs that serve to *enable* the growth and development of task-related KSAs are necessary and quite important. The underlying foundation of growth-related KSAs is based on learning theories. Understanding how individuals learn and mobilize the KSAs that enhance learning is of central interest in growth-related KSAs. In part, this interest stems from increasing concern about the effectiveness of sales training programs based on behavioral approaches. It has been estimated that 87 percent of the new skills acquired as part of behaviorally oriented training programs are lost within a month unless management provides effective reinforcement through incentives and follow-up coaching (Sullivan 2000). By contrast, learning-oriented growth KSAs do not focus only on behavioral change. Rather, these KSAs emphasize change in attitudes toward tasks and goals. Once this attitude change

Figure 1
The Content of Training and Development Efforts
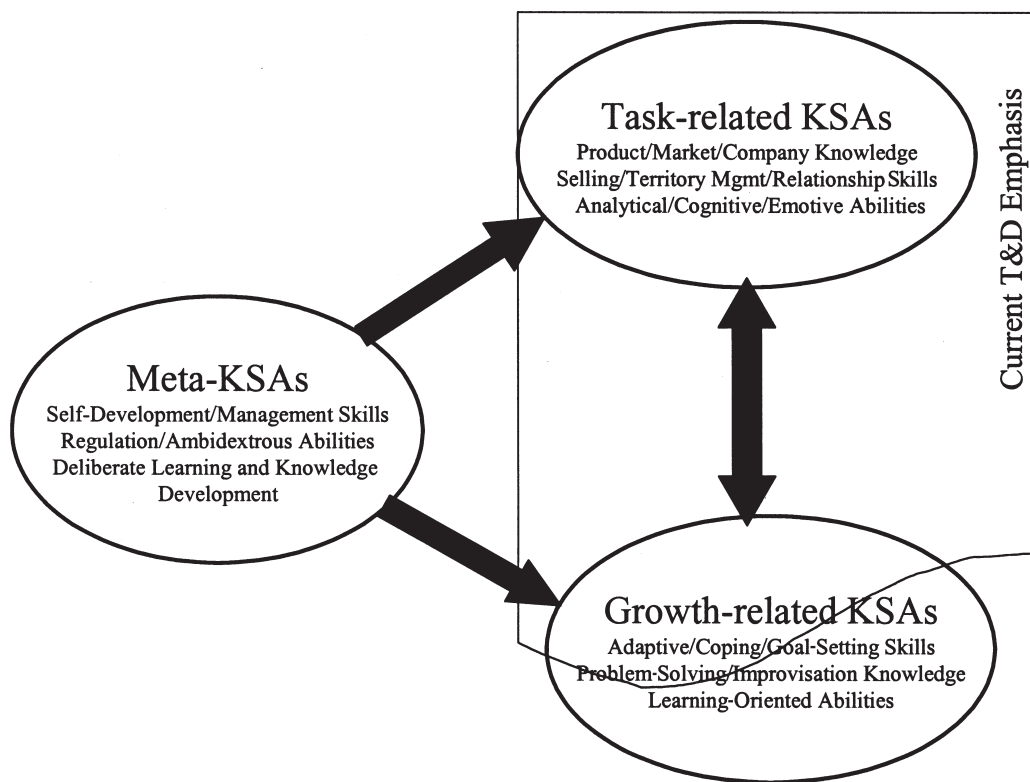
is affected, corresponding change in behaviors is thought to be more enduring (Barrie and Pace 1997). Thus, growth-related KSAs are needed not only to enable dynamic rather than static task-related KSAs but also to sustain the behavior toward which the task-related KSAs are directed.

The difference between training for task-related KSAs versus growth-related KSAs is of considerable importance while training for adaptability. Training for adaptability can be achieved through if–then rules of thumb (Weitz 1981; Weitz, Sujan, and Sujan 1986). Knowledge of these rules allows salespeople, for example, to explain the trade-off between durability and additional features (sales pitch) to buyers who, by personality, are defensive pessimists (contingent upon the customer's needs). Training for adaptability may also be imparted by suggesting that if an initial strategy appears not to be working, a second, alternative strategy should be tried and tested (Weitz 1978). This more global method for training adaptability has not only the advantage of initiating continual development of the important skill but also of sustaining the practice of rules of thumb that are developed and effectively put to use. Adaptability is more effectively taught as a growth-related KSA than as a task-related KSA (Sujan, Weitz, and Sujan 1988).

The same principle holds true for the training of practical intelligence. Tacit knowledge (practical intelligence) can be specified as local (pertaining to the task at hand) rules of thumb.

For example, the tacit knowledge of effective, expert salespeople is to ask a customer who stalls at the last minute if a new competitor has entered the picture. This allows the salesperson to counter this "threat"—failing to ask will result in the salesperson meekly bowing out of the sale. Training through informing sales trainees of these "local" rules is task-related KSA training. Training, alternatively, through creating an appreciation of the broader, more global functions served by such rules is growth-related KSA training. The global tacit knowledge rule of thumb, which the above local rule serves, is to develop a more open, trusting, easy relationship with the client. Consistent with our argument that growth-related KSAs both sustain and develop knowledge, research on practical intelligence has found that global tacit knowledge predicts performance more reliably than does local tacit knowledge (Wagner et al. 1999). Research on problem-solving skills mirrors the work on practical intelligence. In this research, it has been pointed out that the behavioral responses of salespeople who depict high levels of improvisation and problem-solving creativity are a key determinant of effectiveness. That is, the problem-solving tacit knowledge at a global level determines effectiveness (Mintu-Wimsatt and Gassenheimer 2004; Wang and Netemeyer 2004).

Coping skills represent another area of learning-based skills that enable the salesperson to be effective in relationship sell-

ing. It is well known that a salesperson's job involves a significant level of stress due to the boundary-spanning aspect of the role (Belasco 1966; Churchill et al. 1985; Singh 1998). Recent research and practice, however, have shifted the focus away from the sources and consequences of role stress to identifying functional coping strategies and styles that aid salespeople in tackling role stress. Increasing evidence exists that the choice of coping styles and strategies matters in the effectiveness of the salesperson and is an important interpersonal skill for a salesperson to develop and enhance (Nonis and Sager 2003; Rentz et al. 2002). Each of the global skills discussed above warrant greater research attention.

Meta-KSAs: Theory and Practice

The meta-KSAs relate to the motivational and personality underpinnings of growth-related KSAs, which, in turn, foster task-related KSAs. Frayne and Geringer (2000) outlined several important meta-KSAs in the context of insurance salespeople. Focusing on self-development and self-management skills, Frayne and Geringer focused on skills of (1) self-assessment, wherein the salesperson identifies domain-specific (i.e., selling) KSAs that he or she wishes to modify; (2) self-direction, wherein the salesperson identifies the strategies he or she would use to attain desired changes; (3) self-monitoring, wherein the salesperson evaluates his or her progress toward attaining desired changes; and (4) self-reinforcement, wherein the salesperson develops reinforcement and punishment strategies in support of attaining the desired changes. The authors conducted an experiment using salespeople assigned to experimental and control groups. The experimental group was exposed to a self-management training program involving a two-hour session per week for four weeks. Compared to the control group, the experimental group experienced a significantly greater increase in self-efficacy, outcome expectancies, sales revenue, and performance appraisal results. Importantly, the effect of the training was not only an immediate increase in performance and other outcomes but also a gradual continuing increase over time. Recognizing that self-management and self-development skill involves a continuous process of self-guidance and control that enhances some desired, instrumental KSAs (such as self-efficacy), we identify these skills as meta-skills.

Like self-management, learning goals derive from an intrinsic motivational orientation. An orientation toward learning or mastery goals contributes to enhanced self-efficacy, resilience, and motivation (Ames and Archer 1988). In a cross-sectional study of salespeople from diverse industries, Sujan, Weitz, and Kumar (1994) found that salespeople with a mastery (learning) orientation were adaptive and, as a result, more effective. A learning goal orientation relates to goal setting. Salespeople with a learning orientation may set challenging, but attainable, goals in a sequenced set of tasks, raising self-

efficacy, knowledge, adaptation, and performance (Kozlowski et al. 2001).

Salas and Cannon-Bowers (2001) noted that training is increasingly encapsulated in the paradigm of *learning*. This draws attention to the learning styles of trainees, and how these styles interact with learning goals and processes of training. Little, if any, research exists on the learning styles of salespeople. However, in the broader literature, a significant body of work exists to suggest that (1) distinct learning styles can be identified and measured, (2) individuals express preferences for one or more learning styles, and (3) the choice of learning style influences how individuals respond to stimuli to organize and develop their knowledge structures (Kolb 1976; Salas and Cannon-Bowers 2001). Recent work shows that learning styles are malleable and open to alteration and development. As such, rather than viewing training as constrained by the preferred learning style of individual salespeople, training may be utilized to develop meaningful and fulfilling learning styles (Robotham 2003).

A learning goal orientation may be subdivided into a passive and active learning goal orientation. Zollo and Winter (2002) distinguish two types of learning process: (1) experience accumulation—relatively passive experiential process of learning (by doing), and (2) deliberate learning—relatively active cognitive processes of articulation and codification of knowledge. Deliberate learning bridges the behavioral and cognitive approaches to learning (Glynn, Barr, and Dacin 2000). A learning orientation more geared toward active rather than passive learning may be the more important meta-KSA to train.

Like self-management and a learning goal orientation, the focus on regulatory and ambidexterity abilities represents another example of meta-KSAs. For instance, the ability to be ambidextrous implies that an individual is able to successfully work with two apparently opposing KSAs, such as performance versus learning orientation, working harder versus smarter, productivity versus quality, and efficiency versus effectiveness. Cognitive processes often prevent us from conceiving opposites as being equally true or valued. Consistent with this, the pursuit of apparently contrasting KSAs may pose coping and behavioral challenges for a salesperson. However, research in the management literature increasingly has begun to highlight the self-generative and self-renewal potential of ambidextrous organizations (Glynn, Barr, and Dacin 2000). In fact, Benner and Tushman (2003) go as far as to suggest that the survival of contemporary organizations rests on their capabilities to tackle multiple, often inconsistent, goals. A study by Gibson and Birkinshaw (2004) illustrates the nature and influence of ambidexterity. These researchers examined an organizational context in which individual employees were encouraged to develop their own choices for dividing their effort to two opposing activities—alignment- or

adaptability-oriented activities. The results indicate that, with organizational support, some individuals were able to achieve ambidexterity to focus on both activities, and that this ambidexterity relates positively to performance. Although this study does not provide evidence of the potential of ambidexterity to provoke a mechanism of continuous improvement of an individual's KSAs, it supports the self-generative and self-renewal arguments of Glynn, Barr, and Dacin (2000). In all likelihood, ambidexterity enhances adaptability and, more broadly, practical intelligence.

Overall, growth-related KSAs enable the sustained use of effective task-related KSAs and the development of new task-related KSAs. Meta-KSAs foster the continual development of growth-related KSAs. However, the extent to which training can alter an individual's meta-KSAs remains an open research question.

PART TWO: TRENDS IN SALESPERSON SELECTION

Whereas the main elements in the design and validation of personnel selection procedures have been in place for some time (e.g., job analysis, assessment instruments to predict performance, and validation), recent work in industrial organizational (IO) psychology has made advances in several areas. Perhaps the most significant development has been the increased confidence that researchers have in the validity of many personnel selection methods (Greenburg and Greenburg 1990; Robertson and Smith 2001). This conclusion has arisen due, in large part, to the use of meta-analysis in a number of recent important studies (for example, Farrell and Hakstian 2001; Hunter and Schmidt 1990; Mount and Barrick 1995; Vinchur et al. 1998). Each of these studies concludes that when the effects of sampling error, range restrictions, and measurement unreliability are removed, the "true" validity of personnel selection methods is much higher than was originally believed.[1] The current consensus among IO psychologists indicates the need to take a step forward from the prevailing marketing perspective on predictors of sales performance that has been greatly influenced by a meta-analysis reported by Churchill et al. (1985), which concluded that (1) role variables (role conflict, accuracy, and expectations) have the highest average correlation with sales performance, (2) none of the predictors by themselves account for a large amount of the variance in performance, and (3) product and customer type are potential moderators, particularly on the motivation-predictor category.

Although the study by Churchill et al. (1985) and its follow-up using the same data (Ford et al. 1987) were carefully done and important studies for their time, recent developments in meta-analytic techniques have been able to overcome a number of limitations in those two studies, especially incorporating corrections for unreliability and range restrictions in the data. Moreover, predictors in the Churchill et al. (1985) study were collapsed into six categories, which, although meaningful, served to obscure important information. For example, the category of aptitude includes cognitive ability, personality, and other nondemographic individual-difference variables. In the Ford et al. (1987) study, the authors examined 28 categories of predictors and found the personal history category to be the most promising predictor ($r = 0.46$). Nevertheless, the Churchill et al. (1985) conclusions have remained the guiding force for subsequent sales force selection research in marketing, as indicated by its being recognized as one of the top ten most influential articles in sales management research (Leigh, Pullins, and Comer 2001).

Based on developments in research on selection in IO psychology, this section is organized to first discuss recent research in assessment predictors, including cognitive ability, personality inventories, and biographical information (biodata), followed by a similar discussion of developments in assessment methods (e.g., interviews, assessment centers, resumes, etc.). This section concludes with a discussion of some of the salient emerging issues and opportunities for selection research, given changes in the sales position's demands.

Predictors

Selection is an exercise in prediction consisting of three stages: job analysis, selection decision, and validation. This basic three-step process, differing only slightly, has been the basis for textbook treatment of the selection processes, starting with Thorndike (1949) and continuing to the present day (Dalrymple, Cron, and DeCarlo 2004; Ingram et al. 2004; Johnston and Marshall 2006; Spiro, Stanton, and Rich 2003). Interestingly, the stage of personnel selection that has developed the least, and seems increasingly problematic, is job analysis. In their review of personnel selection, for instance, Hough and Oswald (2000) do not include a single reference to the traditional task-analysis aspect of job analysis.[2] One exception is the study by Landis, Fogli, and Goldberg (1998), which recognized the changing nature of most complex positions and utilized a future-oriented job analysis. As the first stage of the process, job analysis forms the foundation and context for the subsequent two stages of the selection process. Given the changing nature of sales positions and heterogeneity across different types of sales positions, this may be a worthwhile opportunity for academic research.

There are many different assessment procedures in use today for the purpose of selecting salespeople. For our purposes, we have categorized these procedures into five distinct domains: job skills/knowledge assessments, personality inventories, biodata, cognitive ability tests, and special purpose sales assessments. Each of these approaches is described in Table 1.

Table 1
Categories of Performance Predictors

Job Skills/Knowledge Assessments	Measurement, by pencil-and-paper test or structured interview, of sales-related skills and information, such as personal selling, planning, and time management. In most cases, job skills/knowledge is gained from experience and training in sales positions.
Cognitive Ability Tests	Assessments both of general mental ability and specific cognitive abilities, such as verbal comprehension, numerical ability, and visual speed and accuracy, thought to be related to sales positions.
Personality Inventories	Assessments of enduring dispositions indicating consistent reactions to situations. Personality dimensions most often studied among salespeople include dominance, empathy, need for achievement, need for power, responsibility, sociability, and self-esteem.
Biographical Information (Biodata)	Assessments, usually by pencil-and-paper inventories, of demographic, educational, occupational information, and other background information.
Special Purpose Sales Assessments	Empirically developed measurement by pencil-and-paper tests focused specifically for the prediction of salesperson performance.

Source: Based on Farrell and Hakstian (2001).

From a practical viewpoint, the most important property of any assessment tool is its predictive validity—that is, its ability to predict future job performance, job-related learning either through training or development programs, and other criteria. This predictive objective is based on the belief that assessments of individual differences prior to hiring will account for much of the variability in sales performance. The potential payoff from improved selection processes may be greater in sales than in other occupations due to the greater standard deviation in individual performance in sales compared to other positions. Hunter, Schmidt, and Judiesch (1990) found the greatest standard deviation in individual employee output (e.g., sales per salesperson) as a percent of mean output (called SD_y) is for sales positions. Salesperson performance is more amenable to measurement than is performance in other occupations, and two generally accepted approaches exist to measure salesperson performance: subjective ratings and objective outcomes. Arguments can be made both for and against each type of performance measure. Further, across all occupations, evidence suggests only a moderate relationship between subjective and objective measures of performance (Bommer et al. 1995), with a mean correlation estimated at 0.41. Biodata and special purpose measures are more consistently effective in predicting objective sales performance than they are at predicting subjective sales performance (Farrell and Hakstian 2001). In contrast, cognitive ability is better at predicting subjective performance ratings (Churchill et al. 1985; Farrell and Hakstian 2001) than objective performance.
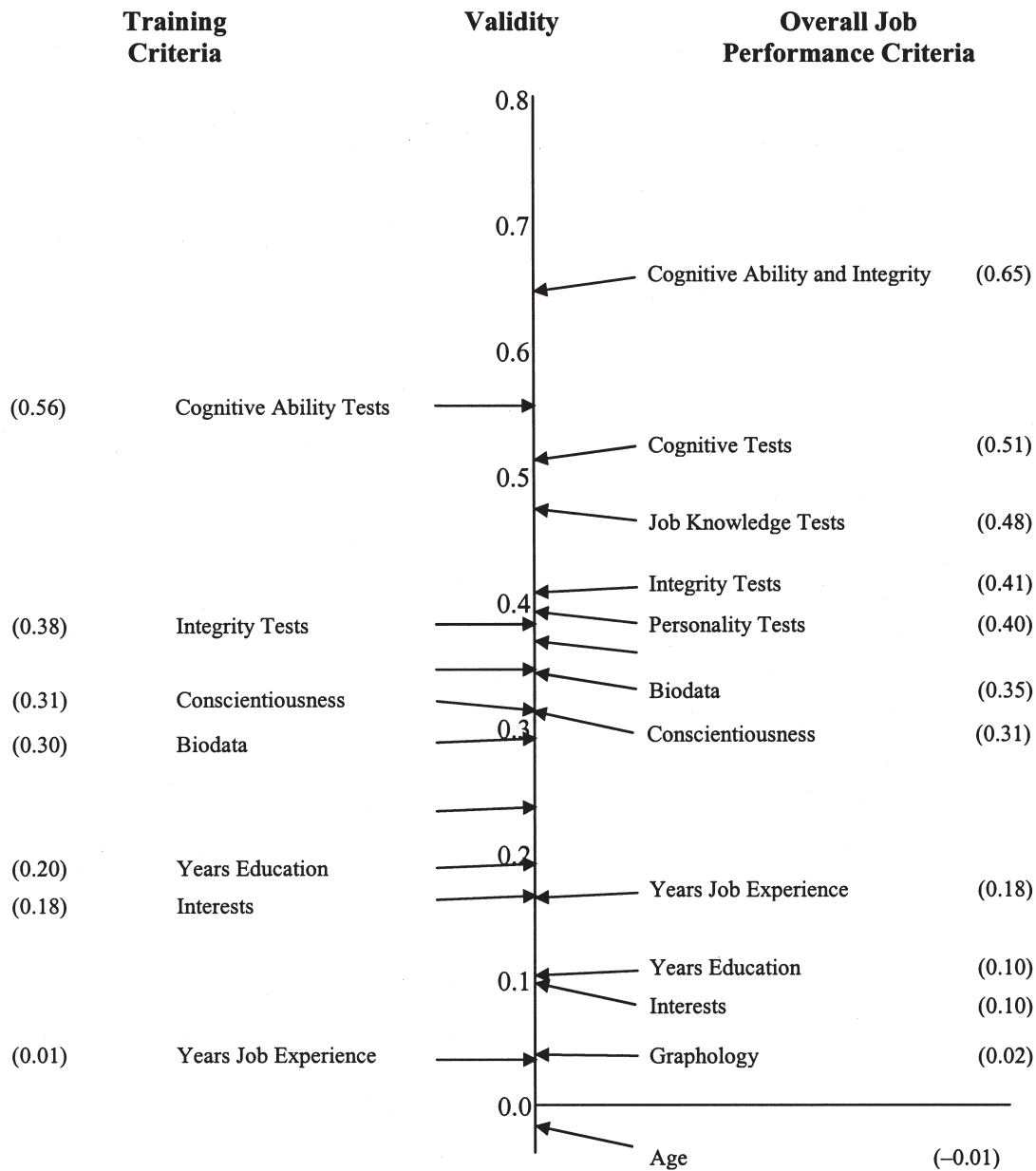
One of the best lists of meta-analyses of selection methods is provided by Schmidt and Hunter's (1998) article, where they review and extend meta-analyses of 17 selection tools.

Based on their review, Figure 2 shows the average validity of various selection tools. The numbers on the right of the diagram represent the validity when job performance ratings are used as the criteria. The numbers on the left of the diagram show the validities obtained when progress during training is the criterion. Although fewer meta-analyses exist for the training criteria, the results on the left side are consistent with those on the right side of the document. Following is a discussion of the three most widely used categories of selection tools: cognitive ability tests, personality inventories, and biodata.

Cognitive Ability Tests

Since research on personnel selection began, cognitive ability has been one of the major methods used to predict job performance. During the 1980s, meta-analytic results provided conclusive evidence concerning the performance-related predictive validity of cognitive ability (see Schmidt and Hunter 1998). IQ, representative of generalized intelligence (or *g*), has been suggested in some studies to predict future performance (e.g., Ree, Earles, and Teachout 1994), but other studies (as reviewed in Weitz 1981) suggest otherwise, casting doubt on its validity. Arguing that IQ is limited in its ability to predict performance in real-world pursuits, researchers have developed measures of alternative forms of intelligence, such as practical intelligence (discussed in Part One). Consideration of this trait, which has been demonstrated to relate to performance, may be useful in the selection of salespeople (Wagner et al. 1999). Another alternative is emotional intelligence, which is the ability to detect, monitor, and effectively manage one's emotions (Goleman 1996). Emotional intelligence has not yet been

Figure 2
Criterion-Related Validity of Selection Methods

Training Criteria	Validity	Overall Job Performance Criteria

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                                                    0.8

                                                    0.7
                                                                Cognitive Ability and Integrity    (0.65)

                                                    0.6
        (0.56)    Cognitive Ability Tests
                                                                Cognitive Tests                    (0.51)
                                                    0.5
                                                                Job Knowledge Tests               (0.48)

                                                                Integrity Tests                   (0.41)
                                                    0.4
        (0.38)    Integrity Tests                              Personality Tests                 (0.40)

                                                                Biodata                           (0.35)
        (0.31)    Conscientiousness
                                                    0.3
        (0.30)    Biodata                                      Conscientiousness                 (0.31)

        (0.20)    Years Education               0.2
        (0.18)    Interests                                    Years Job Experience              (0.18)

                                                                Years Education                   (0.10)
                                                    0.1
                                                                Interests                         (0.10)

        (0.01)    Years Job Experience                         Graphology                        (0.02)

                                                    0.0

                                                                Age                              (–0.01)
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Source: Adapted from Robertson and Smith (2001).

empirically demonstrated to affect sales performance, although it has been shown to improve the quality of social interactions and, thus, may also be useful in the selection process (Lopes et al. 2004). Table 2 provides summary definitions and comments on the two cognitive abilities discussed above.

Research in sales has investigated differences between experts and novices both in the structure and content of knowledge relating to characteristics of customers and strategies for selling to them. An illustrative finding on knowledge content is that experts use underlying characteristics, such as beliefs about the brand, to classify customers, whereas novices use surface-structure characteristics, such as economic status (Sujan, Sujan, and Bettman 1988). It has also been shown that experts have richer, more information-filled categories (Leong, Busch, and Roedder-John 1989; Sujan, Sujan, and Bettman 1988). Together, this research suggests that knowledge and broader tests of intelligence are useful ways to assess salespeople's cognitive ability, and that cognitive ability predicts future performance.

Table 2
Promising Individual Differences Scales

Scale	Comments
Cognitive Abilities	
Practical Intelligence	Intelligence is construed to be comprised of three components: analytical intelligence, creative intelligence, and "street smarts" or practical intelligence (Sternberg and Dobson 1987). Practical intelligence refers to an ability to achieve a good fit between one's self and one's environment. People with practical intelligence achieve this fit in a combination of three ways: by changing themselves, by choosing environments that they are more suited to, and by changing aspects of their environment (Sujan 1999).
Emotional Intelligence	Emotional intelligence is a form of intelligence that manifests itself by being able to identify exactly what emotion one is feeling and what the emotional response of others will be to one's behavior (Lopes, Salovey, and Straus 2003).
Personality Traits	
Integrity	Meta-analysis has found that integrity and conscientiousness tests usefully supplement general cognitive ability tests when predicting overall job performance (Schmidt and Hunter 1998). Themes that account for most of the variance in overt and personality-based integrity tests include punitive attitudes and reliability.
Optimism	Optimism refers to a bias, across time and situations, to hold positive expectations. Optimism has been found to predict active cooperative behavior (Brissette, Scheier, and Carver 2002), to prompt a futuristic, more long-term orientation (Scheier and Carver 1985), and to enable persistence in the face of failure (Seligman and Schulman 1986).
Social Competence	Social competence is construed to be a compound variable consisting of social insight, social maladjustment, social appropriateness, social openness, social influence, warmth, and extroversion (Schneider, Hough, and Dunnette 1996). Self-reports have been shown to be reliable (Gough 1968).
Cooperativeness	Research has found that cooperation alone is insufficient for managing conflicts (Sternberg and Dobson 1987). An active, as opposed to passive, style of coping is needed. This suggests that in order to do a good job of relationship management, salespeople need to plan effectively and be willing to take action in the face of uncertainty.

There is reason to believe that combinations of other tests with those testing cognitive ability are strong predictors of sales performance. For example, notice in Figure 2 that the combination of cognitive ability and integrity results in an average validity rating of 0.65 or a 0.14 increase over the validity achieved by cognitive ability tests alone. Combined cognitive tests could vastly increase validity over IQ alone, and a combination of cognitive ability assessments coupled with personality could further increase the predictive validity.

Personality Inventories

Until the meta-analysis studies of the 1990s established performance-related validity (e.g., Barrick and Mount 1991; Frei and McDaniel 1998; Ones, Visweveran, and Schmidt 1993), personality was not a popular selection factor. Today, researchers and practitioners have, consequently, moved to a position where there is confidence that personality can play a role in selection. Notice in Figure 2 that integrity has a validity of 0.41 on average and that conscientiousness has a validity of 0.31—these two elements of personality are important predictors of performance. Given the evolving legal environment and ethical issues involved in customer relationships, it is likely that integrity will play an even greater role in directing today's

sales behaviors. Optimism, as measured through attributional style, has also been shown to significantly increase sales performance. Seligman and Schulman (1986) divided insurance agents into optimists and pessimists and found that optimistic agents sold 37 percent more in their first two years of service. Optimism, measured as generalized positive expectations, too has been suggested to increase performance—because of superior coping (Strutton and Lumpkin 1993) and superior intelligence (Sujan 1999). Social competence is another important personality trait, given the broadening of sales positions beyond one-on-one interactions (Schneider, Hough, and Dunnette 1996). Moreover, with the move of selling product-centric to problem-centric, the salesperson will be required to display greater cooperativeness in developing cross-functional solutions to customer problems (Sternberg and Dobson 1987). Table 2 presents summary definitions and comments on each of the four traits mentioned above.

One of the lasting practitioner concerns with personality assessment is the effects of impression management or intentional distortion of responses to personality instruments. Evidence supports the notion that applicants do, in fact, distort their responses when personality assessment is used as a selection process (Hough 1998). Despite this evidence, the most important question is whether intentional distortion,

self-deception, or impression management affect the ability of the personality instruments to predict future performance. Whereas some studies have found small effects, most have found no detrimental influence on performance-related validity (e.g., Barrick and Mount 1996; Christiansen et al. 1994; Hough 1998).

Biodata

Grounded in the notion that past behavior is the best predictor of future behavior, biodata are used to predict future performance success. In its original form, biodata consisted of information that is found on most resumes or application forms, such as years of industry experience, level of education, and grade point average. These data are historical and verifiable pieces of information about an individual. More recently, "soft" items, resembling questions found in personality tests, have been used in biodata efforts (Stokes and Searcy 1999). The individual biodata items are empirically weighted, usually based on regression results with performance as the criterion, to derive an index indicating the probability a candidate will be successful in the position. Perhaps the most widely used biodata instrument is the Initial Career Profile (ICP) developed by LIMRA International in the insurance industry. The ICP is administered to approximately a quarter million candidates annually in the United States and Canada.[3] The typical level of validity observed for the ICP rating is in the range of 0.20 to 0.25.

Recent interest in biodata predictors of performance in IO psychology has been attributed to Salgado's (1999) conclusions that biodata have substantial criterion and construct validity. Encouraging results have been found, indicating that biodata provide significant incremental predictive validity to that obtained for personality measures. For instance, in a study of insurance sales positions, McManus and Kelly (1999) found that when biodata scores were combined with personality measures, R^2 increased from 0.16 to 0.23 when predicting contextual performance (i.e., behaviors that provide assistance and support to the environment in which the task behaviors are conducted). In contrast, personality scales did not provide significant incremental prediction of sales task ratings to that achieved by biodata.

Assessment Methods

In addition to pencil-and-paper and computer-assisted testing, three of the most popular assessment methods are (1) interviews; (2) assessment centers; and (3) resumes, curriculum vitae (CVs), and application forms. Although these assessment methods are quite popular in use, they have not received nearly the research attention of the earlier testing and questionnaire assessment methods. Table 3 lists selected recent research findings associated with each assessment method to give the reader a flavor of the types of research questions currently being addressed. Note that several methods, such as graphology and physiological measurement, have not been included in this listing either because the validity of the method has not been demonstrated (Schmidt and Hunter 1998) or because the technique (physiological measurements, for instance) is not generally in use in the sales arena.

One focus of the research on these assessment methods is the issue of construct validity methods (Greenburg and Greenburg 1990; Robertson and Smith 2001). Unlike cognitive ability, motivation, and personality tests, interviews and assessment centers are not designed to focus on specific constructs, so the question that arises is what constructs are actually being measured by these methods. In a review of correlations from a number of studies, Robertson and Smith (2001) concluded that interviews are primarily measuring social skills, including extroversion, agreeableness, openness to experience, and job experience and knowledge. General mental ability has only a moderate correlation with interview performance, and the correlation of conscientiousness is quite small.

As shown in Table 3, the construct validity of assessment centers has been examined and found to be highly correlated with general mental ability (Goldstein et al. 1998). Given the significantly higher expense of assessment centers, the question arises as to whether centers provide incremental utility beyond that which can be obtained from less-expensive methods. And, a broader question to be addressed is which methods for assessment need to be used given the recognition that each method has its own bias.

EMERGING ISSUES AND RESEARCH OPPORTUNITIES

The increasing heterogeneity and demands of the sales position render this an exciting time for sales force research. As a starting point, we need to better understand the nature and extent of the changes in sales positions. Perhaps we need a revised taxonomy of selling positions. Additional research is needed to understand more fully the drivers of these changes. In the training area, we have focused on the importance of growth-related KSAs and meta-KSAs versus the traditional task-related KSAs. Yet many questions remain unanswered. For example, recognizing that there is still a need for some training in the area of task-related KSAs, what is the proper balance between the three types of training? Another intriguing question is which of the growth-related and meta-KSAs are the most important for the successful development of successful salespeople, and to what extent is this a function of the nature of the sales position? At a more basic level, we should probably ask to what extent can training and develop-

Table 3
Assessment Methods: Selected Research Findings

Technique	Selected Findings
Interviews	• The most consistent finding is that interviews are improved by using a structured approach. Validity coefficients for highly structured interviews are typically 0.56, whereas interviews with very little predetermined structure are 0.20 (Salgado 1999). • Regarding construct validity, interviews are primarily measuring social skills, experience, and job attitudes. General mental ability has only a moderate correlation with interview performance, and the contribution of conscientiousness is quite small (Robertson and Smith 2001). • Situational interviews (i.e., candidate is asked to respond to a hypothetical situation) are found to have higher validity (0.50) than behavior event (i.e., describe an event in your past that . . .) descriptions (0.39) (Robertson and Smith 2001).
Assessment Centers	• High criterion validity has been established, and assessment centers have been shown to have a low adverse effect (Hough and Oswald 2000). • Meta-analysis by Scholz and Schuler (1993) found that assessment center ratings correlated with general intelligence, achievement motivation, social competence, self-confidence, and dominance. This suggests that the primary construct measured within assessment centers relates to general intelligence. • Assessment center ratings have been found to have significant validity over personality variables when predicting managerial performance (Goffin, Rothstein, and Johnston 1996).

Resumes, CVs, and Application Forms	• Although resumes, CVs, and application forms have been largely neglected by researchers, an excellent overview, by Bright and Hutton (2000), of recent research includes the following findings:
	  – Competency statements, such as "I am highly motivated with a proven track record in achieving goals and targets," are self-evaluation statements that are difficult to validate. Research finds that such statements have a significant positive effect on CV evaluations, even when the competency is unrelated to the position for which the candidate is applying (Earl, Bright, and Adams 1998).
	  – Research by Watkins and Johnston (2000) found that the inclusion of a photograph, either of an attractive or average looking person, made little difference to evaluations of good CVs. However, the inclusion of an attractive photograph did help the evaluation of an average CV.

ment alter the individual's meta-KSAs, and is this moderated by individual factors?

In the area of selection, we have suggested a variety of dispositional factors that may explain variation in successful sales performance. Certainly, the cognitive skills such as emotional intelligence, practical intelligence, and coping skills are worthy of further study, as are personality factors such as integrity, optimism, social competence, and biodata. In which types of sales positions are these characteristics critical determinants of success? Can some of these individual dispositions be "learned" or strengthened through training? Of course, before we can answer many of these questions, measurement scales must be developed and validated for application to sales positions. Moreover, more research is needed to assess the validity of various assessment methods.

Finally, there are two contextual factors that should receive particular attention, as they have become very common in regard to sales organizations—team selling and cross-cultural selling. Although the challenges surrounding team selling are addressed specifically by another paper in this issue, we feel that we must at least note that selection systems need to con-

sider differences between traditional selection methods and team selection methods. In a team situation, it is not the individual's characteristics alone that influence performance but the collection of individual characteristics within the group. Further, research suggests that these team circumstances have an important effect on the mix of personal characteristics associated with team performance (Barry and Stewart 1997). Significant advances in selling team selection await useful taxonomies of "team difference" characteristics and situational variables relevant to team performance.

With expanding global markets, culturally diverse sales teams, and expatriate sales assignments, international and multinational organizations have a heightened need for better selection processes and measurement tools. Studies indicate a high failure rate among expatriates of between 16 and 40 percent, with almost a quarter leaving the parent company within one year of repatriation (Beamish, Morrison, and Rosenzweig 1997). Validities of domestic selection instruments must be established in international sites, or, in some cases, different behavioral indicators must be developed and validated.

NOTES

1. Range restrictions refer to the situation in which subjects earning low scores on the assessment measure might be excluded from the study because they were not hired, however, such subjects are part of the intended population in which the selection procedures are applied. An average estimate of range restriction is provided by Schmidt and Hunter (1977).

2. Job analysis has evolved to include two perspectives: a task-oriented job analysis, which specifies the behaviors involved in a job and tasks to be accomplished, and a person-oriented task analysis. Much more academic work is occurring in the second aspect of job analysis, person-oriented analysis. Rather than trying to predict performance, the emphasis of person-oriented job analysis is to identify the KSAs that are associated with a particular position as identified either by subject matter experts or through personality instruments such as the "big five" personality factors or other instruments (see, e.g., Raymark, Schmit, and Guion 1997; Westoby and Smith 2000).

3. Dimensions in the ICP include insurance-related experience (e.g., Does the individual personally own the product he or she will be selling?); number of contacts in the industry (e.g., Does the candidate have any relatives or close friends who work in the insurance industry?); recruiting method (e.g., How did the individual learn about the job opening?); establishment (e.g., How many jobs has the individual held over the past five years?); and commitment to the present situation (e.g., How soon would the individual be available to accept a position?).

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