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Sales Contest Effectiveness: An Examination of Sales Contest Design Preferences of Field Sales Forces

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Sales contests, a widely used form of sales force special incentives, receive considerable attention in the trade and academic press. While understanding salespersons' preferences for various contest designs is a critical first step for understanding how sales contests motivate salespeople to pursue contest goals, a knowledge gap exists in understanding design preferences. With expectancy theory serving as a theoretical basis, the authors develop hypotheses about preferences for sales contest components. Following tests of hypotheses using survey and conjoint data provided by field sales forces from three companies, exploratory analyses of how individual, supervisory, and sales setting characteristics may affect preferences suggest potential boundary conditions for initial findings. The results lead to an improved awareness of the determinants of contest design preferences as well as insights and implications for sales managers seeking to design effective contests.

Keywords: *Sales contests; motivation; sales force management; incentives*

We're adding a little something to this month's sales contest. You all know first prize is a Cadillac Eldorado. Anybody want to see second prize? Second prize is a set of steak knives. Third prize is you're fired. You get the picture?

—Alec Baldwin in *Glengarry Glen Ross*
Glengarry Glen Ross. 1992.
New Line Cinema, USA.

Sales managers spend considerable time, energy, and resources attempting to influence salesperson effort through sales system components including compensation, job design, organizational climate, and special incentives. Of these, special incentives have an important role, whether as a formal means to celebrate achievement (via recognition programs) or to reward particular accomplishments (via sales contests). Special incentives, including recognition programs, sales contests, and other special performance incentives (Colletti et al. 1988) are widely used across industries and companies: expenditures in the 1980s reached more than \$4 billion annually (Chrapek 1989), an amount more than doubling by the late 1990s (Nolan and Alonzo 1997).

Contests, used to motivate salespeople to attain specific goals, receive considerable attention in the trade press (e.g., *Personnel Journal*, *Sales & Marketing Management*,

Selling Power) and by researchers (see Murphy and Dacin 1998 for a recent review). Across all reports, there is a common observation—well-designed contests motivate salespeople. Thus, selecting an appropriate contest design is a crucial issue for sales managers and for contest success.

Given widespread use of sales contests and a growing literature surrounding their use, Wildt, Parker, and Harris (1980-1981) took a “what we know and need to know” look at the literature, summarizing the knowledge base as primarily descriptive and lacking answers to many important questions concerning contest design and implementation. Their call for research led to a host of studies highlighting sales contest design possibilities. Still, nearly 20 years later, Murphy and Dacin (1998) revisited the collective body of research and found only a limited understanding of many important contest design issues, including salespeople’s contest design preferences, a crucial factor in motivating the pursuit of contest goals.

In this article, we take up the call and empirically address some fundamental questions concerning sales contest design in a field sales force setting. For our theoretical foundation, we use expectancy theory to develop rationale and hypotheses for why, in general, particular designs may be preferred by salespeople. We then use data obtained from the field sales forces of three companies to test these hypotheses. Following this, we extend our investigation to explore how different contest design preferences relate to individual-level characteristics, supervisor-to-salespeople relationships, and sales setting characteristics. In essence, we investigate potential boundary conditions for our initial findings.

Our approach contributes to current knowledge in several ways. First, we examine why various sales contest designs may be more or less preferred, and we ground this discussion in theoretical and practical perspectives. Second, we identify and test variables that may affect design preferences. Finally, we provide insights for sales managers seeking to design effective contests.

Sales Contests: A Brief Overview

Most sales managers regularly develop special incentives to motivate salespeople to pursue performance goals outside the range of performance generated by pay and/or compensation packages (Beltramini and Evans 1988). Sales contests, a class of special incentives designed to gain increased effort on short-term objectives (Churchill et al. 2000), have long been popular (Colletti et al. 1988; Haring and Morris 1968; Haring and Myers 1953; Nolan and Alonzo 1997). Positive impacts of contests include increasing motivation and morale of salespeople, leading to greater effort, and resultant performance improvements on targeted goals, revenue generation, and contributions to

sales and profits (Urbanski 1986; Wildt et al. 1980-1981; Wotruba and Schoel 1983).

A sales contest represents a collection of several components widely discussed in the literature including goal, competitive format, award type, contest duration, and award value. Murphy and Dacin (1998) discussed these contest components and suggested that a salesperson’s perceptions about these components affect his or her attitude, behavioral intent, and ensuing behaviors toward the contest. Since the purpose of a sales contest is to increase motivation (Beltramini and Evans 1988), understanding how various designs affect preferences and ensuing motivation is an important research aim.

The sales contest literature provides two detailed calls for research (Murphy and Dacin 1998; Wildt et al. 1980-1981), with the most recent call identifying several limitations including a lack of theoretical rationale (see Hart 1984 for a notable exception¹) with an over reliance on (1) case studies, typically describing a specific contest in detail but with limited generalizability; (2) input-output analyses, necessitating the assumption that if a sales contest is associated with behavioral change and/or financial gains, then salespeople must have positive attitudes toward the design; (3) sales managers rather than salespeople for reporting contest design preferences; and (4) frequency of use of particular contest designs to infer preference. The authors conclude that considerable uncertainty remains about salespeople’s preferences for sales contest designs.

In this article, we address several of these issues, including the lack of theoretical rationale. We do this by incorporating one of the more prevalent theoretical bases in the study of sales force motivation, expectancy theory (Vroom 1964), as a basis for approaching our expectations for sales contest design preferences.

Expectancy Theory

Motivating salespeople is a major task of sales managers, leading to an ongoing need to understand how salespeople are likely to respond to organizational directives such as sales contests. Expectancy theory, introduced to sales management research in the 1970s (Oliver 1974), led to a shift in research from descriptive reports of sales force motivation schemes to using theory as a basis for identifying variables and processes involved in influencing behavior. Briefly, expectancy theory posits that an individual’s motivation is determined by his or her expectancy, instrumentality, and valence estimates and that higher motivation results in increased effort. *Expectancy* represents an individual’s estimate of the extent to which increased effort will lead to greater performance. *Instrumentality* represents an individual’s estimate of the extent to which greater performance will lead to additional rewards.

Valence is an individual's estimate of the attractiveness of these additional rewards. The theory posits that motivation increases as an individual's expectancy and instrumentality estimates, along with valence for rewards, are heightened.

Expectancy theory research suggests that many variables affect expectancy, instrumentality, and valence estimates. For example, variables affecting expectancy estimates include the effects of current and past performance (DeCarlo, Teas, and McElroy 1997; Johnston and Kim 1994) and task conflict (Tyagi 1982). Variables affecting instrumentality estimates include feedback, task variety, and task significance (Teas 1982); identification with the organization; and perceived concern of management (Tyagi 1982). In addition, many environmental, organizational, and/or individual-level factors including supervisor consideration and performance feedback, tenure, and self-esteem affect both expectancy and instrumentality estimates (Evans, Margheim, and Schacter 1982; Teas 1981). Finally, variables including pay, promotion, and perceived sense of accomplishment affect valence estimates (Ford, Churchill, and Walker 1985).

Valence receives extensive attention in the literature due to management's need to identify and provide rewards that influence effort (Chonko, Tanner, and Weeks 1992). Valence discussions usually involve *intrinsic/extrinsic rewards* and/or *needs hierarchies*. Theory suggests salespeople will typically not have high valences for intrinsic rewards (motivated by the value of the work itself) until they are satisfied with extrinsic rewards (motivated by incentives offered by management) (Alderfer 1969; Herzberg, Mauser, and Snyderman 1959; Maslow 1943). In general, increases in extrinsic rewards (such as pay) appear to be of particular importance (Chonko et al. 1992; Ford et al. 1985; Oliver 1974), but there is also some evidence suggesting intrinsic rewards may be just as important (Tyagi 1985). Valences for intrinsic and extrinsic rewards may also vary by individual characteristics (Churchill, Ford, and Walker 1979), although some studies find the effects of these characteristics to be weak or not predictive of valence (Chonko et al. 1992; Ingram and Bellenger 1983).

With respect to needs hierarchies (Maslow 1970), theory and research suggest satisfaction with lower order needs (associated with more pay, higher monetary rewards, job security, etc.) reduces valence for rewards targeted at those needs and increases valence for rewards targeted at higher order needs (associated with recognition, personal growth, etc.) (Ford et al. 1985), although some rewards associated with lower order needs (compensation) never seem to lose attractiveness, a finding consistent across numerous variables (Chonko et al. 1992) including gender (Dubinsky, Jolson, Michaels, Kotable, and Lim 1993).

Overall, expectancy theory has had an enormous impact on the study of sales force motivation and effort, yet it rarely appears as a conceptual basis for understanding sales contest design issues. The next section addresses this theoretical gap using expectancy theory to develop hypotheses concerning preferences for components of sales contest design in a field sales force setting.

Preferences for Sales Contest Design Components

In this section, we focus on general tendency hypotheses rather than individual difference hypotheses. Later, we use individual-level analyses to identify boundary conditions under which general tendencies may not hold. We do this for two reasons. First, sales managers usually must design sales contests that appeal to a broad array of salespeople; positing hypotheses as general tendencies capture broad preference expectations. Second, as Berlyne (1968) stated,

It is perfectly obvious that human beings are different from one another in some respects but alike in other respects. The question is whether we should first look for statements that apply to all of them or whether we should first try to describe and explain their differences. (P. 640)

Searching for general tendencies followed by the inclusion of individual differences to refine generalizations (Weiner 1986) recognizes that numerous individual, supervisory, and sales setting variables could be related to design preference and ensuing motivation (Evans et al. 1982; Teas 1981), although these differences may not necessarily improve predictive ability (Chonko et al. 1992; Ingram and Bellenger 1983).

In developing hypotheses, we focus on sales contest components discussed by Murphy and Dacin (1998). These components are contest goal, competitive format, award type, contest duration, and award value. Briefly, *contest goal* is the performance expectation required to win. As we later discuss, these expectations can be outcome, process, or combined outcome/process based. *Competitive format* refers to two factors. First, contests can have either individual or team formats. Second, the format can allow everyone an opportunity to win or restrict the number of winners. *Award type* refers to whether contests offer cash, merchandise, or travel awards. *Duration* relates to the length of time during which the sales contest is held. *Award value* refers to the "price tag" of an award. Although not specified in Murphy and Dacin (1998), *contest theme* does represent an additional component. Novel exciting themes are generally associated with greater performance on targeted goals (Wotruba and Schoel 1983), making them a relevant issue when preparing a contest

launch. However, we exclude themes from the present study due to their situation-specific nature. Following, we use expectancy theory to develop our general hypotheses for each contest component.

Contest goal can be one of three types: process based, outcome based, and combined outcome and process based. Process-based goals require ongoing supervisory involvement either through observation or other mechanisms (e.g., keeping tabs through weekly field reports) to assess goal attainment. These goals emphasize improvements in product knowledge, selling skills, and/or demonstrating appropriate levels of effort on targeted activities (e.g., product demonstrations, dealer shows, working with distributor representatives, etc.). In retail settings where supervisory attention to salespeople is ongoing, process-based goals have proven effective in gaining increases in targeted behaviors (Luthans, Paul, and Baker 1981; Luthans, Paul, and Taylor 1985).

For field salespeople, process-based goals can be problematic—field salespeople typically have high autonomy. The average span of control for field sales managers of 8.2 salespeople (Heide 1994) results in very few management days spent in the field with any given salesperson. Consequently, from an expectancy theory perspective, uncertainty as to whether management fully and accurately tracks process (effort) is likely to follow, reducing confidence in one's effort-to-performance assessment. Consistent with Anderson and Oliver's (1987) discourse on behavior-based and outcome-based control systems and related literature raising concerns about behavior-based controls (Cravens, Ingram, LaForge, and Young 1993; Oliver and Anderson 1995), Oliver and Weitz (1991) asserted that this uncertainty "reduces both the expectancy associated with sales effort and the instrumentality of sales generated" (p. 4). Lower expectancy and instrumentality estimates associated with this uncertainty will, in turn, lead to lower motivation to pursue contest goals.

Outcome-based goals, often revenue or volume based but also including improvements in indices such as customer satisfaction scores, are frequently used goal formats across many field sales force settings (Colletti et al. 1988; Wildt et al. 1980-1981; Wotruba and Schoel 1983). These goals focus sales force energies on gaining targeted results while not requiring much supervisory involvement during a contest. To a salesperson, reduced supervisory attention to process (effort) allows greater behavioral leeway in choosing the effort needed to gain targeted goals, potentially enhancing expectancy estimates (Oliver and Anderson 1995). Also, outcome-based goals are "objective" in that there is little uncertainty as to the performance required or ensuing accuracy of measurement. As a result, performance-to-rewards estimates are also likely to be heightened. In effect, well-chosen outcome-based goals should lead to higher expectancy and instrumentality

estimates and thus higher motivation to participate in a contest.

Combined outcome/process-based goals are also in frequent use (Colletti et al. 1988). The objective of these goals is to maintain a sales force's focus on achieving targeted results while simultaneously ensuring that good outcome-based performance only leads to winning if targeted process-based requirements are also met. While possessing the strengths and weaknesses of each of the above designs, in a field sales force setting, the process-based component again can be problematic, thus lowering expectancies and instrumentalities. Thus, from a field sales force perspective, this design should also be inferior to the outcome-based goal format. In sum, based on expectancy theory, we expect the following:

Hypothesis 1: In general, field salespeople will have the greater preference for outcome-based goals over either process-based or combined outcome- and process-based goals.

Competitive format: Number of potential winners. The number of potential winners can span from one salesperson to all salespeople in a field sales force. The most frequently used contest design allows everyone to win by setting individual performance goals, although this is followed closely by designs limiting the number of winners (Colletti et al. 1988). With limited winners, common practice is to have from 20 percent to 40 percent of a sales force win (Churchill et al. 2000; Colletti et al. 1988), although some contests have fewer and some have more winners.

Based on expectancy theory, the primary effect of number of potential winners on contest design preferences will be through its counterbalancing effects on instrumentality and valence estimates. In terms of instrumentality, certainty about the performance-to-reward relationship will be higher when high numbers are given the opportunity to win, resulting in higher instrumentalities (Vroom 1964). On the other hand, for valence, when lower numbers are given the opportunity to win, salespeople will feel that the higher order rewards (recognition) for winning will be greater, resulting in higher valence estimates. Consequently, it appears that higher preference is likely to occur for designs that create a balance between these estimates. In effect, the optimum design may need to reduce numbers of winners to heighten valence estimates while being sufficient to avoid overly dampening instrumentality estimates.

In determining a "balanced" number of winners, the extent that the higher valence estimates provided by limited numbers of winners overcomes dampened instrumentality estimates due to limited numbers of winners is uncertain (Ford et al. 1985). However, some reports suggest that

contests should not have more than half of the participants given the opportunity to win (Kalra and Shi 2001; Moncrief, Hart, and Robertson 1988). Consequently, based on our expectancy theory-related call for a balanced number of winners, it appears that a midrange number of winners is preferred. At midrange numbers, any dampening effects on instrumentalities may be limited (still sufficient numbers to keep salespeople confident), even being offset by increased valence for higher order rewards present due to limited numbers, leading to greater preference for these designs. Therefore,

Hypothesis 2: In general, field salespeople will have a greater preference for sales contests designed with midrange numbers of winners over those with all-can-win or overly constrained numbers of potential winners.

Award type. A variety of award types are available for sales contest design including cash, merchandise, and travel. Cash or cash-equivalent awards, used in more than 70 percent of sales contests, are the most frequently used award (Colletti et al. 1988; Urbanski 1986), perhaps due to the belief that cash always motivates (Ford et al. 1985). In expectancy theory terms, preference for award type seems most likely to be understood through the effects of valence estimates, particularly as a satisfier of lower order needs (through award value) and higher order needs (achieved through factors including praise and recognition). Of the award types, cash awards may be best suited for addressing lower order needs—the “real” value of the award is apparent, and there is control over how to use the award. At the same time, cash likely has little effect on higher order need satisfaction. This suggests that other awards may be better suited for providing *both* lower and higher order needs satisfaction.

Moncrief, Hart, and Robertson (1988), in discussing merchandise awards, suggest that giving winners something tangible to show for their winning provides better higher order needs satisfaction (as opposed to cash, which is often used simply to pay bills or put into savings). In addition, Haring and Myers (1953) suggested that for similar costs to the company, the face value of a merchandise reward can be greater than a cash award since management accesses merchandise at discounted prices while offering them to salespeople at face value. From an expectancy theory perspective, this suggests that merchandise, in addition to higher order need satisfaction, can also provide lower order needs satisfaction, providing a strong basis for motivation (Moncrief et al. 1988).

As with merchandise, travel awards can also address both lower order and higher order needs. However, from an expectancy theory perspective, travel may have an advantage over merchandise. Whereas travel can satisfy lower order needs through high face value, it can also pro-

vide substantially more prestige and recognition for winning compared to merchandise, especially when management accompanies winners. Consistent with this rationale, there is descriptive evidence suggesting that salespeople may value travel awards more than other awards (Hastings, Kiely, and Watkins 1988) and that travel awards may lead to the greatest gains in sales goals (Caballero 1988). Consequently, based on expectancy theory logic and these findings, travel awards better satisfy both lower and higher order needs and, in so doing, lead to higher valence estimates (Ford et al. 1985). As result, these awards will be more preferred by members of a field sales force than either merchandise or cash:

Hypothesis 3: In general, for awards of comparable monetary value, field salespeople will have the highest preference for travel awards, followed by merchandise, then cash.

Contest duration. Contests can run the gamut from a few days or weeks to a year or more. Although 3 months' duration appears most common (Colletti et al. 1988), duration has not been a specific focus of sales contest research. Following the rationale of Murphy and Dacin (1998), duration might be appropriately thought of as a hygiene factor, or dissatisfier (Herzberg et al. 1959)—while duration cannot motivate behavior, inappropriate duration can reduce motivation. In terms of expectancy theory, preference for duration is most likely to result from its effects on expectancy estimates. For example, if a salesperson perceives too little time to plan and implement strategies for goal attainment, his or her perception of the effort-to-performance relationship will be dampened. Based on this rationale, it is not surprising that anecdotal evidence suggests increased contest performance when contests last at least one sales cycle compared with contests of shorter duration (Wotruba and Schoel 1983).

Still, this does not mean duration can be extended indefinitely; from an expectancy theory perspective, durations extending to multiple sales cycles can have dampening effects on contest-related motivation. For instance, salespeople may feel that they will be unable to sustain the perceived effort required to pursue contest goals for extended periods. If so, dampened perceptions of the effort-to-performance relationship will result in lower expectancy estimates and reduced motivation to pursue goals (Oliver 1974). In addition to effects on expectancy estimates, long durations may also lead salespeople to feel that managers are using a contest to allay weaknesses in compensation and/or territory goals rather than as incentives to pursue short-term goals (Wotruba and Schoel 1983).

Thus, while assigning a specific length for an ideal duration is difficult, duration relative to a sales cycle provides

a frame of reference meaningful to any field sales setting. In particular, based on expectancy theory, we expect sales contests with durations of one sales cycle to be the most preferred design, with shorter durations or longer durations relative to this cycle to be less preferred. Thus, we expect the following:

Hypothesis 4: In general, field salespeople will have greater preference for sales contests with durations of approximately one sales cycle over those with durations shorter than or considerably longer than a sales cycle.

Award value. Determining appropriate award value is crucial. Expectancy theory clearly suggests that only valued rewards gain high valence estimates (Vroom 1964). From an expectancy theory perspective, award value helps satisfy lower order needs and, once satiated, a salesperson's attention should be directed to fulfilling higher order needs (Maslow 1970). However, sales research finds that increases in pay and other pay proxies are always associated with higher valence estimates (Chonko et al. 1992; Dubinsky et al. 1993; Ford et al. 1985), a reminder that greater award values may always be associated with higher valences for awards (whether cash, merchandise, or travel). Because of its effects on valence estimates and evidence that lower order needs associated with value are never fully satiated, our next hypothesis seems obvious—higher award values are more preferred. That is,

Hypothesis 5: In general, field salespeople will prefer sales contests designed with greater award value.

While the above hypothesis may be obvious, in practice, a crucial management consideration becomes that of determining sufficient but not excessive award values. For instance, if the award value is too high, it can engender such high valence estimates that salespeople could become overly distracted from other duties or become tempted to use inappropriate behaviors while pursuing contest goals (Hampton 1970; Murphy 2003). Currently, management guidance on this matter seems to be limited to suggestions that appropriate award values be approximately 2 percent to 5 percent of annual income (LaForge, Bolger, and Englander 1992) or no less than 1 week's pay (Colletti et al. 1988).

In sum, we expect field sales force preferences for outcome-based goals (Hypothesis 1), all-can-win designs (Hypothesis 2), travel awards (Hypothesis 3), durations of one sales cycle (Hypothesis 4), and high award values (Hypothesis 5). Next, we discuss our methodology. Following the analysis of hypotheses, we adopt Weiner's (1986) suggestion for refining generalizations by conducting a variety of exploratory analyses to identify deviations from the general findings. Specifically, we reexamine the general hypotheses in the context of individual-level

characteristics, supervisor-to-salespeople relationships, and sales setting characteristics as discussed in a broad spectrum existing of motivation research.

METHOD

Salespeople from three U.S.-based companies with field sales forces spanning consumer, industrial, and health care sectors comprised the sample (3 companies; 46 business units). Management provided names and home addresses of salespeople, along with letters encouraging participation promising anonymity and stressing the study's value. Respondents had the opportunity to obtain a summary of the findings; more than one third requested these findings. A total of 1,560 sets of study materials were mailed, followed 3 weeks later by reminder letters. Seven hundred ninety-six usable responses were returned (51% response rate).

Study Design, Materials, and Procedures

We collected several specific types of information including preferences for various contest design components, individual-level characteristics, measures of supervisor-to-salespeople relationships, and sales setting. To do this, we used a full-profile conjoint task and a survey.

Conjoint task. We chose a conjoint task (and subsequent analysis) to arrive at preferences for individual components because of its ability to measure trade-offs among multiattribute objects. We initially considered obtaining sales contest component-related measures by exposing respondents to each component in isolation. However, to gain realism, we felt that ratings of contest design profiles should allow for trade-offs among components. Consequently, a full-profile conjoint task was used, allowing respondents to consider preferences across a range of possible sales contest components simultaneously.

To reduce the chance of contrived component levels, we initially selected the levels for each component based on common practices in sales contest use (Murphy and Dacin 1998; Wildt et al. 1980-1981). Then, managers at each firm examined our initial profiles and suggested revisions to component levels so as to ensure realistic levels across all profiles. We then revised the component levels. For example, with respect to *number of potential winners*, managers agreed with setting 20 percent of the sales force as the lowest level, considering anything less to be too constraining. Also, after learning that participating firms never used "pure" process-based goals in a contest, we used only outcome-based and combined outcome- and process-based goals. One caveat of this change to contest goals is that it results in an unbalanced design. In

TABLE 1
Factors in Conjoint Task

<i>Variable</i>	<i>Level</i>	<i>Descriptor</i>
Goals	0, 1	(0) Sales performance on the highest sales volume product in the line (percentage increase over previous matching time period). (1) 80 percent sales based, 20 percent manager evaluation based as follows: (a) Sales performance on the highest sales volume product in the line (percentage increase over previous matching time period). (b) Management evaluation of performance factors of selling effort, presentation effectiveness, overall skills. The evaluation is used as a multiplier for the sales performance percentage. Multipliers are the following: (1) considerably below expectations, 0.8; (2) somewhat below expectations, 0.9; (3) meets expectations, 1.0; (4) more than meets expectations, 1.1; (5) greatly exceeds expectations, 1.2. Example: Salesperson who has a 13 percent increase who "greatly exceeds expectations" will receive $13 \times 1.2 = 15.6\%$ performance increase.
Competitive format	0, 1, 2	(0) Top 20 percent of the sales force at the end of the contest period. (1) Top 40 percent of the sales force at the end of the contest period. (2) All salespeople exceeding a 15 percent increase over previous matching time period.
Award types	0, 1, 2	(0) Winners receive a merchandise award for JC Penney's catalog items. (1) Winners receive a vacation award that includes expenses for travel to a resort, lodging for a five-night stay, and meal vouchers at the resort. Award includes bringing significant other on the vacation. (2) Winners receive a cash award.
Award value	0, 1, 2	(0) One week's pay (1) Two weeks' pay (2) Three weeks' pay
Duration	0, 1, 2	(0) One month (1) Three months (2) Six months

unbalanced designs, components with more levels are often associated with greater importance (Hair, Tatham, Anderson, and Black 1998). Consequently, the importance of contest goals may be attenuated. Finally, although business groups' sales cycles tended to differ in duration, all managers agreed that 1 month and 3 and 6 months were acceptable durations to include.

Two pretests followed these revisions. First, salespeople at an executive development program completed the conjoint task and provided comments on the task and the profiles. Next, complete packages including a management-sponsored cover letter, conjoint task, survey, and postage-paid return envelope were mailed to 70 salespeople from two business units of one of the participating firms. Thirty-one (44%) returned completed study materials. Pretest feedback led to further refinements in the wording of written instructions in the survey and conjoint task (e.g., the sorting instructions), assessments of measure validity, and verification of the use of JC Penney as an appropriate source for the merchandise option (Table 1 contains a description of final sales contest component

levels, while the appendix contains our measures of constructs indicating the source of each measure and how it was refined).

In using the conjoint task, for practical purposes, we assumed interaction effects among the sales contest components to equal zero (Hair et al. 1998; Louviere 1994). We made this choice understanding that interaction effects may account for additional explained variance but can also decrease the predictive power of the model (Hair et al. 1998). Also, while interaction effects may be seen as a more accurate representation of how respondents value an attribute, they require the use of additional profiles (Hair et al. 1998; Louviere 1994). As we were working with actual field sales forces, we decided to use an additive form, intentionally trading off some explained variance for a substantially less overwhelming task.

Based on the components in Table 1, we used SPSS ORTHOPLAN to generate a fractional factorial design. The generated design consisted of 16 full profiles of sales contests. To facilitate the conjoint task, each profile appeared on a separate card.

Study procedure. A cover page provided task instructions requesting respondents to review the 16 cards containing the sales contest profiles and to sort the profiles in order of preference. After completing this task, respondents numbered individual cards from 1 (*the most preferred*) to 16 (*the least preferred*) using each number only once. This ensured that even if the cards were not returned in sorted order, there would be no loss of information. Each respondent numbered and returned all cards.

The ensuing survey included several established measures; others developed for the specific requirements of our research; and demographics including position in the firm, years in the position, years at the firm, education, income, age, and gender (see appendix for these measures and their properties).

STATISTICAL ANALYSES

As discussed, we began our analyses with the testing of our hypotheses concerning preferences for various sales contest components. Following this, we conducted several exploratory analyses involving individual-level characteristics, supervisor-to-salespeople relationships, and sales setting.

Sample Characteristics

The characteristics of respondents included the following: 45 to 49 years old (19%), 40 to 44 (18.1%), 35 to 39 (15.8%), 50 to 54 (14.4%), and 30 to 34 (13.8%); men 69%, women 31%; high school degree (22.3%), bachelor's degree (56.2%), advanced study (21.3%); income below \$50,000 (20.6%), income between \$50,000 and \$70,000 (45%), and income above \$70,000 (34%). We used contingency tables to examine differences in demographics across the three industries represented in the sample (approximately 26% consumer, 29% industrial, and 25% health care, while 20% fell into more than one industry). The following differences in demographics existed across industries. Industrial and health care salespeople were older (68.5% and 65.1% older than 40, respectively) than consumer goods salespeople (53% older than 40 years), $\chi^2(df=16)=47.64, p<.05$. Industrial had a smaller percentage of women (18.5%) than either consumer or health care (each with approximately 30%), $\chi^2(df=4)=16.69, p<.05$. Industrial salespeople spent more years in sales (median category of 11-15 years) than either consumer or health care (median category of 7-10 years for both), $\chi^2(df=12)=67.11, p<.05$. Finally, industrial and health care salespeople had higher annual incomes (median category of \$60,000-\$69,999) than consumer salespeople (median category of \$50,000-\$59,999), $\chi^2(df=14)=38.29, p<.05$. We further investigate the potential associations of these differences to contest design

preferences in our exploratory analyses following the tests of hypotheses.

Tests of Hypotheses

The SPSS conjoint module allowed us to decompose the rankings of the 16 contest profiles based on the contest components (goals, number of winners, award types, duration, award value) and arrive at individual-level utility scores for each level of each contest component. To test the hypotheses, we averaged these results across respondents ($N=796$).

As conjoint analysis provides no tests of significance, we conducted within-subject Scheffé tests as a conservative test of our hypotheses using utilities as indicators of preference. The directionality of our hypotheses led to the use of one-tailed tests (Hays 1994). This analysis provided support for four of the five expectancy theory-based preference hypotheses (Table 2). For *goals*, higher preferences for outcome-based (utility of .688) than combined outcome and process based (-.688) ($t=12.66, p<.05$), supported Hypothesis 1. For *number of potential winners*, there was a higher preference for designs with a midrange number of potential winners (i.e., 40%) (utility of .199) compared with 20 percent can-win (-.272) ($t=6.51, p<.05$) or all-can-win designs (.081) ($t=3.10, p<.05$). For *award type* (Hypothesis 3), we hypothesized the most preferred award type to be travel, followed by merchandise, then cash. However, cash was clearly the most preferred award (utilities of 1.630 for cash, .307 for travel, and -1.973 for merchandise). Thus, Hypothesis 3 was not supported.

Clearly, the duration hypothesis (Hypothesis 4) is dependent on the length of the sales cycle, and this differs across industries (consumer sales typically have shorter duration sales cycles than either health care or industrial sales). Consequently, we tested this hypothesis across industries, finding that consumer salespeople clearly prefer shorter duration contests than industrial salespeople, with health care salespeople tending toward longer duration contests as well. In particular, consumer salespeople preferred 3 months over either 1 month (utilities of .61 and -.30, respectively) ($t=3.98, p<.05$) or 6 months (.61 and -.31, $t=4.56, p<.05$). Meanwhile, industrial salespeople preferred 6 months over either 1 month (.85 and -1.51, respectively) ($t=8.22, p<.05$) or 3 months (.85 and .65, $t=1.99, p<.05$). At the same time, health care salespeople also preferred 6 months over 1 month (.70 and -1.35, $t=5.69, p<.05$), with nearly identical utilities for 6 months and 3 months (.70 and .60), a nonsignificant difference ($t=0.43, p<.05$). Overall, these findings support Hypothesis 4. Finally, for award value, we found a higher preference for 3 weeks' pay (utility of 1.03) than either 2 weeks' pay (.34) ($t=11.04, p<.05$) or 1 week's pay (-1.38) ($t=23.65, p<.05$). This finding supports Hypothesis 5.

TABLE 2
Conjoint Analysis:
Aggregate and Industry-Based Solutions

	Industry Based			
	Aggregate (n = 796)	Consumer (n = 211)	Industrial (n = 224)	Health (n = 200)
Goal				
Outcome	0.688	0.79	0.61	0.65
Combined	-0.688	-0.79	-0.61	-0.65
Importance	0.130	0.18	0.12	0.13
Number of winners				
All can win	0.081	-0.01	0.15	-0.04
40 percent can win	0.199	0.18	0.13	0.21
20 percent can win	-0.272	-0.17	-0.29	-0.17
Importance	0.138	0.04	0.04	0.04
Award type				
Merchandise	-1.937	-1.85	-1.95	-1.84
Travel	0.307	0.25	0.23	0.17
Cash	1.630	1.61	1.73	1.67
Importance	0.315	0.41	0.36	0.36
Award value				
One week's pay	-1.38	-1.27	-1.44	-1.43
Two weeks' pay	0.34	0.30	0.39	0.36
Three weeks' pay	1.03	0.97	1.04	1.06
Importance	0.181	0.26	0.24	0.26
Duration				
One month	-0.899	-0.30	-1.51	-1.35
Three months	0.670	0.61	0.66	0.70
Six months	0.229	-0.31	0.85	0.65
Importance	0.251	0.11	0.23	0.21

NOTE: Respondents reporting more than one industry are not included in the table. We conducted an ANOVA for each of the average utilities across industries and found no significant differences (in all cases, $p < .05$) except for duration as reported in the text. The difference for duration is a result of different length sales cycles among the industries. Results for respondents reporting more than one industry were not significantly different from the aggregate results.

In sum, tests of hypotheses revealed preferences for outcome-based goals, limiting numbers of winners to 40 percent of the sales force, 3 months' duration (with exceptions as noted by industry), and with cash awards at high value levels (3 weeks' pay). To provide additional evidence as to how widespread sales force preferences were for this "preferred design," we examined each respondent's utilities to identify the percentage whose utilities matched this combination. Approximately 18 percent of respondents' utilities indicated this would be their most preferred combination. In addition, about 7 percent of respondents' utilities indicated a sales contest design preference deviating from this design only in terms of duration (6 months rather than 3 months). Thus, these two design combinations accounted for approximately 25 percent of the respondents.

Exploring Individual, Supervisory, and Sales Setting Characteristics

Following hypothesis testing, we explored whether component preferences differed across industries and by

individual, supervisory, and sales setting characteristics—variables found in existing motivation research. Being exploratory, we used two-tailed tests of significance for these analyses.

By industry. We investigated whether design preferences differed on an industry basis (for this analysis, we excluded respondents falling into multiple industries). Beyond the preferences for duration, conjoint analysis by industry revealed a near mirroring in terms of preferences for outcome-based goals, cash awards followed by travel, and 3 weeks' followed by 2 weeks' value. In terms of number of winners, consumer and health care each preferred 40 percent, followed by all-can-win, while industrial had a slight preference for all-can-win, followed closely by 40 percent. For all three, 20 percent can-win was the least attractive (Table 2).

Continuing with industry, we examined whether responses to measures (appendix) differed across industries. The results indicated that only relationship to supervisor differed between industries—health care salespeople (5.83) were closer to their supervisors ($p < .05$) than consumer salespeople (5.42), while industrial (5.74) was not significantly different from health care or consumer.

By individual, supervisory and sales setting characteristics. We also explored how design preferences varied due to individual, supervisory, and sales setting variables on a component-by-component basis. To do this, we investigated utility scores for each level of each component. For example, for the goals component, we used each respondent's utility scores to determine preferences for outcome or combined outcome- and process-based goals. For goals, 65.3 percent preferred outcome and 34.7 percent preferred combined outcome- and process-based goals. Using the explanatory variables (appendix), we ran a series of Scheffé tests and Pearson chi-square tests (for categorical measures) to determine which variables were associated with preferences toward one or the other goal. Then, we repeated the analysis for each component. Only significant results from these analyses ($p < .05$) appear in Table 3.

We also explored the relationship between component importance (from the conjoint analysis) and the various individual, supervisory, and sales setting variables. In particular, in terms of the importance of individual design components in determining contest attitudes, significant relationships ($p < .05$ using two-tailed tests) were found for several variables. First, with respect to the goal-type component, we found that as satisfaction with supervisor, relationship with supervisor, supervisor effectiveness, and the frequency with which the supervisor works with the salesperson increased, the importance of goal type decreased. Furthermore, these supervisory relationship variables were unrelated importance variations for any other component. With respect to award value importance,

TABLE 3
Component-by-Component Exploratory Analyses

<i>Goal</i>	<i>Outcome Based</i>	<i>Combined</i>	
Percentage preferring	65.3	34.7	
Individual, supervisory, and sales setting characteristics			
Satisfaction with supervisor	5.34 ^a	5.78 ^b	
Relationship to supervisor	5.53 ^a	5.90 ^b	
Supervisor effectiveness	4.36 ^a	4.90 ^b	
Advancement desire	3.80 ^a	4.24 ^b	
Supervisor time with rep (categorical)	< 1 day a month	> 2 days a month	
Gender (categorical)	70 percent of men	55 percent of women	
<i>Competitive Format</i>	<i>20 Percent Can Win</i>	<i>40 Percent Can Win</i>	<i>All Can Win</i>
Percentage preferring	34.4	38.9	26.7
Individual, supervisory, and sales setting characteristics			
Advancement desire	4.12 ^a	4.03	3.76 ^b
Commitment	6.22 ^a	6.12	6.09 ^b
Competitive-based need for achievement	5.21 ^a	5.03	5.01 ^b
<i>Award Type</i>	<i>Cash</i>	<i>Travel</i>	<i>Merchandise</i>
Percentage preferring	57.8	36.3	5.9
Individual, supervisory, and sales setting characteristics			
Satisfaction with compensation	4.85 ^a	5.13 ^b	5.17
Satisfaction with supervisor	5.50	5.61 ^a	5.10 ^b
Supervisor effectiveness	4.96	4.82 ^a	4.68 ^b
Advancement desire	3.91	4.10 ^a	3.44 ^b
Income (categorical)	< \$30,000, \$60,000-\$69,000, and \$70,000-\$79,000	\$60,000-\$69,000, \$70,000-\$79,000, and > \$80,000	> \$80,000
<i>Award Value</i>	<i>One Week's Pay</i>	<i>Two Weeks' Pay</i>	<i>Three Weeks' Pay</i>
Percentage preferring	7.5	8.2	84.3
Individual, supervisory, and sales setting characteristics			
Competitive-based need for achievement	4.79 ^a	5.20 ^b	5.07
Supervisor time with rep (categorical)	1 day a week	Up to 2-3 days a month	Less than 2-3 days a month
Income (categorical)	< \$50,000	< \$50,000	> \$50,000
<i>Duration</i>	<i>1 month</i>	<i>3 months</i>	<i>6 months</i>
Percentage preferring	26.8	31.8	41.3
Individual, supervisory, and sales setting characteristics			
Percentage pay at risk	57.9 ^a	68.6 ^b	75.0 ^c
Advancement desire	4.37 ^a	3.72 ^b	3.86 ^b
Status-based need for achievement	5.65 ^a	5.48 ^b	5.54
Supervisor time with rep (categorical)	Up to 1 day a month	Up to 7-11 days a year	Less than 11 days a year
Years in sales (categorical)	< 3 years	3-11 years	> 7 years
Industry type (categorical)	Consumer	No dominant industry	Health care and industrial

NOTE: Preferences for component levels were determined by individual-level conjoint-derived utilities. Both Pearson chi-square tests (for categorical variables noted in the table) and Scheffé tests (for continuous variables) were used. Only significant differences ($p < .05$) are reported ($n = 796$). For categorical variables, categories reflecting the primary differences in trends found in the contingency tables are reported. For percentage scores, we first transformed the data using an arcsin transformation. Raw percentages are reported for interpretability. In each row, different letters represent scores that are significantly different ($p < .05$) based on Scheffé tests. For example, for Advancement desire, under Duration, those who preferred 1 month had significantly different Advancement desire scores than those who preferred 3 months and 6 months. Advancement desire scores for those who preferred 3 months were not significantly different from those who preferred 6 months.

a. Those who preferred 1 month.

b. Those who preferred 3 and 6 months.

we found that as status aspiration-based need for achievement, competitiveness-based need for achievement

advancement desire, perceived control over own performance, and relative perceived performance increased, so

did importance of this component. In addition, importance of the award value component decreased as age and years in sales increased. Finally, with respect to duration importance, we found that it increased as the percentage of pay at risk decreased.

DISCUSSION

The results associated with our hypotheses suggest several field sales force contest design preferences that are consistent with expectancy theory-based predictions. These preferences are for outcome-based goals, a limited number of winners (40%), durations of approximately a sales cycle (as appropriate for various industries), and higher award values (3 weeks' pay). The only result our expectancy theory-based hypotheses did not anticipate was the preference for cash awards.

All told, the emergent preferred design represented the preferred combination of component levels for nearly one fifth of the sample and, with duration allowed to be either 3 or 6 months, the identified preference design fully accounts for approximately one fourth of the respondent's preferences based on conjoint derived utilities. While representing a preferred design for substantial numbers of field salespeople, these tendencies do not provide complete guidance to sales contest planners seeking to design effective sales contests. However, our combined general results and our component-by-component exploratory analyses using individual, supervisory, and sales setting characteristics do provide deeper insights into potential boundary conditions in contest design considerations.

Although, on average, *goal type* is the least important component determining preferences (not unexpected given our previous caveat about unbalanced conjoint designs), both its preference and importance seem related to a salesperson's relationship to supervisor. While its importance decreases with closer relationships, stronger supervisor-to-salesperson relationships are associated with a higher preference for combined outcome- and process-based designs. This is consistent with our expectancy theory perspective. As we argued earlier, if salespeople feel distant from their supervisors, they are likely to lack certainty as to whether management fully and accurately tracks process, which in turn could reduce confidence in their own effort-to-performance assessments (dampening expectancy and instrumentality estimates). Furthermore, the use of this goal type would magnify the effects of this component in determining contest attitudes, hindering the ability of contest planners to gain positive attitude and ensuing motivation to pursue contest goals.

Management attuned to these relationship-to-supervisor issues can better choose appropriate instances to use combined outcome- and process-based goal formats, with the accompanying advantage of being able to make certain

that winning can be recognized as being due to both meeting outcome targets *and* good effort (reducing wins by windfall or unacceptable behaviors; Murphy 2003). On the flip side, the addition of a process-based goal, even if representing just 20 percent of the overall goal, as is the case for our combined outcome- and process-based goal design, can severely affect expectancies and compromise motivation toward a contest for salespeople with more distant supervisory relationships.

Combined outcome- and process-based goal designs also seem more acceptable to women (45% of women preferred combined designs compared with just 30% of men) and to salespeople with more frequent days spent working with supervisors. As to the latter, this attests to the benefits of ongoing observation, which is likely to increase salespeople's confidence in whether management is tracking process, thus leading to increased expectancy and instrumentality estimates when process-based goals are used. As to the former, we considered the possibility that the relationship-to-supervisor variable could be driving this difference. However, there are no significant differences by gender on the supervisor relationship variables, thus no support for this conjecture. Still, the results must be interpreted with care; similar to earlier gender-related findings (Dubinsky et al. 1993; Schul, Remington, and Berl 1990), more gender similarities than dissimilarities exist across the contest design components here.

The *number of potential winners* component has fairly low importance scores, with 34 percent preferring all-can-win designs, 39 percent preferring 40 percent can-win designs, and 27 percent preferring 20 percent can-win designs. This does not vary by individual, supervisory, and sales setting characteristics. With respect to preference, both more competitive and higher advancement-desiring salespeople seem to prefer limited numbers of winners. As argued previously, this may be due to the dampening effects on expectancies provoked by limited numbers of winners not affecting these salespeople as much as their peers and the counterbalancing valence effects gained by being among a select group of winners. That is, salespeople with either of these characteristics might view limited numbers as a positive challenge. Also, these salespeople may have especially high valence estimates for the higher order needs satisfaction (recognition) gained by winning; with small numbers of winners, these estimates would be enhanced.

The *award type* component is of high importance for most salespeople and, although our expectancy theory-based rationale and prior research (Caballero 1988; Hastings et al. 1988) led us to expect a preference for travel awards over cash or merchandise, cash awards are generally the most preferred. Even so, preferred award type varies by at least some individual, supervisory, and sales setting characteristics. For instance, and not unexpectedly, salespeople with less close relationships to supervisors

find travel awards accompanied by supervisory staff to be a far distant third in award preference; these salespeople strongly prefer cash. At the same time, closer-to-supervisor salespeople, along with those with higher levels of satisfaction with supervisors and whose supervisors are seen as more effective, seem quite comfortable with having travel awards accompanied by supervisory staff as an alternative to cash. Thus, consistent with earlier research suggesting that manager-salesperson relationships affect valence estimates (Legace, Castleberry, and Ridnour 1993), supervisory factors clearly affect reward preferences. In a positive light, this means that travel awards can be effectively used when an audit of supervisor-to-sales force relationships suggests "good health." However, if in doubt about the quality of these relationships, or if these relationships vary noticeably, travel awards in which supervisors accompany winners should be avoided—wide variation in resultant motivation seems likely to follow.

Additional observations concerning award type suggest that lower (below \$30,000) as well as mid- to upper income brackets (\$60,000-\$80,000) have greater preferences for cash awards. The preference for cash seems clear for lower incomes—these salespeople would be far from satiated in terms of satisfying their lower order needs (i.e., need for more pay). Thus, cash would be more likely to gain high valence estimates. At the same time, middle/upper income salespeople might have a higher valence for cash (suggesting a renewed drive to satisfy lower order needs occurring at these income levels) due to financial demands associated with midcareer/midlife stages. Unfortunately, we did not collect data on financial demands.

While it is not surprising that increases in *award value* are nearly always preferred, award value is seldom of high importance relative to other components. This is an interesting finding in that salespeople do not seem merely focused on chasing sales contest goals solely to address lower order needs. Even so, our exploratory analysis does indicate that award value importance varies by individual characteristics. First, value seems more important to highly competitive salespeople. This could be due to highly competitive salespeople having a heightened focus on the extrinsic rewards gained by winning—they may be "chasing the carrot" being extended by management (Kohn 1993), and only a large enough carrot will excite them to the chase. Second, consistent with the findings of Cron (1984), younger salespeople, as well as salespeople in earlier career stages, place greater importance on value. This may be due to having less financial security, for example, lower order needs remain unsatisfied, thereby giving value heightened importance. From an expectancy theory perspective, contest designers need to understand that "undershooting value" in contest design could cause considerable problems in gaining motivation with sales forces composed of these types of salespeople.

As predicted by our expectancy theory-based rationale, duration seems to require a "sufficient but not excessive" quality; sufficient for planning and executing strategies for contest goal attainment but short enough that difficulties in sustaining a positive effort-to-performance relationship are not an issue. Based on this, we predicted a preference for duration of approximately one sales cycle. Using industry analysis as a proxy for varying sales cycles, with consumer salespeople having the shortest sales cycle and industrial the longest, duration preferences clearly vary between industries. Consistent with their shorter sales cycles, consumer salespeople have a clear preference for 3 months' duration, with substantial numbers also showing a preference for 1 month. Meanwhile, consistent with their longer sales cycles, both industrial and health care salespeople clearly dislike 1-month durations, while industrial salespeople even have a slight bias toward 6 months.

Other factors associated with duration preferences include years in sales, frequency supervisors work with salespeople, pay at risk, advancement desire, and status-based need for achievement. We find that salespeople with more years of experience are more likely to prefer longer duration contests. In part, this might be due to experienced salespeople having "been there before," giving them increased patience in letting a contest run for longer periods. We also find that salespeople possessing higher advancement desire and/or a higher status-based need for achievement are each more likely to prefer shorter duration contests. This could be due to having higher valences for the higher order awards associated with winning (recognition), thereby increasing a sense of urgency to bring contests to conclusion. Finally, we find that salespeople working in sales settings with higher base salaries (lower pay at risk) seem to key in on duration as a vital component affecting their attitudes, with longer duration contests more preferred. One reason for this may be the types of sales settings where high base salary is typically found. In field sales force settings where territory objectives include factors other than simply short-term sales volume and when a salesperson's impact on volume is hard to measure, higher base salaries are often the norm (Churchill et al. 2000). Thus, salespeople with higher base salaries are often more accustomed to longer time horizons. Meanwhile, higher pay-at-risk salespeople are nearly ambivalent as to whether a contest is 3 months or 1 month, perhaps reflecting their focus on short-term performance goals as a normal part of day-to-day selling efforts. Since pay characteristics (high base salary versus high pay at risk) are a consequence of the sales setting, contest designers would be well served to make contest duration reflect the pay/setting dynamic. Suggested earlier, duration may only have adverse consequences on expectancy estimates when misaligned (too short or excessive for goal attainment).

ADDITIONAL MANAGERIAL IMPLICATIONS

Our findings and discussion of results provide management with two paths for designing sales contests. On one hand, management can fall back on our general findings, constructing sales contests that reflect preferences of the *average* salesperson. For example, management can use the general findings to justify outcome-based goals in contest design. Outcome-based goals reduce the need for monitoring mechanisms, thereby lessening contest administration activities. As such, these goals have advantages not only in that salespeople tend to prefer them but also for ease of administration. Similarly, management can always use cash awards since these awards tend to be preferred over travel or merchandise. Whether due to ease of administration or an awareness of the effects of these goals on expectancies and instrumentalities, the literature consistently reports a management preference for outcome-based designs (Haring and Myers 1953; Haring and Morris 1968; Wotruba and Schoel 1983).

On the other hand, management can "dig deeper" and be driven by the understanding that improved contest design is possible by attending to individual, supervisory, and sales setting factors (i.e., factors related to motivation) and adapting designs and communications that best reflect the needs and circumstances of a given sales force. Many of the variables differentiating design preferences appear to have strong effects. For example, supervisory factors clearly affect design preferences for goals and award type, suggesting the need to consider the nature of supervisor-salesperson relationships. Are they consistently "healthy" and do salespeople feel their supervisors treat them with respect, are eager to reward good performance, and are active in training and coaching? If so, management might consider taking advantage of the managerially positive effects of including a process-based goal component.

As another example, contest planners contemplating the number of salespeople eligible to win need to realize that constraining the potential number of winners too severely will likely harm preferences and motivation toward sales contests. At some point, the dampening effects on expectancy and instrumentality estimates likely becomes too great to be offset by increased valences for higher order rewards provided by designs with limited numbers of winners. Here again, best practices are affected by both individual and supervisory differences. For instance, if supervisors are actively involved in training and coaching and are eager to reward good performance, salespeople seem to prefer limits placed on the number of potential winners. In effect, this can be due to the fact that these salespeople come to develop greater confidence in their abilities while also feeling that a design with limited numbers of winners has been designed fairly.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

A number of limitations introduce future research opportunities. The first concerns the nature of the sample. Although the sample included a diverse group of business units spanning consumer, industrial, and health care, only three companies participated, potentially limiting the generalizability of the findings. There may also be some concern for self-selection bias; salespeople with a greater vested interest may have responded in greater numbers. In addition, our focus was on field sales forces only. Today's highly dynamic markets have sales conducted by a wide array of salespeople (e.g., telesales; sales engineers; etc.) in numerous settings (e.g., business-to-business; business-to-consumer); at present, our findings cannot be extended to these contexts.

In terms of the methodological issues, future research should include a balanced design as a means to clarify ideal attribute levels. Although possibly very cumbersome, in future research, the ability to detect interaction effects is also important. In this study, respondents were asked to focus on a high sales volume part of their line as the contest goal. Future studies should also include other offerings including newly launched, slow-moving, and/or discontinued products. As noted, our research did not examine competitive format in terms of team versus individual-based designs. With some growing emphasis on teams in many sales settings, this would be an important component to study in future research. With respect to the award-type component, we chose our specific levels based on pretests involving both management and salespeople from the organizations we surveyed. While appropriate for this study, a broader approach to this component would be beneficial for a deeper understanding.

Finally, although areas of known potential impact include effects on motivation and morale of salespeople (Wildt et al. 1980-1981), our study only alludes to the effects of contests on relevant constructs including commitment and satisfaction, as well as the possibility of conditioning salespeople to "chase carrots" (Kohn 1993); the effects of sales contests on these outcomes must be explored if the full impact of sales contests are to be understood. Along these lines, the risks/concerns of using extrinsic motivators such as sales contests must also be given attention. Although unintended consequences have been addressed (Hampton 1970; Murphy 2003), research is needed in terms of the kinds of cheating behaviors that might occur and the ethical or legal implications of these behaviors.

In sum, the importance of sales contests is unquestioned. Furthermore, the potential of expectancy theory as a legitimate basis for deriving an understanding of sales contest design preferences and motivation appears very

APPENDIX
Individual, Supervisory, and Sales Setting Variables Included in the Survey

<i>Measure</i>	<i>Scale Items</i>	<i>Reliability (Coefficient α)</i>
Affective Organizational Commitment seven-item, 7-point scale adapted from Jaworski and Kohli (1993) reduced to six items following pretest	<ol style="list-style-type: none"> 1. I am fond of this organization. 2. I am happy to make personal sacrifices for this organization if it is important for the organization's well-being. 3. The bonds between this organization and me are weak. (R) 4. In general, I am proud to work for this organization. 5. I often go above and beyond the call of duty to ensure this organization's success. 6. I have little commitment to this organization. (R) 	.82
Relationship to Supervisor eight-item, 7-point Likert-type scale adapted from Tyagi (1985) reduced to six items following pretest	<ol style="list-style-type: none"> 1. My supervisor is eager to recognize and reward my performance when it is good. 2. My supervisor treats me with respect. 3. I find my supervisor friendly and easy to approach. 4. My supervisor is usually attentive to what I say. 5. I usually trust statements made by my supervisor. 6. My supervisor is usually willing to listen to my problems. 	.83
Status Aspiration-Based Need for Achievement seven-item, 7-point Likert-type scale adapted from Cassidy and Lynn (1989), reduced to four items following pretest	<ol style="list-style-type: none"> 1. I want to have a position in the firm where I can have prestige. 2. I like to be admired for my achievements. 3. I want to be an important person at this firm. 4. I find satisfaction when I can influence others in this firm. 	.78
Competitiveness-Based Need for Achievement seven-item, 7-point Likert-type scale adapted from Cassidy and Lynn (1989), reduced to four items following pretest	<ol style="list-style-type: none"> 1. I try harder when I am in competition with other people. 2. To be a real success, I have to do better than other salespeople. 3. It is important for me to do better than others in the sales force. 4. I judge my performance on whether I do better than others. 	.78
Supervisor Effectiveness four-item, 7-point Likert-type scale developed for this study	<ol style="list-style-type: none"> 1. My supervisor provides me with insights to improve my selling efforts. 2. My supervisor demonstrates active training and coaching for me. 3. My supervisor holds effective meetings (I leave knowing how to do job better). 4. My supervisor handles the job such that I consider him or her effective 	.93
Advancement Desire single-item, 7-point Likert-type scale	I view sales as primarily a stepping stone to other positions.	
Control Over Own Performance single-item, 7-point Likert-type scale	For the most part, I control my performance in my territory.	
Satisfaction with Supervisor and Compensation single-item, 7-point scale anchored by strongly satisfied and strongly dissatisfied	<p>Please indicate the extent of satisfaction with the following areas of your job</p> <p style="padding-left: 40px;">Your compensation . . . Your supervisor . . .</p>	
Supervisor Span of Control categorical response	<p>How many salespeople is your sales manager responsible for?</p> <p style="padding-left: 20px;">Less than 5 5 to 6 7 to 8 9 to 10 11 to 12 13 or more</p>	

(continued)

APPENDIX (continued)

Measure	Scale Items	Reliability (Coefficient α)
Relative Perceived Performance categorical response	<p>If you were to gauge your overall performance compared to other salespeople, where would your performance put you relative to the rest of the sales team?</p> <p>Bottom 20% (among bottom performers)</p> <p>21% to 40%</p> <p>41% to 60%</p> <p>61% to 80%</p> <p>Top 20% (among the top performers)</p>	
Supervisor Works with Rep categorical response	<p>How often does your boss work with you?</p> <p>1 day a week or more</p> <p>2 or 3 days a month</p> <p>1 day each month</p> <p>7 to 11 days each year</p> <p>3 days each year or less</p>	

promising. What remains is for researchers to further advance understanding of this widely used incentive tool and to make the direct connection between preferences motivation and effort in this context. Until then, descriptive reports provide most of the available guidance, although Alec Baldwin has added to the discourse, leaving little doubt about how sales contests can even be used to bludgeon salespeople toward greater motivation. You get the picture?

NOTES

1. Hart (1984) grounded her sales contest study in goal theory (Locke 1968). Goal theory proposes that effort expended by a goal-focused individual is greater than effort expended by an individual without goals and that goal characteristics affect performance outcomes (see Locke and Latham 1990 for a review). In sum, researchers suggest that acceptable, clear, specific, and difficult goals lead to higher performance by increasing goal-related effort (Hollenbeck and Klein 1987; Latham and Locke 1979). Hart found support for most of these expectations.

2. All award types (cash, merchandise, travel) likely provide similar baseline levels of higher order need satisfaction through the public announcement of winners. These announcements often occur at meetings/banquets where every member of the sales force, along with management, attends and the winners are given accolades. The focus of this discussion concerns the above baseline effects of particular award types.

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