Recent political and social activities in Central and Eastern Europe have created an environment of "transformational change" (Jick, 1992). Jick describes such a magnitude of change as representing a complete abandonment of traditional behaviour, expectations and theories in favour of completely new alternatives or innovations. Such change may be a proactive decision for organizational renewal, or a reaction to recognized obsolescence. The concept of transformational change has also been recently popularized in practitioner work under the slogan of "Paradigm Shifts" (Barker, 1992). Paradigm shifts, in this context, are cited as a complete change in the rules, tools, and approaches to behaviour. Little stretching of the imagination is required to conclude that Central and Eastern European nations are currently experiencing paradigm shifts, or transformational change. Our focus in this article is on whether it is appropriate and effective to apply American management techniques to implement change in Russian enterprises. Current events in Russia provide an unprecedented opportunity for assessing the capability of existing theories of change and development to assist in revitalizing economic and management practices. While there is a closer cultural similarity to Western Europe (McNulty, 1992), Russia (as well as many other Central and Eastern European countries) has preferred to actively seek assistance from the United States. In response to these requests, American universities and federal agencies have created several programmes to facilitate the change process. Indeed, the desire of Central and Eastern Europeans to change, and the desire of Americans to help them change has led to many symbiotic relationships. We, the authors, have been fortunate enough to be involved in some of these efforts. However, before getting swept up in the current of good intentions, Americans might evaluate their ability to serve effectively as change agents in these ventures.

Over the last several years, there has been a repeated cry for more international management research activity (Adler, 1991). Many have advocated that the foundations of our current theories are rooted in a Western (more specifically, American) "cultural bias" (Adler, 1991; Hofstede, 1980). Based on this premiss, others have questioned whether we are suitable and appropriate models and have criticized our more recent efforts to facilitate change in other nations. For example, Americans have a tendency to ignore and underestimate the abilities of Russian managers (McCarthy and Puffer, 1992), most of whom hold the equivalent of a Master's degree (McNulty, 1992). This breeds resentment towards many American consultants. It thus follows that this time of transformation is also an opportunity to gain a better understanding of cross-cultural similarities and differences.
Reducing these barriers will help create and test new knowledge, identify similarities which would help validate existing theories, and reduce the probability that cultural differences may hamper effective cross-cultural collaboration. In short, collaborative ventures would determine if American "paradigms" can be transferred to Russia wholesale, whether new paradigms need to be created, or if appropriate change will be accomplished through integrating existing knowledge across the two cultures. The 1980s saw such accomplishments via comparisons of American and Asian practices (Adler et al., 1986; Black et al., 1991; Deal and Kennedy, 1982; Hitt et al., 1990), specifically, in the development of Theory Z (Ouchi, 1981; Pascale, 1985). Now is the time to devote similar attention to Central and Eastern Europe, a region severely neglected by past research (Pearce, 1991).

A flurry of recent activity has generated an initial body of knowledge to direct these intellectual efforts (Forker, 1991; Vance and Zhuplev, 1992). Such activities have also generated application benefits by identifying potentially appropriate management practices and intervention strategies for implementing change in Russia. While some have focused on the cultural differences between the United States and the former Soviet Union (Lawrence and Vlachoutsicos, 1990), others have emphasized the past and present similarities. Historical debates provide evidence that the two cultures are not that divergent in the development of management theories (Kiezun, 1991). Anecdotal evidence indicates that similar practices have been developed and implemented in both communist and capitalist countries (Pearce, 1991), though not with equal success. Finally, recent empirical work has demonstrated that some popular American interventions can be successfully applied in Russia with little need for technical revision (Welsh et al., 1993a).

Our specific interest here is the identification, using rigorous methods, of interventions that can be useful in changing the motivation and performance of Russian workers. Effectively motivating workers was the chief concern expressed in a recent survey of 1,000 Russian heads of enterprises (Ivancevich et al., 1992, p. 47). In fact, Soviet-American exchange programmes have apparently tried to address these issues over the last two decades (Kiezun, 1991; Naylor, 1990).

Interestingly enough, a review of the scant literature indicated one technique which demonstrates great promise for changing behaviour in Russia — incentive systems. In fact, the concept of incentive systems is not new to Russia. The concept of incentive systems has been referenced under a number of labels — contingent reinforcement, piece-rate systems, scientific management, behavioural management and OB Mod, to name a few (Andrasik, 1989; Luthans and Kreitner, 1985; Scott and Podsakoff, 1985). We will use the phrases "incentive systems" or "contingent reinforcement programmes" in the remainder of the article.

Setting aside the debate over behavioural versus cognitive theoretical foundations, the application of such programmes is relatively simple. Incentive systems involve identifying an outcome that is valued by (reinforcing to) the subject. In addition, functional behaviours leading to effective task performance are identified, and/or desired performance goals are established. Once identified, the employee is trained to perform the requisite behaviours, to understand the intended goal, and to recognize the contingent relationship between these and the valued outcome. Although behavioural management theory was developed primarily through research in the United States, the technology has been successfully applied in many other parts of the world.
Interestingly enough, incentive systems enjoy a long and extensive history of study and application in Russia (and the former Soviet Union). This appears to be a possible example of our lack of familiarity with Russian management, illustrated by the American executive who bragged about "trying something they had never done before" when he implemented an incentive programme in Poland (Associated Press, 19 November 1992). In fact, the behavioural sciences (including behavioural management techniques) are a central focus in Russian management education programmes (McNulty, 1992).

Kiezun (1991) provides one of the best historical accounts of incentive programmes in Russia. He discusses at length the use of contingent financial rewards as a carrot-and-stick approach to productivity improvement. Lenin's thinking was to use external rewards until the workers were able to recognize contingent social rewards — the deeper social values of socialism, e.g., the enthusiasm for work itself; the intrinsic value of contributing to the community (pp. 82-5). In discussing the development and application of incentive systems, Kiezun seems to claim that Lenin actually preceded Taylor in the development of piece-rate systems and scientific management.

Regardless, financially-based incentive systems historically have not worked in Russia, as well as elsewhere in Central and Eastern Europe (Meurs and Schaufler, 1990). However, the failure of incentive systems cannot be attributed to a lack of knowledge or effort on the part of Russian managers. Again, in spite of our misperceptions (McNulty, 1992), Russian managers are highly educated. Their knowledge of motivation, including this technique, is better than we might give them credit for (McCarthy and Puffer, 1992). In fact, the failure of incentive systems in Russia is more likely due to environmental reasons than to managerial ability (Pearce, 1991).

Pearce (1991) describes the difficulty Hungarian managers had in using incentives to motivate performance. While these managers had a "bonus pool" to reward workers, they were hampered in punishing them. The workers are fully aware of this limitation of authority. Consequently, the bonus pool frequently must be used to induce merely minimal performance. Workers had learned to expect receiving the bonuses and would restrict output when there was any indication that bonuses would not be forthcoming (Pearce, 1991). Many Russian incentive programmes offered cash to workers for exemplary performance. Unfortunately, with the scarcity of goods to purchase, the workers viewed this reward as worthless (Welsh, 1991). Consequently, cash-based programmes quickly lost their power to motivate. Finally, Albania's rate for unemployment compensation is rather generous — 80 per cent of wages. Therefore, many workers would quit their jobs rather than comply with a supervisor's request to increase their attendance or effort.

This evidence would suggest that political policies and scarce resources, not managerial ability, were the more significant inhibitor of incentive programme success in Central and Eastern Europe. Even so, existing empirical studies indicate that contingent reward programmes can work in Russia. The critical factor is using the right rewards to reinforce behaviour. Welsh et al., (1993a) tested the efficacy of different reinforcement programmes on the productivity of Russian textile workers. They found that quantity of top-grade fabric produced increased under extrinsic
and social reinforcement programmes, but it actually decreased in a participative management programme. While presenting many benefits of the first two styles of human resource management, they refer to cultural reasons for the failure of the participative technique.

Puffer (1992a) recently demonstrated the preference of Russian managers to rely on socially-based incentives (time off, tourist passes, higher priority to purchase scarce goods) to reward workers. Her results would appear to support the social reinforcement programme used by Welsh et al. (1993a). Lawrence and Vlachoutsicos (1990) found a strong reliance on piece-rate systems to shape the behaviour of Russian workers. However, the Russian factory workers would approach new situations cautiously by alternating intense spurts of rest and work.

Each of these research efforts has furthered our understanding and ability to transfer Western-based management theory and practice to Russian cultural settings. However, these studies are not without their limitations. Lawrence and Vlachoutsicos stated their findings were limited as they were based on personal observations and interviews over a short — two week — period. Although using a six-week time span, Welsh et al., (1993a; 1993b) cited the need for a better cultural foundation and a longer time span to better assess their interventions. And, Puffer's study is somewhat restricted due to its laboratory use of scenario responses. In addition, all three used manufacturing organizations as the source of their data.

This is not to downplay the significance of their work. In fact, logistical difficulties make empirical research in Russia a significant challenge, especially at the time this research was conducted. These studies do offer several contributions. The Puffer study suggests Russian managers are aware of the weakness of using extrinsic rewards in their settings, thus they focus motivational efforts on social rewards. The building of more socially oriented authority relationships is a tactic Pearce (1991) identified as used by Hungarian managers to overcome financial "blackmail". However, the Welsh et al. study demonstrated the ability of external rewards to motivate when the right outcomes are selected (actual goods instead of cash). In fact, using the "right" external rewards worked as well as using social rewards. The superiority of using goods versus cash was also found in the Lawrence and Vlachoutsicos interviews.

This study seeks to demonstrate further the efficacy of this popular technique to Russian settings undergoing transformational change and also to extend this application beyond the manufacturing sector. We have chosen a retail setting for this study, a sector that has received some attention in prior Russian studies (Puffer, 1992b). Attention is needed in this sector to revitalize and enhance the ability of the new Russian Federation to provide goods to its citizens. Problems with Russian distribution systems often have been cited as a critical weak link in the Russian economy. Retailing is one link in the distribution chain. Thus, this study investigated the ability of incentive systems to motivate retail employee behaviour.

To date, there are no known empirical studies of Russian retail management behaviour nor experimental interventions in organizations undergoing major paradigm shifts. In designing this study, considerable effort was devoted to matching retail sites to satisfy experimental concerns of validity (Cook and Campbell, 1979). After considerable investigation and negotiation by the lead author, two retail bookstores were selected and approved for this study. Obviously, the use of only two sites is a significant obstacle to the generalizability of any results found in the study.
Thus, while we are confident in the results of this study, we also recognize its limitations and the dangers of over-interpretation.

METHODS

Subjects
The study was conducted in 1990 at two bookstores located in the Russian city of Tver (formerly Kalinin), a city of moderate size located 90 miles northwest of Moscow. These two stores were matched on a number of criteria. Each store employed 12 workers who performed duties in all four retail product areas: books, magazines, posters, and postcards. Eight to 12 of these workers would be on the floor at any given time. All subjects had completed similar training and orientation programmes, been repeatedly informed of performance and behavioural expectations, and had at least one year of experience in their particular store. These employees were all ethnic Russian and all females; they were, on average, 46 years-old and had an average of six years work experience. The stores were state-owned, located in similar geographic and demographic areas, and had similar sales trends and similar sales histories.

The Intervention and Procedures
The intervention employed a baseline-intervention-withdrawal design. This procedure is commonly used in behavioural studies, especially in field settings where external threats require greater consideration (Kazdin, 1973). Each period of the study lasted two weeks. During the first two weeks employees were observed in their day-to-day behavioural activities and their sales volume was recorded. This was to establish baseline rates. During the third and fourth week, the intervention was administered to the experimental bookstore only. Behavioural and sales data continued to be collected. The intervention was removed for the fifth and sixth week to determine if the variables of interest would revert to baseline levels. A reversal in sales volume, if one occurred, would provide further support for the efficacy of the intervention. Discussions with the managers of each bookstore focused on identifying critical success factors for sales performance.

Several behaviours were identified (e.g. customer interaction, stock work, special orders, missing from station) that could be targeted for improvement to increase sales productivity. After much analysis and discussion, the managers determined that the activity with the most current need for improvement was street-vending. Consequently, the remaining behaviours were used as manipulation checks and thus, throughout each period of the study, were observed but not experimentally changed.

Street-vending involved a worker standing on the pavement outside the store and selling books from a mobile cart (similar to a fruit stand or an urban food cart). The store managers wanted to develop a consistent and stable street-vending activity by increasing either the number of volunteers or the number of hours per volunteer. Street-vending was considered an important way to make contact with potential customers. It also served as a form of advertising for the store and its products. Similar to impulse displays in American stores, a street contact might trigger a purchase behaviour or it might induce the individual to stop in the store and "look around". Historical data demonstrated that street-vending led to increased sales. Unfortunately, many of the retail workers perceived this as a very undesirable aspect of their job and were reluctant to volunteer. Workers considered street-vending to be demeaning and harder work than being
inside the store. A loss of social interaction, frequent bad weather, and having to be on one's feet also created a feeling of poor working conditions among these workers when staffing the street-vending cart.

For this study, a sign-up sheet was posted for street-vending during the intervention period in the experimental store. Employees had been instructed that the volunteer (only one person/day was required to be on the street) would be required to vend from 10 a.m. to 2 p.m. In exchange, the volunteer would get to leave work two hours early, with pay. The workers remaining in the store might have to work harder to make up for the early departure of the street-vending worker, but it was explained that all would benefit from the additional contribution to the state-provided sales quota. The sign-up sheet and paid time off were terminated on the start of the withdrawal period. At that time, staffing for street-vending would again rely on true volunteerism and/or manager pressure more than on contingent rewards (as was the case throughout the study for the control store).

**Measures**

**Performance.** Performance was the store's sales volume in terms of percentage achievement of quota. Percentage goal achievement is an appropriate measure given that quotas often account for individual store circumstances. Even so, these stores were shown to be relatively equal on most comparison criteria, and historically had been assigned similar quotas.

**Behaviours.** In addition to street-vending, other behaviours identified by the managers were measured to test that sales results were due to the planned intervention and not to an increase in other identified functional behaviours or to decreased dysfunctional behaviours within the store. These behaviours were similar to the five categories of retail behaviour used in an American behavioural management study (Luthans et al., 1981). These categories covered functional behaviours such as selling behaviour, stock work, and miscellaneous (returns, receiving instruction); and dysfunctional behaviours like idle-time and workstation absences.

Subjects were observed, and their behaviours recorded every half-hour for the duration of the study in both experimental and control stores (see Luthans et al., 1981; Welsh et al., 1993b for detailed discussions of this method). Forms were provided by the experimenter which listed the behaviour categories (in Russian), and provided spaces for the observer to record the store, the worker's name, the date, and the time of observation. A check would be placed in the appropriate box in a matrix designating the observation time and the observed behaviour. The behavioural observations were recorded by the store manager to minimize intrusion into the workplace. Both managers already observed and provided feedback on employee behaviour on an informal basis. A side benefit of this study was the development of a formal feedback programme for evaluating employee behaviour.

The managers were trained by the lead author consistent with prior studies using this method (again, see Luthans et al., 1981). This training emphasized the need for unobtrusive observation and recording to prevent the cuing of behaviour, the recognition and matching of behaviour to categories, and the sampling of behaviour within the half-hour time blocks. The managers in both stores were also cautioned not to develop predictable time schedules by which they would collect these data. Subsequent one-on-one discussions and observations support a conclusion that
the behavioural measurement method was successfully implemented in both stores. Store 1 was the experimental store, and Store 2 was the control store.

**Attitude.** To further test the impact of the intervention, certain standard attitude questionnaires were administered before the implementation and after the termination of the intervention. These measures were collected to determine whether there was any contamination. The instruments used were the Job Description Index (Smith et al., 1969) for measuring job satisfaction; the Job Diagnostic Survey (Hackman and Oldham, 1980) for assessing job enrichment; and the MOTT scales (Mott, 1972) for measured perceived organizational effectiveness. Twenty items from the Leader Behaviour Description Questionnaire (Stogdill and Coons, 1951) were used to measure direction, flexibility, and supervisor introversion.

These instruments were presented as one omnibus survey at each administration time. The survey was presented in Russian. Translation of the survey was performed using the back-translation method recommended by Earley (1989). The English version of the instrument was translated into Russian by a faculty colleague at Tver State University and then back to English from the Russian translation by a second faculty member; the retranslated English version was reviewed to verify whether it remained consistent with the original.

**RESULTS**

**Behavioural Measures**
Two different analyses were performed on the behavioural data collected by the observation procedure. The first analysis tested whether the contingent reward programme had an impact on the frequency of daily functional and dysfunctional behaviours during the intervention period. Investigating the impact of contingent rewards on functional and dysfunctional behaviour has been the focus of other studies (see Luthans and Kreitner, 1985). We checked here to see if there was an indirect effect, as non-street-vending subjects were informed they might have to work harder to make up for the time-off granted to the street vendor. An analysis of variance with repeated measures indicated levels of daily functional and dysfunctional behaviour did not change over time (F functional = 1.11, ns; F dysfunctional = 1.07, ns), thus the intervention did not have an apparent impact on non-experimental behaviour. However, there was a significant main effect for store, with the experimental store employees displaying more functional behaviours at all times (F functional = 45.45, p < 0.001; F dysfunctional = 44.96, p < 0.001), although the actual effect size is small. The global means for the entire study were Store 1 functional = 14.98; Store 2 functional = 14.70; Store 1 dysfunctional = 1.02; and Store 2 dysfunctional = 1.30.

**Attitude Measures**
The attitude data were collected for both exploratory and control purposes: these data were collected to determine if sales performance increased due to the intervention or due to a change in job attitudes.

Multiple analysis of variance with repeated measures tests provided little evidence that the intervention had a significant impact on attitudes. No interaction effects of store by
administration time were found for many of the measures. There were no differences in initial and follow-up attitudes across the stores over time for organizational commitment, descriptions of leader behaviour, the Smith et al. ratings of job satisfaction, or the Job Motivating Potential Score.

Only two measured effects over time were found that would suggest any effect of the intervention on attitudes. Both stores reported an increase in perceived feedback from the job \((F = 5.56; p < 0.023)\). This would follow from the activities of developing and measuring behavioural contributions to sales, and from the attention devoted to percentage sales quota achievement as the outcome variable of obvious interest to the American researcher. Clearly, a Hawthorne Effect may have occurred. Second, perceived productivity increased from the pre- to post-intervention measurement in both stores. These results, being subjective not objective, also seem to result from a Hawthorne Effect. Both stores were part of an American experiment, and given they were already at quota, they might have concluded that they had reached their peak for productivity — especially, given that the American researcher did not intervene in any other obtrusive manner. That is, the lack of subsequent action may have enhanced their self-perception.

The most telling findings were the many significant main effects that indicated differences in employee attitudes between the stores. The first set of differences in store attitudes were found in the job satisfaction categories. No differences were found between stores for measures of pay and advancement. This is not surprising given the compensation practices of Russian enterprises, or the identical personnel structure of the bookstores. However, the experimental store reported higher ratings than the control store for the elements of work itself \((F = 26.65; p < 0.001)\), supervision \((F = 29.62; p < 0.001)\), and co-workers \((F = 14.46; p < 0.001)\). The first difference is surprising given these were identical sites; and that no main effects were found for any of the job design elements measured by the JDS, except feedback. However, subjective impressions of work enjoyment are often enhanced by positive supervisory behaviour and group dynamics, which did appear to be present in the experimental store.

Further differences were found in analysing the responses to the MOTT scales. The experimental store perceived itself as more productive \((F = 5.57; p < 0.023)\), more adaptable to anticipating and solving problems \((F = 10.26; p < 0.003)\), more effective in general \((F = 6.62; p < 0.003)\), and having superior supervision \((F = 23.80; p < 0.001)\). Finally, results from the Leader Behaviour Description Questionnaire showed the manager of the control bookstore to be perceived as more introverted \((F = 14.74; p < 0.001)\), possibly indicating a lack of communication and feedback. However, this measure declined for both managers over time \((F = 7.21; p < 0.001)\). Therefore, it is fairly evident that differences existed between the two sites prior to the experimental intervention. These differences can be summarized as a more positive climate in the experimental store. Indeed, the data strongly suggest a more supportive and interpersonally skilled manager and a more cohesive group of salespeople in the experimental store.

These differences could confound the results for the impact of the intervention on sales performance. Therefore, the analysis of sales performance will be presented in two stages. The
first stage will present the simple analysis of variance results testing for main effect differences in performance between the two stores.

While this analysis does not account for the influence of the attitude differences, it allows for a simple presentation of the performance data. Besides, if no main effect existed for performance by store for the intervention, subsequent analyses would be unnecessary. If needed, the second stage will present hierarchical regression results controlling for the potential influence of situational effects (manager behaviour and job design) on performance (Cohen and Cohen, 1983).

**Performance**

Figure 1 and Tables I and II show the average weekly performance of each store over the six week duration of the study. These data showed a significant difference in performance between the stores in the baseline period ($F = 115.34; p < 0.000$). The experimental store had sales significantly greater than quota (110 per cent)

Figure 1. Weekly Sales Performance as a Percentage of Assigned Quota by Bookstore
whereas the control store had sales marginally above quota (101 per cent). However, the performance across the baseline period for the two stores is parallel. Thus we conclude the sales patterns were different in volume, but acceptable as a baseline measure given they displayed the same longitudinal behaviour. While traditional studies would call for stabilizing the baseline at equal levels, such opportunities were not available here. Even so, similar baseline patterns have been accepted in other studies.

The impact of the intervention is clearly shown in Figure 1. The slopes of the lines were similar during the baseline period. However, this similarity changed immediately on introduction of the experimental manipulation. The performance trend for the experimental bookstore showed an immediate and rapid increase in sales. The performance trend was unchanged for the control store in the intervention period. The results of an analysis of variance with repeated measures (shown in Tables I and II) indicated a significant interaction effect for time and store \( (F = 5.52; p < 0.001) \) during this period. Again, the experimental bookstore, which had higher sales to begin with, displayed increasingly higher sales than the control site (which exhibits constant sales performance) as a result of the contingent reward intervention.

To confirm that the observed effects were due to the designed treatment intervention, performance was measured for two weeks after the withdrawal of the manipulation. Unfortunately, recording difficulties and logistical problems in data collection and researcher transfer to the United States provided reliable performance data for only the first week of the reversal period. As shown in Figure 1, the sales performance of the experimental store immediately declined to its baseline level during the first week of withdrawal. The sales performance of the control store still remained unchanged.

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>MS</th>
<th>( F )</th>
<th>( p )</th>
<th>( \eta^2 )</th>
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</thead>
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<tr>
<td>Week</td>
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<td>115.54</td>
<td>4.50</td>
<td>0.004</td>
<td>0.09</td>
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<tr>
<td>Store</td>
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<td>2961.42</td>
<td>115.34</td>
<td>0.000</td>
<td>0.59</td>
</tr>
<tr>
<td>Week ( \times ) store</td>
<td>4</td>
<td>141.64</td>
<td>5.52</td>
<td>0.001</td>
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</tr>
</tbody>
</table>

Table I.
Analysis of Variance of Sales Performance as a Percentage of Quota Achievement

<table>
<thead>
<tr>
<th>Week ( \times ) Store</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
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<tbody>
<tr>
<td>Store 1</td>
<td>109.12</td>
<td>111.88</td>
<td>118.13</td>
<td>125.23</td>
<td>109.60</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>(2.85)</td>
<td>(6.08)</td>
<td>(5.71)</td>
<td>(5.80)</td>
<td>(8.07)</td>
<td></td>
</tr>
<tr>
<td>Store 2</td>
<td>100.78</td>
<td>101.97</td>
<td>97.70</td>
<td>101.17</td>
<td>101.30</td>
<td>–</td>
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<tr>
<td></td>
<td>(2.75)</td>
<td>(3.58)</td>
<td>(6.30)</td>
<td>(1.50)</td>
<td>(4.16)</td>
<td></td>
</tr>
</tbody>
</table>

Table II.
Means and Standard Deviations of Sales Performance as a Percentage of Quota Achievement (standard deviations in parentheses)

**Performance, Controlling for Attitude Differences**

Hierarchical regression analyses were used with performance as the dependent variable and store dummy coded as the independent variable (representing intervention [Store 1]/no intervention [Store 2]). Those scales within each instrument that had significant differences were entered as
control blocks. Each instrument was assessed separately to avoid problems of collinearity. A control variable representing the pre-/post-intervention administrations of the survey was also entered in the control block for each analysis (pre/post variable in Table III). The control variables were entered first and tested for a significant $R^2$. The store variable was entered as the second block and the change in $R^2$ tested to see if the intervention significantly affected performance after controlling for the attitude variables (Cohen and Cohen, 1983).

Table III provides the results of these regression analyses. While there were significant differences in attitudes between the stores, few of the individual attitude scales had a significant impact on sales performance. Supervisor behaviour (in the MOTT scale only) and feedback were the only significant factors associated with performance. However, as collective measures, each of the instruments did account for significant explained variance. These results would suggest a modest, yet noted impact of job attitudes on performance. However, the regression analyses demonstrated the intervention still had a strong and significant impact on performance, even after accounting for differences in reported job attitudes. The standardized beta for the store/intervention variable is highly significant in each of the four analyses ($p < 0.001$). The beta coefficient indicated a large effect size for the intervention after controlling for job attitudes (0.64 to 0.89). And, the

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>Variable</th>
<th>Beta</th>
<th>Variable</th>
<th>Beta</th>
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<td>(LBDQ)</td>
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</tr>
<tr>
<td>Work</td>
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<td>Adaptive</td>
<td>-0.06</td>
<td>Prepost</td>
<td>0.11</td>
<td>Prepost</td>
<td>-0.17</td>
</tr>
<tr>
<td>Supervisor</td>
<td>0.09</td>
<td>Supervisor</td>
<td>0.70d</td>
<td>Prepost</td>
<td>0.41c</td>
<td>Introvert</td>
<td>-0.38c</td>
</tr>
<tr>
<td>Co-workers</td>
<td>0.21</td>
<td>Productive</td>
<td>-0.18</td>
<td>Prepost</td>
<td>0.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R^2$  
Step 1  
0.31d  
Step 2  
0.64e  
$\Delta R^2$  
0.35c  
0.77c  
0.89c  
0.67c

Table III. Regression Results

intervention contributes sizably and significantly to the additional amount of explained variance in sales performance ($AV$ ranges from 0.35 to 0.67).

In summary, these data provided strong support for the effectiveness of the incentive system intervention. Clearly, the stores exhibited similar performance patterns, albeit at different sales volumes, under the initial baseline conditions. The introduction of the intervention led to a significant and positive impact on sales in the experimental condition only. This effect dissipated
on removal of the intervention. As demonstrated by the regression analyses, this impact was in addition to any potential impact of the higher experimental employee attitudes on performance.

DISCUSSION
This study sought to test if contingent reward systems developed in America could be implemented with success in Russia. In conducting this test, our interest was in increasing our knowledge and capability in transferring Western-developed management practices to organizations in need of transformational change. Such research is vital to assessing whether we have the current capacity to assist the dramatic transformation occurring in Eastern and Central European countries; or if we need to devote significant effort to re-assessing and adapting our knowledge to be of assistance in these ventures. The results of this study are encouraging. The use of a contingent reward programme had an immediate and positive impact on employee performance. These results are consistent with earlier work in the area of reward practices in Russia (Puffer, 1992a; Welsh et al., 1993a; 1993b) showing the application of desired outcomes can enhance employee performance. These results also suggest that our current theories of management can be utilized to implement change in the paradigm-shifting organizations of the former communist countries.

Obviously, the extent of this generalizability must be further examined by future studies and considered within the limitations of this study (only two study sites). However, when combined with the current body of literature, these results provide encouragement. One important finding is that the practice of reward incentive systems can be applied in Russia. While, as has been stated, Lenin promoted such management practices for a long time, their history of being unsuccessful generated considerable debate. Our results, along with those of earlier studies, suggest the problem may have resulted from the improper (or non-existent) identification of meaningful outcomes to be used as rewards, from constraints on managerial authority, or from a lack of resources. In this particular study, a desired and meaningful outcome was identified, and its use led to higher sales. One might infer that future collaborative development efforts should focus on the potentially available rewards themselves, not the system of providing them to employees. This suggestion would not be unlike the advocacy of cafeteria plans in American organizations (Lawler, 1981).

A further confirmation of this point is drawn from the strategy these workers themselves used in response to the intervention. Although the volunteer opportunity was open to each of the 12 retail employees in the experimental store, only three took advantage of it. This was unexpected, especially given that these workers were told that the non-street-vendors would have extra work to make up for the street vendor who left early. Collectively, the employees agreed to this arrangement. The three who did work the street were young mothers who stated they valued the ability to go home early with no loss of pay. The rest, in their distaste for the street-vending activity, were more than willing to pick up the slack (even though they also valued the time-off option). As in Western efforts to build teams, the workers developed a collaborative relationship — allowing a co-worker time off in exchange for themselves not having to street-vend. From the manager's point of view, this self-management relieved the manager of having to force employees out onto the streets. This arrangement indicates the benefits of identifying desired rewards, and it builds, no doubt, on existing group cohesiveness.

As discussed, there were apparent differences in the climate between the two stores. Earlier, we stated that the experimental store appeared to foster a more positive and supportive environment than the control bookstore. In analysing the questionnaire responses, it readily appeared that this climate was a function of the differences in leadership styles and management practices of the two managers. This fact was used to explain the baseline differences in initial sales volume. One
is left to wonder what results would have been found if the intervention/control assignments had been reversed. If known a priori, we would have utilized a staggered baseline-intervention-withdrawal design to test the intervention in each store (e.g. A-B-A-A in Store 1 and A-A-B-A in Store 2). However, these findings do point out other implications of applying Western-based management practices to changing Russian organizational behaviour.

The first additional implication deals with managerial behaviour. Independent of the reward practices, there appeared to be a leadership impact on performance. In the tradition of participative approaches to management in the United States, it appears that supportive and involvement-oriented behaviour may have similar positive effects in Russia. The experimental bookstore manager was rated as more supportive, less introverted, and more effective in setting direction. In fact, later discussions revealed that she was recognized as a superior manager by the state. As with American managers, her ability to communicate goals, listen to employees, and be supportive led to a more positive workplace climate. Additionally, the baseline measures suggest this managerial behaviour led to better sales performance than in the control store.

The second additional implication focuses on the importance of feedback and employee involvement. The experimental store reported a higher perceived level of feedback before the intervention began. The manager of the experimental bookstore said she often met with her workers to discuss work behaviours and to give verbal praise. This a priori difference is important to note in light of the baseline performance differences. However, employees in both stores reported greater feedback over the course of the study. One might initially conclude that the knowledge of being part of a study might have generated a Hawthorne Effect — especially a study by American researchers during a time of radical transition towards Western-style management.

A more likely explanation is the intervention-created specific, objective, and salient feedback systems for each of the stores. The process itself generated discussion about critical behaviours. It is quite likely that subsequent manager-worker discussions emerged in reference to the observation forms. Organizational change experts frequently comment that survey activities tend to draw attention to issues not previously considered. Others cite the importance of feedback in focusing and directing attention and effort. The workers in both of these stores needed feedback, and the intervention itself created a salient method to provide it.

Beyond the feedback effects, additional benefits may have come from the involvement of the employees in the study. These workers previously had been given information on performance expectations, trained in selling behaviour, and provided with information on store performance. Rarely, however, had they been asked for their attitudes and opinions on issues such as work behaviour, job design, or task assignments (who works the cart). Previously, a worker seldom received feedback focused specifically on her individual job activities. Now, individual workers not only received such feedback but began to feel included in the process of developing improvement strategies.

This study demonstrated the importance of participation and information in making changes, especially in such radical transformations as are now occurring in Central and Eastern European nations. The implementation of a behavioural measurement process did affect employee attitudes in a positive manner in both stores. Even so, it is important to remember that only the time-off reward incentive programme led to an increase in sales volume. When combined with the results of other studies, these results indicate the effectiveness of incentive systems directing change efforts in Russian settings. This intervention also identified the need to make change incrementally. By taking small steps over an extended period, individuals were able to adjust to
change while maintaining a needed sense of stability. In the current situation in Russia, change is whole-scale and rapid. Whereas the rigorous structure of behavioural management technology proposed by Luthans and Kreitner (1985) may seem contrary to traditional change efforts, its structure may actually be beneficial under conditions of transformational change. With everything else in a seemingly endless state of flux, contingent reward systems provide a source of stability. The procedure is simple and provides rapid, objective feedback. As workers are quick to see improvement, their confidence is enhanced. In closing, one might say that this intervention provides a source of structured incremental change in a turbulent setting — a rock to hold onto in the midst of a raging river of change.

REFERENCES


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