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Travor C. Brown and Gary P. Latham

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Article abstract

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TRAVOR C. BROWN
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This study assesses the effectiveness of goal setting, goal setting plus training in self-instruction, and being urged to do one's best on the performance of unionized employees (n = 32). The ability of managers, peers and self to observe changes in employee performance was also assessed. Appraisals were made prior to and 10 weeks following three interventions. ANCOVA indicated that employees who set specific, difficult goals had significantly higher performance than those in the doing one's best and those doing goal setting plus self-instruction. Moreover, self-efficacy correlated positively with subsequent performance. Employee satisfaction with the performance appraisal process was high across the three conditions. Peers provided better data for assessing the effect of an intervention than self or managers.

A primary purpose of performance appraisal is to coach and counsel employees in ways that instill a desire for continuous improvement (Latham and Wexley 1994). However among unionized employees, performance appraisal processes are rarely used (Ng and Maki 1994) as administrative decisions such as promotion, pay, and termination are usually based on seniority or other factors outlined in the collective labour agreement (Stone and Meltz 1993). Given that approximately 31% of the Canadian workforce

– BROWN, T. C., Faculty of Business Administration, Memorial University of Newfoundland, St. John's, Newfoundland.
LATHAM, G. P., Rotman School of Management, University of Toronto, Toronto, Ontario.

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is unionized (Akyeampong 1997), knowledge of ways in which performance appraisals can be implemented to improve the performance of these individuals is needed.

Given this void in the literature, the purpose of the present study was three-fold. First, to develop a performance appraisal process that facilitated coaching for continuous improvement among unionized employees. Second, to design and implement three different training methods to develop the competencies underlying this performance appraisal process. Third, to assess the effectiveness of these different training techniques in improving the performance of unionized employees.

THEORETICAL BACKGROUND

Two organizational behaviour (OB) theories, namely goal setting and social cognitive theories, were used to systematically develop a training program designed to accomplish this objective. Theory-based training provides a framework for developing training content, a basis for formulating hypotheses, as well as a rationale for explaining why an intervention was or was not effective (Latham and Crandall 1991). OB theories were chosen in response to Craig's (1988) call to bridge the gap between industrial relations (IR) and OB as OB theories have been largely overlooked in the IR literature.

Locke and Latham's (1990) goal setting theory was chosen because reviews of the literature suggest that it is among the most effective motivational theories in terms of validity and practicality (Miner 1984; Pinder 1997). This theory states that conscious goals regulate behaviour; specific difficult goals lead to higher performance than either no goals or abstract goals such as urging people to do their best; given goal commitment, high goals lead to higher performance than easy goals and variables such as praise and feedback only change behaviour to the extent that they lead to the setting of and commitment to a specific, difficult goal. These core findings are supported by over 400 laboratory and field studies (see the review in Locke and Latham 1990) that include experiments with loggers (Latham and Baldes 1975), maintenance employees (Frayne and Latham 1987), and truck drivers (Latham and Saari 1982). Within the context of performance appraisal, Latham, Mitchell, and Dossett (1978) found a linear relationship between goal difficulty and the performance of engineers and scientists. Consistent with the theory, feedback in the absence of goal setting did not have a significant effect on performance.

Bandura's (1986) social cognitive theory states that self-efficacy, or task specific confidence, can affect effort, persistence and the discovery of effective task strategies to attain a goal (Locke and Latham 1990).

Persuasion can be used to increase self-efficacy as people who are persuaded that they have the ability to master a given task are likely to mobilize sustained effort (Bandura 1986). Self-statements are particularly persuasive and thus play an important role in increasing self-efficacy (Bandura 1997). Research conducted in clinical (Meichenbaum 1971), sports (Anshel and Porter 1996) and educational (Schunk and Rice 1985) settings have shown that people who use self-instruction outperform those who do not. In organizational settings, Gist (1989) found significant increases in self-efficacy and performance (i.e., idea generation) among federal government employees using a single training intervention that included functional self-instruction. Similarly, Millman and Latham (in press) found that seven, two hour self-instruction training sessions conducted over a two and a half week period, resulted in significantly higher self-efficacy and a significantly greater number of displaced managers finding jobs within nine months of training than those in the comparison group.

To the researchers' knowledge, no study has examined whether self-instruction training can improve the job performance of unionized employees. Hence, this study examined whether self-instruction training when combined with goal setting increases performance as compared to goal setting alone or urging people to do their best.

Tziner and Kopelman (1988), in a study of Israeli airport employees, examined the effect of the performance appraisal instrument in facilitating the effect of goal setting. They found that employees appraised using behavioural observation scales (BOS) (Latham and Wexley 1977) had significantly higher levels of goal clarity, goal acceptance, and goal commitment than individuals who were appraised on a traditional graphic rating scale. Additional research has shown that BOS are content valid, have high inter-observer reliability, and are effective in facilitating feedback and goal setting in performance appraisals (Latham, Fay, and Saari 1979; Latham and Wexley 1994; Tziner and Latham 1989). For these reasons, BOS were used in this study to provide performance feedback to employees. In brief, BOS are algebraic, summated 5-point Likert scales. Because they are based on a job analysis, namely the critical incident technique (Flanagan 1954), they are ideal for coaching self as well as others. Moreover, because these scales are composed of behavioural referents that are under the control of the employee, and as the behaviours are observable, BOS focus the attention of the observer on pertinent behaviours. Thus, they conform to Wherry and Bartlett's (1982) theory of ways to minimize bias in ratings.

The BOS were completed by managers, peers, and self. This is because type II errors are problematic in field research, that is, an erroneous conclusion that an intervention was not effective. Managers often assess performance, yet they rarely see their workers and they do not seek

comprehensive information regarding an individual's performance (Komaki 1994). The use of multiple observers, namely, peers and self, in addition to managers, increases the probability that changes in an employee's behaviour would not go undetected. Peers, on the other hand, are aware of the aims and objectives of the person's job, frequently observe the person on the job, and can discern competent from incompetent performance. Hence, they have the necessary information to reach a conclusion regarding a person's performance (Latham and Wexley 1994). Consequently, anonymous peer ratings have high reliability and validity (Kremer 1990; Kane and Lawler 1978).

Similarly, with regard to self-appraisals, Downs, Farr, and Colbeck (1978) found that employees make realistic self-appraisals when behavioural scales are used. A meta-analysis by Mabe and West (1982) confirmed that when self-appraisals are not tied to administrative variables such as pay and promotion, their reliability and validity is satisfactory. Farh and Werbel (1986) found that telling people that their self-appraisals would be verified against performance assessments made by others decreases positive leniency, and Fox and Dinur (1988) found that this increases validity.

The following hypotheses were tested:

Hypothesis 1: There is a significant positive correlation between goal level and job performance.

Hypothesis 2: Employees who set a specific, difficult goal have significantly higher performance than those who are urged to do their best.

Hypothesis 3: Participants who receive self-instruction training and set goals have significantly higher self-efficacy and performance than those who set goals or who are only urged to do their best.

Hypothesis 4: Self-efficacy correlates positively with performance.

Hypothesis 5: Only peer and self assessments detect changes in an employee's behaviour.

METHOD

Sample

The initial sample consisted of 36 unionized employees of a Canadian telecommunications company whose job titles included customer service representative, materials coordinator, and accounting clerk. Participants were randomly assigned to one of three training conditions (goal setting, self-instruction plus goal setting, do your best). As the company was undergoing a major restructuring, several employees were removed from their

normal jobs. Consequently, four people dropped out of the study and the final sample was 32 employees (goal setting = 11, self-instruction plus goal setting = 9, do your best = 12). The average participant was a 42.81 (SD = 8.11) year old female (75%).

The population from which the sample was selected was chosen for three reasons. First, data from an internal employee survey revealed that this employee population desired a formal feedback process. Second, the company was interested in assessing the effectiveness of different methods of improving employee performance. Third, as previously noted, there has been limited research concerning the implementation of performance appraisal processes in a unionized setting (Stone and Meltz 1993).

Procedure

An overview of the study's purpose and time-line was presented to managers, union representatives and employees, respectively. In these meetings, there was no discussion of the training manipulations or the hypotheses. Participants were only informed that the study would examine the effectiveness of goal setting and feedback on their job performance. In accordance with the union's request, participants were also informed that the training was voluntary, the feedback was solely for developmental purposes, disciplinary actions could not result from an employee's feedback, this training would cause no job loss, and peer feedback was anonymous.

Development of a performance appraisal instrument. BOS were developed following the recommendations of Latham and Wexley (1977, 1994). A critical incident job analysis (Flanagan 1954) was conducted with the unionized employees where they generated examples of effective and ineffective behaviour which they had observed take place on the job. Over 65 incidents were generated. These were consolidated into 31 behavioural items. Each item was categorized into one of the company's seven core competencies, namely, working with others, customer orientation, professional/technical expertise, relationship building, building trust, innovation, and adaptability. Each employee was subsequently asked to examine the BOS, rate themselves on the BOS, and make any suggestions/comments regarding the instrument. The internal consistency of the BOS was satisfactory (Cronbach's alpha (a) = .76).

Collection of Time 1 Performance Measures. Employees were asked to distribute copies of the BOS to their manager and peers (minimum of 2; maximum of 6). The peers and managers were not aware of the experimental conditions to which the employee was assigned.

Training Manipulations. Participants took part in three training sessions over a three week period. These sessions lasted between 45 and 75 minutes.

Goal Setting. These sessions lasted approximately 45 minutes. In the first session, participants were informed of their training condition. To minimize contamination across conditions, participants were asked not to share specifics concerning their training with others. They were briefly instructed on the scientific research process and the importance of minimizing the effects of extraneous variables. They were then trained to set SMART (Specific, Measureable, Attainable, Relevant, Time-based) goals (Mealiea and Latham 1996). Each participant then set a specific, difficult, yet attainable goal for the BOS score she or he wished to attain on the second wave of feedback. A participative goal was used as participation can lead to the setting of a more difficult goal than that which is assigned (Latham, Mitchell and Dossett 1978). Consistent with Latham and Yukl (1976), if the goal selected was too easy or too difficult, the trainer urged participants to set a goal that is difficult, yet attainable. Participants also identified three to five specific behaviours that they wished to develop to help them achieve their goal. The goal, goal commitment, and self-efficacy measures were assessed at this time.

Sessions two and three focused on reviewing the elements of SMART, having participants verbally present their goals, and having them explain why their goal was important to them. This discussion was included because providing the rationale for a goal and tying it to important personal values can increase goal commitment (Locke and Latham 1990). The third session included relapse prevention techniques (Marx 1982). Specifically, each participant identified obstacles to the successful demonstration of the BOS behaviours on the job. As a group, they brainstormed ways in which the obstacles could be overcome. Handouts were used to record this information. The session ended with questionnaires used to record the employees' assessment of training effectiveness.

Self-Instruction plus Goal Setting. This training replicated the previous training with regard to goal setting. It was augmented with approximately 30 minutes of self-instruction training, adapted from Meichenbaum (1977) and Millman and Latham (in press). In the first session, participants discussed their thoughts and feelings concerning the skills listed on the BOS. Then, self-instruction was defined and participants discussed how their self-instruction statements could impact their job performance. The participants discussed and reviewed the negative and positive self-instruction statements that were recorded on a worksheet. This was followed by self-instruction of a BOS behaviour using the statements recorded in the worksheets. Following the procedure of Millman and Latham (in press), this self-instruction consisted of three types of statements. It began with negative self-statements (e.g., "I just can't keep in contact with all of my customers... there are simply too many of them and not enough time"), moved to neutral

statements (e.g., "When I think about it, I haven't really tried to keep in contact with all of them... Now, how can I ensure better communication with my customers"), and ended with positive self-guidance statements (e.g., I can plan my week ahead of time and so that I contact each customer at least once per week. That way, I can ensure that I keep in contact with my customers). Consistent with Meichenbaum (1977) each statement was modelled by the trainer, then repeated by the participants aloud, and finally repeated by the participants silently. The trainer ended the session by giving the participants a log and to record their self-instruction statements over the coming weeks.

In the second and third sessions, the participants discussed and reviewed some of the negative and positive self-instruction statements that they had recorded in their log books. This was followed by self-instruction training using the statements recorded in the logs. The third session included relapse prevention techniques for both goal setting and self-instruction training.

Do Your Best. This training was identical to the goal setting training with the following exceptions: there was no goal setting or relapse prevention training. Consistent with Latham, Mitchell and Dossett (1978), participants in each session were urged to do their best to demonstrate the behaviours listed on the BOS as their scores would be compared to people in the other groups. Participants also individually discussed the importance of demonstrating these behaviours and why they believed it was important to do so on the job.

Time 2 Measures. Ten weeks after the final training session, thirteen weeks after Time 1 measures, the BOS and the self-efficacy questionnaires were completed. All forms were returned directly to the researchers.

RESULTS

Manipulation Checks

Manipulation checks serve two main purposes (Kervin 1992). First, they determine whether the variables that were manipulated by the trainers were in fact used differentially in the different experimental conditions. Second, they verify that the control group did not receive the treatment that is being manipulated. In the present study, goal setting manipulation checks included goal difficulty, specificity, and commitment. These measures were chosen as each has been shown to be critical to the effectiveness of a goal setting intervention (Locke and Latham 1990). In addition, all DYB participants were asked at the end of the study if they set goals

concerning the BOS. Two of the DYB participants reported that they set a goal; hence, they were removed from subsequent analyses.

Goal specificity and difficulty were assessed using questions adapted from Latham, Mitchell and Dossett (1978). Both measures were assessed at the end of the study using a 5-point Likert-type scale. The first question asked participants to state the degree to which they believed that their goal was specific. The overall mean was 3.90 (SD = .91) indicating that the goals were perceived as specific. There was no significant difference between the two goal setting conditions ($t = .05, p > .05$). The second question asked participants to state the degree to which the overall goal was difficult. The grand mean of 3.60 (SD = 1.14) indicates that participants perceived their goal as being moderately difficult. A t-test revealed no significant differences in goal difficulty in the two goal setting conditions ($t = .90, p > .05$). The mean goal was 103.05 out of 122 (SD = 12.20).

Goal commitment was assessed using Hollenbeck et al. (1989) seven-item goal commitment scale. It was administered immediately following goal setting using a five-point Likert type scale. As Cronbach's alpha for the scale was only .60, the two reverse-scored items were dropped. The resulting five-item scale had a Cronbach's alpha of .72. With an overall mean of 19.15 (maximum score = 25; SD = 3.13), the participants indicated commitment to their goals. There was no significant difference in goal commitment between the two goal setting conditions ($t = .09, p > .05$).

Manipulation checks for self-instruction training included self-efficacy with regard to using self-instruction, and usage of the self-instruction skills. Self-efficacy was assessed consistent with the recommendations of Lee and Bobko (1994). Specifically, self-instruction participants were asked to indicate if they believed they could perform the five self-instruction skills (yes/no) and their confidence in their ability to perform each of them (on a 10-point scale). While a composite measure can be created through the use of z scores, Lee and Bobko (1994: 368) suggested that the method used in this study "may be the measure of choice" as it is the least cumbersome. The reliability of the scale was satisfactory ($\alpha = .80$). A mean of 39.25 (maximum score = 50, SD = 3.20) indicated that they were confident in their ability to use these skills. Self-instruction usage was assessed using a four-item scale. This scale asked participants to state the extent to which they were aware of their self-instruction, monitored their self-instruction, generated positive self-instruction statements and converted negative statements to positive ones. Cronbach's alpha for the scale was .93; the overall mean was 13.55 (maximum score = 20; SD = .72). Analysis of variance (ANOVA) failed to detect significant differences among groups. Thus the self-instruction training was not effective as the participants in this condition did not use self-instruction more frequently than participants in the two conditions who did not receive this training.

Dependent and Intervening Variables

The dependent variables in this study were performance as well as satisfaction with the appraisal training process. The intervening variable was self-efficacy regarding performance. Participant satisfaction with the appraisal training process was assessed at the end of the training program. Performance and self-efficacy measures were collected at the beginning of the study and 10 weeks subsequent to training. There was no significant differences in the Time 1 pre-measures among conditions. Time 2 means and standard deviations by condition are presented in Table 1. The managers and peers were blind to the assignment of participants to conditions as well as to the hypotheses of the study.

TABLE 1

Time 2 Satisfaction, Performance and Self-Efficacy Means and Standard Deviations

	Do Your Best	*Goal Setting*	*Goal Setting + Self-Instruction*
Satisfaction	42.13 (2.95)	43.14 (3.08)	43.42 (4.47)
Performance			
– Self Rating	102.90 (9.62)	109.75 (10.04)	97.00 (16.71)
– Peer Rating	105.36 (11.37)	110.80 (9.67)	102.68 (9.54)
– Manager Rating	103.55 (12.67)	98.70 (11.26)	98.37 (9.39)
Self-Efficacy	39.20 (11.55)	39.64 (10.22)	35.89 (9.32)

Note: standard deviations in parentheses.

Satisfaction. Employee reactions (10-item, 5-point scale; maximum score = 50) to the training was assessed using questions adapted from Gist (1989) and Wexley and Latham (1991). Sample items included: I found the handout material valuable for developing the skills on the feedback form; I would recommend this training to others; Overall, I am satisfied with this training program. Cronbach's alpha for the reaction scale was .70. Overall, participants were very satisfied with the training (M = 42.87, SD = 3.41). ANOVA revealed no significant differences among the three training conditions regarding levels of satisfaction ($F = .29$, $p > .05$).

Performance. Cronbach's alpha coefficients for self, peer (minimum of 2, maximum of 6) and manager ratings were 95, .98, .93, respectively. The Pearson r between peer and self-ratings was .38 ($p < .08$). Manager ratings did not correlate significantly with self or peer ratings.

Peer ratings. The Pearson r between goal level and performance was .62 ($p < .05$). Analysis of Covariance (ANCOVA) revealed a significant

difference among training conditions ($F_{3, 20} = 3.28$, $p = .06$). Planned t-tests revealed, contrary to the hypothesis, that participants trained to set goals had significantly higher performance than those in the goal setting plus self-instruction condition ($t = 2.43$, $p < .05$) and those in the DYB condition ($t = 2.13$, $p < .10$). The correlation between self-efficacy and subsequent peer assessments of performance was not significant ($r = .03$, $p > .05$).

Self-ratings. The Pearson r between goal level and performance was .48 ($p < .06$). ANOVA did not reveal a significant effect for training conditions ($F_{2, 23} = 2.15$, $p > .05$). However, planned t-tests revealed, again contrary to the hypothesis, that participants who were trained in goal setting had significantly higher performance than those in the goal setting plus self instruction ($t = 2.07$, $p < .05$). There was no significant difference between participants in the goal setting versus DYB conditions ($t = 1.18$, $p > .05$). The correlation between self-efficacy and subsequent self-assessments of performance was significant ($r = .59$, $p < .01$).

Manager ratings. Neither the Pearson r between goal level and performance nor the ANCOVA on the performance measures revealed significant relationships ($F_{2, 26} = .65$, $p > .05$) Nevertheless, the correlation between self-efficacy and subsequent ratings of performance from managers was significant ($r = .36$, $p < .05$).

Self-efficacy. Participants were asked to indicate if they believed they could attain a certain BOS score (yes/no) and their confidence in their ability to achieve the score (on a 10-point scale). Cronbach's alphas were .81 and .78 for Time 1 and 2, respectively. ANOVA failed to reveal a significant difference between training conditions ($F_{2, 27} = .38$, $p > .05$).

DISCUSSION

The theoretical and practical significance of this study to the IR literature is five-fold. First, the study extends the external validity of goal setting theory (Locke and Latham 1990). Two core findings of this theory are as follows. First, given goal commitment, there is a positive relationship between goal level and performance. Second, specific, difficult goals lead to superior performance than do vague goals such as urging people to do their best. In the present study, goal commitment was high and there was a significant correlation between goal level and subsequent performance with unionized employees, a population who had not been studied previously within the context of performance appraisal. Thus, the first hypothesis was supported. In addition, the results showed that unionized employees who set specific, difficult goals had higher performance than those who were urged to do their best when peers were used as observers.

Second, the study similarly extends the external validity of social cognitive theory (Bandura 1986, 1997) to a population of workers, unionized employees, who had not been studied previously. The theory states that self-efficacy can affect performance directly, or indirectly though an effect on goals. In the present study, self-efficacy correlated positively with subsequent performance. Thus, the fourth hypothesis was accepted. Subsequent studies that employ a larger sample size should investigate whether self-efficacy is an intervening variable in the relationship between goal setting and the performance of union workers.

Third, the study shows that two direct ways to increase the performance of unionized employees are to focus on goal setting and on ways to increase their self-efficacy. This supports Craig's (1988) advice to examine OB theories for their utility in IR settings. Training in self-instruction did not increase self-efficacy or performance. Thus, the third hypothesis was rejected. That self-efficacy regarding ability to do what was taught in the self-instruction training was high may reflect nothing more than the fact that people know they have the ability to instruct themselves. Additional hours of training may be necessary to teach them the discipline to do so, namely, to engage in functional self-instruction. For example, everyone knows they have the ability to eat less food in order to lose weight, but clinical psychological research shows that hours of training are necessary to give people the discipline to say no regarding the intake of food.

Fourth, the study demonstrates that unionized employees appreciate performance feedback for coaching and development purposes, and are willing to accept feedback from managers, peers, and themselves. Anecdotal data support the quantitative analysis of the reaction measures. Numerous employees commented that "for the first time I know what skills to develop to improve myself on the job." A boundary variable for this conclusion, however, may be the union executive's stipulation that no disciplinary action could be taken based on this feedback. Had this stipulation not been in place, the employees might have resisted performance appraisals. With this stipulation, the union executive voluntarily provided suggestions on ways to increase union member participation in this study.

Fifth, the study indicates that peers are better able to detect changes in a unionized employee's behaviour than the employees themselves or their supervisor. Thus, the last hypothesis was accepted. As noted in the introduction, this finding corroborates numerous studies involving populations of workers that show that peers have more opportunities to observe one another than do their supervisors (Latham and Wexley 1994). Moreover, several managers stated that because this was the first time that these employees were given feedback from them in a formal manner, they gave employees similar ratings (i.e., committed central tendency error). Hence,

restriction of range may have precluded the finding of significant differences between conditions.

A limitation of this study is the small sample size, which in turn reduces statistical power to find significant differences (Kervin 1992). Thus the study needs to be replicated with a larger sample size. A larger sample may show that with the requisite hours of training in functional self-talk, employee performance increases above that which occurs with goal setting alone. To the extent that this increases self-efficacy, obstacles to goal attainment are likely to be viewed as challenges to overcome rather than reasons to abandon the goal.

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RÉSUMÉ

Les effets de l'élaboration d'objectifs et de l'autoformation sur le rendement des salariés syndiqués

Un des objectifs de base de l'évaluation du rendement est de soutenir et de conseiller les employés de façon à susciter chez eux un désir d'amélioration continue (Latham et Wexley 1994). Cependant, de telles évaluations du rendement sont rarement utilisées en milieu syndiqué (Ng et Maki 1995), les décisions administratives à l'égard des promotions, de la rémunération et de la fin d'emploi étant basées sur l'ancienneté ou sur d'autres facteurs définis dans la convention collective (Stone et Meltz 1993). Le but du présent article est alors de développer un tel processus d'évaluation du rendement en milieu syndiqué.

Trente-deux employés syndiqués ont été référés au hasard à une de trois formes de formation (se fixer des objectifs, autoformation et fixation d'objectifs et faire de son mieux). Avant cette formation et pendant dix semaines après celle-ci, leur rendement fut évalué au moyen d'échelles d'observations behaviorales construites pour la présente étude. Le rendement fut évalué par les gestionnaires, par les pairs et par les individus visés eux-mêmes.

L'évaluation des pairs démontre que les employés qui se sont fixés des objectifs ont eu un rendement significativement plus élevé que ceux qui ont été référés aux deux autres formes de formation. L'auto-évaluation va dans le même sens. La satisfaction des employés eu égard au programme de formation à l'évaluation du rendement était élevée pour toutes les formes de formation.

L'importance pratique de la présente étude pour les relations industrielles réside dans la démonstration faite que des interventions en matière d'évaluation du rendement peuvent être réalisées en milieu syndiqué. Dans notre étude, les gestionnaires, le syndicat et les employés désiraient une réaction de notre part pour fins de développement. De plus, le haut degré de satisfaction noté dans toutes les formes de formation utilisées suggère que de telles interventions sont acceptables pour tous les acteurs du système de relations industrielles.

Sur le plan théorique, les implications de la présente étude sont doubles. Premièrement, elle soutient la validité externe de la théorie de la fixation d'objectifs (Locke et Latham 1990). Les deux principales conclusions de cette théorie sont les suivantes : d'abord, vu l'engagement envers un objectif, il existe une relation positive entre le niveau de l'objectif et le rendement. Ensuite, des objectifs spécifiques élevés mènent à un rendement supérieur à celui atteint par des objectifs vagues, tel demander aux

gens de faire de leur mieux. Ici, l'engagement envers l'objectif était élevé et il y a eu corrélation significative entre le niveau de l'objectif et le rendement subséquent de ces employés syndiqués. De plus, les résultats démontrent que ces employés qui s'étaient fixés des objectifs spécifiques élevés ont eu un rendement supérieur à ceux à qui on avait demandé de faire de leur mieux.

Deuxièmement, la présente étude permet d'étendre la validité externe de la théorie sociale cognitive (Bandura 1986, 1997) à des employés syndiqués, ce qui n'avait pas été encore étudié. Cette théorie soutient que l'auto-efficacité peut influencer directement le rendement ou indirectement par un effet sur les objectifs. Ici l'auto-efficacité a une corrélation positive avec le rendement subséquent.