

———— **Research Report** ————  
**Corcan Instructor Leadership  
and Offender Work Attitude**

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**Corcan Instructor Leadership and Offender Work Attitudes**

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## EXECUTIVE SUMMARY

In 1993, CORCAN instituted a series of studies designed to assess the impact of institutional employment programming on offenders, with the ultimate purpose of evaluating CORCAN's contributions to offender employability. One of the preliminary studies under the employability initiative assessed the relationship between leadership styles of CORCAN instructors and offender work attitudes. Given the findings that more positive self-reported work attitudes for offenders were related to an active "transformational" leadership style (Gillis, 1994), CORCAN implemented leadership training for instructors on a national scale.

This leadership training took place in two phases. The first phase began in 1996 in the Atlantic, Quebec, Prairie and Pacific regions. Concurrently, research was conducted to evaluate the influence of leadership training on instructors and its subsequent effect on offenders. The second phase began in 1998 in which further leadership training was given to instructors in the Ontario region. A corresponding evaluation was also undertaken to assess the Ontario-based leadership training.

The present report was prepared to evaluate the relationship between: (a) instructor leadership orientation and offender work attitudes; (b) leadership training and instructor leadership orientation; and (c) instructor leadership training and offender work outcomes. To this end, instructors and offenders completed questionnaires before and after leadership training; instructors and offenders completed ratings of leadership style used by the instructors, and offenders completed a battery of work attitude measures.

Findings from the first study replicated the results reported by Gillis (1994), with instructors rated higher on transformational orientation and credibility associated with more positive work attitudes in offenders. Moreover, a nonleadership orientation was generally associated with lower scores on measures of offender work attitudes. This strong relationship between instructor leadership and offender work attitudes reiterates the integral role of correctional staff in contributing to offender outcomes.

Results, however, indicated negligible change on instructor leadership style and no difference in offender work attitudes from pre- to post-test. Notably, offenders did not report any differences in observed instructor leadership styles as a result of training but instructors rated themselves as displaying more transformational behaviours following leadership training.

Unfortunately, because leadership training was not fully implemented in the Ontario region, the second study was not completed. Explanations for the findings from the first study are discussed, and future research proposed.

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## INTRODUCTION

The correctional strategy adopted by the Correctional Service Canada (CSC) advocates the provision of intervention and programming on the basis of offender risk and need. Specifically, offenders should be provided with the opportunity to participate in programs that respond to identified criminogenic needs. Further, when these needs are effectively addressed, offender risk for future involvement in crime should be decreased (Andrews & Bonta, 1998; Andrews, Bonta, & Hoge, 1990). Employment constitutes a prevalent offender need, with as many as 75% of federal offenders identified as having employment deficits upon entry to the correctional system (Motiuk, 1997).

Empirical evidence for a link between offender employment and reintegration potential (e.g., successful release) was provided in a recent meta-analytic review of the literature (Gendreau, Little, & Goggin, 1996). In their quantitative review, Gendreau and his colleagues identified unstable education and employment (subsumed within the broader “social achievement” domain) as a contributing factor ( $r = .15$ ) to recidivism among offenders. An expansion of the meta-analysis was conducted as part of a larger review of the CSC Dynamic Factor Identification and Analysis (DFIA) protocol, from the Offender Intake Assessment (OIA) process (see Gendreau, Goggin, & Gray, 1998). The authors reported education/employment ( $r = .26$ ), employment needs at discharge ( $r = .15$ ), and employment history ( $r = .14$ ) as some of the most powerful predictors of recidivism within the employment domain. The average correlation with recidivism of the 200 effect sizes from 67 studies ( $r = .13$ ) was comparable to correlations between the marital/family (.14), substance abuse (.12) and personal/emotional (.11) DFIA domains and recidivism. These are lower than correlations between associates/social interaction (.18), community functioning (.15), and attitudes (.16) and recidivism (see Brown, 1998). Gendreau and his colleagues also proposed the incorporation of additional dynamic assessment tools (i.e., relating to offenders’ work attitudes, values, beliefs and satisfaction with employment) as a means of enhancing the predictive validity of the employment domain.

Offender employment deficits are most frequently addressed through institutional employment experience and training. Within the Canadian federal correctional system,

such training is provided primarily through CORCAN, a special operating system comprised of institutional manufacturing (industries), agribusiness (farming), construction, services (i.e., keyboarding, data entry, and telemarketing) and textiles operations.

Employment opportunities and work placements for offenders have existed since the advent of jails and prisons, but have been attributed different functions over time, in accordance with prevailing correctional ideology (Miller & Grieser, 1986). Although widely recognized for their contribution to maintaining institutional order and occupying offenders (Grieser, 1996; Guynes & Grieser, 1986; Maguire, 1996), offender employment programs have more recently received renewed interest in the correctional literature and in practice for their demonstrated relationship with safe reintegration and rehabilitation (Fabiano, LaPlante, & Loza, 1996; Gillis, Robinson, & Porporino, 1996; Motiuk, 1996; Mulgrew, 1996; Saylor & Gaes, 1995, 1996). Importantly, offenders also perceive institutional employment programs and experience as important for successful community reintegration (Gleason, 1986). Further, many acknowledge the role of educational and employment deficits in contributing to their criminal offending (Erez, 1987; Gleason, 1986).

An accepted tenet related to the provision of employment training is the development of positive work habits that contribute to offender rehabilitation (Fabiano et al., 1996; Guynes & Grieser, 1986). Consequently, CORCAN has reoriented its focus to the development and enhancement of generic employability skills, rather than specific job skills, as a means of contributing to offender reintegration potential (Fabiano et al., 1996). An increased appreciation of the need for generalizable skills has developed in part from recognition that community employment opportunities are often not comparable with institutional training. It is anticipated that this reorientation will provide institutional employment opportunities that lead to the development of attitudes, skills, and abilities that are more transferable to community employment situations.

### **Leadership Orientation and Credibility**

In 1993, CORCAN and the Research Branch instituted a series of studies designed to assess the impact of institutional employment on offenders. More specifically, they undertook an empirically guided exploration of factors that contribute to offender

employability. One component of employability is the relationship between work attitudes, comprised of such factors as motivation and involvement, and behaviour. Given that correctional shop instructors spend the majority of the working day with offenders, they play an integral role in contributing to the types of work attitudes that offenders develop and maintain. Their role is not solely to provide instruction in specific job skills, but also to promote and reinforce positive attitudes and behaviour among offenders in the work environment, providing continuity in the transition from correctional programs to practice.

In recognition of the potential influence of shop instructors, it was determined that their leadership style should be assessed, as leadership constitutes one of the most influential factors in contributing to employee work attitudes, motivation, and behaviour (Bass, 1985, 1990; Bass & Avolio, 1990).

One of the most prominent leadership typologies, from Bass and Avolio (1990) examines transformational, transactional, and nonleadership orientations. Transformational supervisors inspire and motivate employees to achieve their goals, by promoting attitudinal and behavioural change. They are viewed as coaches, or mentors, who assist employees in attaining their full potential. Transactional leaders, although less active in promoting higher-level change, participate in “transactions” with their employees; employees are rewarded for attaining predetermined objectives and punished for failing to achieve goals (Bass, 1990). Nonleadership is characterized by a “laissez-faire”, passive approach to the management of employees (Bass & Avolio, 1990). The use of transformational leadership by supervisors is consistently associated with increased motivation in employees (see Bass, 1990 for a review) and an “augmenting” effect above and beyond that associated with transactional leadership (Bass, 1985).

Another factor that contributes to effective leadership is credibility (Kouzes & Posner, 1989, 1993). In their research, Kouzes and Posner found that people attribute a great deal of importance to the construct of credibility; people want to feel confident in placing trust in their supervisor. Honesty, inspiration, and competency are regarded as three characteristics essential to perceived credibility and effective leadership.

## **Leadership in a Correctional Context**

Although general consensus exists regarding the influence staff have on offenders, surprisingly few studies have been conducted to examine this issue. The majority of studies have focused on the types of attitudes held by correctional staff regarding correctional issues (e.g., support for a rehabilitative or punitive orientation in dealing with offenders), but have not explored how these attitudes impact offenders. Only two studies have been conducted within the correctional realm to assess the effect of instructors' leadership styles on offenders.

Crookall (1989) examined the impact of leadership training on offenders. Correctional industries instructors were trained in either situational leadership (responding to employees differentially according to the presenting situation) or transformational leadership; offender productivity, skill development, work habits and personal growth were outcome measures. Although results indicated statistically significant gains in offender productivity and personal growth for both experimental groups (compared to a control group whose instructors received no training), greater improvement was associated with offenders whose instructors were trained in transformational leadership. Specifically, the transformational group underwent significant improvements in personal growth, as gauged by decreased turnover, increased work habits, increased respect, increased job skills, and progress toward rehabilitation. In addition, individual performance ratings and shop ratings increased, as did overall productivity (Crookall, 1989).

Gillis (1994) extended Crookall's study to supplement the assessment of instructor leadership style with an evaluation of instructor credibility. Furthermore, standardized measures of work attitudes were included in the assessment battery of offender attitudes. Offender ratings of instructor leadership style and credibility were examined for their relationship to work attitudes reported by offenders.

As predicted, leadership style and credibility were related to the offenders' work attitudes. Offenders who rated their instructors as displaying a transformational style of leadership reported significantly more positive work attitudes and outcomes. More specifically, higher levels of job involvement, intrinsic job motivation, meaningfulness of

work and responsibility for work outcomes were reported by offenders who rated their instructors higher on transformational leadership orientation.

Furthermore, offenders who rated instructors as active transformational leaders reported higher levels of shop effectiveness and a greater willingness to exert extra effort. Importantly, offenders who rated their instructors as high on transformational leadership were more punctual in arriving to work, as rated by shop instructors. Therefore, these findings confirm instructor leadership styles influence objective, behavioural outcomes of improved employment skills for offenders. Identical findings were obtained for the credibility construct, with the exception of the behavioural outcome, punctuality.

Interestingly, transactional leadership was not related to offender work attitudes. Nonleadership, however, was associated with negative offender work attitudes. Essentially, findings were opposite those obtained for transformational leadership and credibility. Offenders who rated their instructors higher on the nonleadership dimension reported lower levels of job involvement, meaningfulness, responsibility, extra effort, and effectiveness.

This leadership study was cross-sectional in nature, thereby limiting “causal” conclusions that may be drawn. Nonetheless, this research provided an important indication of the potential influence correctional instructors can exert on offenders' behaviour and attitudes. Additionally, the study contributed to the industrial/organizational literature by providing further support for the application of leadership typologies in different organizational contexts, including corrections.

## **Present Study**

Given the results reported by Crookall (1989) and Gillis (1994), it was determined instructors should be provided with training designed to promote positive leadership qualities. It was postulated that training should contribute to the increased use of effective leadership styles and subsequently, improve the quality of interaction between shop instructors and offenders. An anticipated outcome of enhanced leadership style would be an improvement in offenders' work attitudes.

In summary, the present study was designed to evaluate the relationship between: (a) instructor leadership orientation and offender work attitudes; (b) leadership training

and instructors' leadership orientation; and (c) instructor leadership training and offenders' work outcomes.

## METHOD

### Participants

Participants for the study included instructors ( $n = 98$ ) and offenders ( $n = 450$ ) from 17 CORCAN sites in the Atlantic, Quebec, Prairies and Pacific regions. The demographic information presented in the following section was obtained during the pre-test session.

### Instructors

Instructors reported working an average of 7.1 years with CORCAN. One quarter (24.2%) of the instructors worked in minimum security institutions, more than half (54.7%) in medium security, and one fifth (21.0%) in maximum security or multilevel institutions. In response to education level completed, 28.7% attained a secondary or high school diploma or less, 10.6% obtained some college or university, and 3.2% obtained a bachelor's degree. More than one-quarter (28.7%) obtained a trade certificate and almost one fifth (19.1%) obtained journeyman status. Finally, 9.6% responded to the "other" category. Respondents were also asked if they would re-enter the field of corrections if they had the choice; two thirds (66.0%) responded that they would, 23.4% were unsure, and 10.6% indicated that they would not.

Offenders. In addition to basic demographic information, offenders were requested to provide information relating to: (a) employment experience prior to incarceration; (b) institutional employment experience; (c) level of education completed; and (d) participation in institutional programming.

The average age of offenders who participated in the study was 36 years ( $SD = 10.2$ ). The average period of continuous (i.e., uninterrupted) employment experience outside of the institution reported was 62 months ( $SD = 10.2$ ; median 29 months). One fifth (20.6%) of the sample reported continuous community employment of six months or less, 12.3% between six months and one year, one quarter (24.7%) between one and three years, and approximately 40% for more than three years.

Two fifths (40.7%) of the respondents reported working for institutional work placements other than CORCAN during their current sentence. One quarter (25.8%) reported working previously for CORCAN. A total of 50% of offenders worked for six

months or less, 25% between six and 12 months, and 25% for one year or more at the time of the pre-test.

In response to education level completed, one third (31.4%) of offenders reported obtaining either a high school or General Education Diploma and 13.2% reported obtaining a community college diploma/certificate or graduating from university. Almost one-fifth (19.3%) indicated completion of grade 8 or less, 15.2% completed Adult Basic Education, and 20.7% reported participating in training/education other than the aforementioned programs.

Finally, offenders were requested to complete a section on program participation. Of the offenders who responded to these questions (76.6%), over half indicated that they had participated in Cognitive Living Skills (57.1%), Offender Substance Abuse Pre-Release Program (OSAPP) (53.6%), and educational programs (50.7%). Slightly more than one fifth of the respondents had participated in the Living without Violence program (22.6%) and sex offender programming (21.2%).

## MEASURES

### Shop Instructor Survey

Leadership. The Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1990) examines behaviours relating to a transformational, transactional, and nonleadership orientation. Response options range from “Not at all,” scored as a 1, to “Frequently, if not always,” scored as a five on a five-point Likert scale, with higher scores indicating higher endorsement of the leadership items. The shop instructor questionnaire (MLQ-5X-Self; Bass & Avolio, 1990) provided self ratings of leadership while the offender questionnaire (MLQ-5X-Rater; Bass & Avolio, 1990) provided ratings of their shop instructor.

Five leadership behaviours are associated with a transformational orientation: Attributed Charisma (8 items), Idealized Influence (10 items), Inspirational Leadership (10 items), Intellectual Stimulation (10 items), and Individualized Consideration (8 items). A transactional orientation to leadership is associated with three factors: Contingent Reward (9 items), Active Management-by-Exception (7 items), and Passive Management-by-Exception (7 items). The 8-item Laissez-Faire scale measures nonleadership.

Credibility. Getkate and Gillis (1993) created a credibility rating scale for the original leadership pilot study. Adapted from Kouzes and Posner (1987, 1993), the 13-item scale assesses the degree of credibility offenders attribute to their instructors, using three factors: trust, inspiration and competence. Each item is rated on a five-point Likert scale ranging from "Strongly agree" to "Strongly disagree". In the initial examination of the psychometric properties of the scale, good internal consistency ( $\alpha = .95$ ) and convergent validity (e.g., relationship with the leadership measures) were found (Gillis, 1994).

### Inmate Work Survey

The present study examined several work-related outcome variables, including involvement, motivation, self efficacy and outcomes such as job satisfaction.

*Involvement.* The constructs of job and work involvement were explored using Kanungo's (1982) Job Involvement and Work Involvement measures. These constructs refer to a "cognitive or belief state of psychological identification" (Kanungo, 1982, p. 342), the development of which is contingent upon both the saliency of needs (extrinsic and intrinsic) and perceptions of the ability (of work or a particular job) to satisfy these needs. However, job involvement refers to a specific or particular job context, whereas work involvement is associated with a more generalized work context.

The Job Involvement scale, comprised of 10 items evaluated on a seven-point scale, has adequate internal consistency ( $\alpha = .80$ ), as reported by Kanungo (1982). The Work Involvement scale, consisting of six items rated on a seven-point scale, has demonstrated adequate internal consistency ( $\alpha = .75$ ) in previous research (Kanungo, 1982). Higher scores indicate greater endorsement of scale items.

*Motivation.* Several measures of work motivation were used as dependent variables, including Intrinsic Job Motivation, Experienced Meaningfulness of Work, and Experienced Responsibility for Work Outcomes.

The Intrinsic Job Motivation scale (Warr, Cook, & Wall, 1979), comprised of six items rated on a seven-point scale, was designed to assess the extent to which an individual wants to perform well in his/her job to achieve intrinsic satisfaction. The authors reported good internal consistency ( $\alpha = .82$ ).

Intrinsic work motivation was also assessed using the Experienced Meaningfulness of Work and Experienced Responsibility for the Work scales from the Job Diagnostic Survey (JDS; Hackman & Oldham, 1975). These measures respectively assess the degree of meaningfulness and value offenders attribute to their work, and the extent to which they feel responsible and accountable for work outcomes. Response options range from "Strongly disagree" to "Strongly agree," rated on a seven-point scale. Hackman and Oldham reported adequate internal consistency for the experienced meaningfulness and responsibility scales (.74 and .72, respectively).

*Self Efficacy.* The extent to which offenders feel efficacious with respect to employment is postulated to relate to the type of leadership style endorsed by instructors.

The 13-item Occupational Self Efficacy Scale (Getkate, 1994) was developed for use within CORCAN to measure the extent to which offenders feel competent in attaining work goals.

*Organizational Outcomes.* Instructors and offenders completed the MLQ (Form 5X-Rater; Bass & Avolio, 1990) organizational outcome measures. These outcomes include Extra Effort exerted by followers (3 items), individual and group Effectiveness (4 items), and Satisfaction (2 items) with instructor leadership style. Additionally, the degree to which offenders are satisfied with their job was assessed using a two-item job satisfaction questionnaire.

## **PROCEDURE**

Pre-tests were conducted at each of the 17 participating CORCAN sites in the Atlantic, Quebec, Prairie and Pacific regions prior to initiating instructor leadership training. Instructors and offenders were provided with a description of the study and consent form, and requested to participate. Instructors who consented to participate were ensured that their leadership ratings and responses would not be released to their Operations Manager, to CORCAN, or other CSC staff (aside from the principal researchers). Likewise, offenders were ensured of the confidentiality of their responses (e.g., individual results would be available only to the researchers involved in the project, and would not be accessible by their instructors, Operations Managers, case management team, or other CSC or NPB staff). Offenders who agreed to participate signed the consent form and completed the instructor leadership and work attitudes questionnaires in a common area. Those offenders who were supervised by more than one instructor were asked to complete leadership ratings for each instructor. Instructors were requested to complete the consent form and leadership questionnaire in their offices. When testing was completed, offenders and supervisors were requested to place their respective forms in the envelopes provided, and to hand them to the researcher.

After pre-testing was completed at each institution, leadership training was provided to instructors. The training consisted of two half-day sessions, one day a week, for a period of five weeks. During the training day, institutional shops were closed down (with the exception of farms, in which case instructors received training on a rotating basis) and offenders did not report to work. Three months following the pre-test, the same battery of measures was administered to shop instructors and offenders.

The data were sent to the Research Branch, where they were entered into a SAS (1990) database created for the project. Offenders and instructors were assigned a subject number that was later used, in conjunction with the date of data collection, to match the post-tests with the pre-tests.

## RESULTS

### Study 1

Preliminary analyses were conducted to clean the data and to examine the internal consistency of the variables. To facilitate analyses of the MLQ (Form 5X-Rater; Bass & Avolio, 1990) leadership scales, the subscales were collapsed to yield three profiles of leadership style with adequate internal consistency: transformational ( $\alpha = .94$ ), transactional ( $\alpha = .63$ ) and nonleadership ( $\alpha = .74$ ). The internal consistency for the other independent measure, the Credibility scale, replicated that found in the pilot study ( $\alpha = .96$ ) conducted by Gillis (1994).

The Job Involvement and Work Involvement scales had adequate internal consistency ( $\alpha = .86$  and  $.74$ , respectively), comparable to results reported by Kanungo (1982) in previous research. The internal consistency for the Intrinsic Job Motivation scale in the present study was somewhat lower ( $\alpha = .75$ ) than that reported by Warr, Cook and Wall (1979) in their initial exploration of the scale psychometric properties. In the present study, the Experienced Meaningfulness of Work and Experienced Responsibility for the Work scales (Hackman & Oldham, 1975) did not demonstrate high internal consistency, with alphas of  $.59$  and  $.68$ , respectively. Nonetheless, the scales were retained in the analyses due to their theoretical link with leadership. Conversely, the internal consistency of the Occupational Self Efficacy scale (Getkate, 1994) was high ( $\alpha = .82$ ).

The organizational outcomes measures from the MLQ (Form 5X-Rater; Bass & Avolio, 1990): Extra Effort exerted by followers; individual and group Effectiveness; and Satisfaction with instructor leadership style, each demonstrated adequate internal consistency ( $\alpha = .75$ ,  $.84$ , and  $.89$ , respectively). Additionally, the degree to which offenders are satisfied with their job was assessed using a two-item job satisfaction questionnaire ( $\alpha = .66$ ).

Following these preliminary analyses, further analyses were conducted to explore the relationships between: (a) instructor leadership orientation and offenders' work attitudes; (b) leadership training and instructors' leadership orientation; and (c) instructor leadership training and offenders' work outcomes.

### ***Instructor Leadership Orientation/Credibility and Offender Work Attitudes***

Before analyzing the data for relationships between instructor leadership and offender work attitudes, leadership scales were computed using the following procedure.

As previously described, offenders who were supervised by more than one instructor in a particular work location were requested to complete leadership profiles (MLQ; Bass & Avolio, 1990) for each instructor. Each of the profiles provides a rating for the instructor on transformational, transactional, and nonleadership behaviours, as well as organizational outcomes, including extra effort, effectiveness, and satisfaction with the instructor. Although the credibility scale is not part of the MLQ, the following procedure was also applied to its calculation.

To compute the overall scales, each scale required at least 50% item completion by each offender. Although the following procedure applies to the calculation of each leadership component (i.e., transformational, transactional, laissez-faire, credibility, and organizational outcomes), only the computation of the transformational scale will be described in detail. Each instructor was assigned a transformational score based on each offender's rating of the instructor on the transformational scale items (see Table 1, columns 2, 3, 4 and 5). An average score was then computed across the offender's instructors and assigned back to the offender (see Table 1, column 6). This procedure was adopted in compiling scores for each of the leadership-related scales for both pre- and post-tests.

**Table 1 : Calculation of Transformational Leadership Scale**

Offender	Supervisor 1	Supervisor 2	Supervisor 3	Supervisor 4	Average
A	3	6	-	-	4.5
B	-	-	1	5	3.0
C		1	1	4	2.0
D	4	-	-	-	4.0
Total					Overall average for 390 offender ratings

Once the leadership scales were computed, they were subjected to a number of statistical analyses. Although both instructors and offenders completed scales to assess instructor leadership styles, only the offender ratings of instructor leadership style and credibility were used in the analyses examining the relationship between leadership and offender work attitudes. Use of employee leadership ratings, rather than manager self-ratings, is consistent with suggestions provided in the leadership literature, which indicates that generally, subordinate ratings provide a more accurate reflection of the actual leadership behaviours used by a manager.

First, a series of correlational analyses were conducted to examine relationships among the independent (leadership) and dependent variables (offender work attitudes and outcomes). As illustrated in Table 2, highly significant relationships were obtained between active leadership and organizational outcomes. Virtually identical correlations were obtained for transformational orientation and credibility with effectiveness, extra effort, and satisfaction with supervisor, with correlations ranging from .66 to .79. Although less strong, findings for transactional instructors were encouraging, with moderate positive correlations ranging from .25 to .32. The opposite findings were obtained for instructors exhibiting a nonleadership orientation. The higher instructors were rated on nonleadership, the lower offender ratings on organizational outcomes.

Results for job involvement were not in the hypothesized direction. Although positive relationships were obtained between the measures of involvement and leadership (transformational and transactional); and involvement and credibility, similar correlations were obtained for nonleadership and involvement.

The findings for intrinsic job motivation, however, were more consistent with that hypothesized. Transformational leadership and credibility were associated with higher levels of intrinsic job motivation than was a transactional orientation to leadership.

**Table 2 : Correlations Between Leadership & Offender Work Outcome Measures**

Work outcome measures	Trans-formational	Trans-actional	Non-leadership	Credibility
Job involvement	.20**	.22**	.20**	.25**
Work involvement	.15	.18*	.15	.12
Intrinsic job motivation	.37**	.26**	.01	.40**
Meaningfulness	.29**	-.01	-.17*	.29**
Responsibility	.34**	.19*	-.05	.33**
Occupational self efficacy	.08	-.11	-.33**	.12
Job satisfaction	.35**	.03	-.14	.42**
Effectiveness	.83**	.31**	-.32**	.71**
Extra effort	.79**	.32**	-.17*	.66**
Satisfaction with instructor	.77**	.25**	-.29**	.75**

Note. n's range from 343 to 436. The Bonferroni procedure was used to set the alpha level at .001 to control for Type I errors.  
p≤.001\* p≤.0001\*\*

The occupational self efficacy measure only associated with a nonleadership orientation, with higher ratings on nonleadership associated with lower levels of perceived self efficacy.

Finally, the higher the ratings on transformational leadership and credibility, the higher offenders' reported level of job satisfaction. As expected, a negative trend was noted for the relationship between nonleadership orientation and job satisfaction.

### ***Leadership Training and Instructor Leadership Styles***

The second issue addressed by the study was whether leadership training contributed to a change in instructor leadership profiles. These analyses are limited by the very small number of instructors who participated in the post-test, relative to the pre-test (85% attrition). Additionally, only approximately one fifth of the offenders who initially consented were available to participate in the post-test session (82% attrition). Table 3 presents the mean scores reported by offenders and instructors on the transformational, transactional and nonleadership measures. Results from t-tests examining differences between the means of the pre- and post-tests on leadership styles are also presented.

**Table 3 : Mean leadership Scores Pre- and Post-Training**

Leadership measures	Pre-training score	n	Post-training score	n	t-test
<b><i>Instructor ratings</i></b>					
Transformational	3.87	97	4.27	13	**
Transactional	2.96	97	2.93	13	ns
Nonleadership	1.74	97	1.60	12	ns
<b><i>Offender ratings</i></b>					
Transformational	3.35	390	3.24	69	ns
Transactional	2.73	389	2.52	69	ns
Nonleadership	1.63	390	1.68	69	ns

Note. \*\*p < .01

As Table 3 demonstrates, no significant differences were noted in offender ratings of instructor leadership styles from pre- to post-test. Instructor self-ratings on transformational leadership, however, were higher on the post-test, indicating that they endorsed more items that reflect this leadership style after training. Their self-ratings on transactional leadership post-test were consistent with pre-test ratings. Although

instructors rated themselves lower on nonleadership at post-test, these differences were not significant. Notably, offender ratings did not reflect similar improvements.

***Leadership Training and Offender Work Attitudes***

As no significant change was noted for instructor leadership style, the following section only presents information on offender work attitudes. To assess whether mean scores differed significantly from pre- to post-test, t-tests were conducted. After controlling for the number of analyses conducted, no differences were statistically reliable, indicating no change on the measures from the pre- to post-test period.

**Table 4 : Mean Scores on Offender Work Attitudes Pre- and Post-Training**

Work attitudes	Pre-training score	Post-training score	t-test
Job involvement	2.89	2.76	ns
Work involvement	3.06	2.91	ns
Intrinsic job motivation	5.61	5.57	ns
Meaningfulness	4.96	4.82	ns
Responsibility	4.92	4.82	ns
Occupational self efficacy	5.73	5.77	ns
Job satisfaction	5.97	5.97	ns
Effectiveness	3.91	3.72	ns
Extra effort	3.43	3.42	ns
Satisfaction with instructor	4.11	3.84	ns

Note. n’s range from 348-435 for the entire sample pre-training scores. N’s range from 45-72 for offenders who participated in the post-test.

Further analyses were conducted to explore whether any differences existed between offenders who completed only the pre-test, and those who remained to complete the post-test. Data was available for 35 offenders who completed the pre- and post-test, and for 176 offenders who participated only in the pre-test. Although the age of

offenders who completed both pre- and post-test differed (36 versus 37 years at pre-test), no further differences were noted.

Offenders who completed the post test were compared to offenders who completed only the pre-test, to assess if differences existed in their overall risk and need levels at intake assessment. The two groups did not differ on their mean scores on various measures of risk, including: criminal history risk rating, offense severity rating, sex offender history, Statistical Information on Recidivism (SIR; Nuffield, 1982) score rating, overall risk rating and overall needs rating derived from the OIA protocol (Motiuk, 1997; Taylor, 1997).

Finally, offenders were compared on various employment-specific domains. No differences were noted on the following employment factors: number of employment needs identified at intake, overall employment need rating, lack of skill/area/trade/profession, lack of employment history, unemployment history, unstable job history, lack of initiative, and employment program participation during incarceration.

Additionally, scores were examined on different work attitudes to ascertain if the groups differed on the various work attitudes at the time of pre-testing. Although no differences were noted on the majority of the work attitude measures, the groups differed on work involvement and meaningfulness of work at pre-test, with offenders who completed both pre- and post-test reporting higher levels on each measure at pre-test.

Although the groups generally did not differ at intake on demographic, risk/need factors, and work attitudes, results from the post-test are not necessarily generalizable to the entire sample, due to the extremely high attrition rate.

## Study 2

A second study was conducted in the remaining CORCAN shops<sup>1</sup> that did not participate in the initial leadership training, in an attempt to address some of the methodological problems from the first study. It is postulated that the first study did not allow for an adequate length of time to assess attitudinal changes and behavioural changes that reflect the effect of leadership training; the follow-up period was increased to one year in the second study. However, a post-assessment was conducted at three months following pre-testing to allow for preliminary assessment of change in offender attitudes and instructor behaviour immediately following instructor leadership training. The second leadership study also incorporated a control group of instructors who did not receive leadership training and offenders who work with these instructors; this control group completed pre-and post-tests, in an attempt to better isolate the effects of training on instructors and offenders who participated in the training group (see study design in the Appendix).

An additional limitation of the evaluation concerned the fact that the questionnaire used to collect information on leadership style was not fully consistent with the leadership training provided. The front line leadership<sup>2</sup> modules used in the training focus on interpersonal skills development and managing individual performance, which do not specifically address the transformational, transactional and nonleadership typologies contained within the MLQ (Bass & Avolio, 1990), although they assess components of transformational and transactional leadership. More specifically, the following components of the front line leadership training system were used to train instructors:

*Your Role and the Basic Principles, Giving Constructive Feedback, Getting Good Information From Others, Getting Your Ideas Across, Dealing with Emotional Behaviour, Establishing Performance Expectations, Developing Job Skills, Taking*

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<sup>1</sup> The first study (summarized in this report) was conducted in the Atlantic, Quebec, Prairies and Pacific regions. Because no changes in offender attitudes and staff attitudes/behaviour were found, numerous revisions were proposed for the second study involving instructors and offenders working in the Ontario region.

<sup>2</sup> © Zenger-Miller, Inc. (1986)

*Corrective Action, Recognizing Positive Results, and Coaching for Optimal Performance.* For the second study, a new leadership measure was compiled to reflect the content of the leadership training and was completed by instructors and offenders. It was anticipated that this scale would be more sensitive to change resulting from the training. Furthermore, in order to compare the revised study results to those obtained in the first study, the credibility scale (which is strongly related to the transformational leadership scale) was included in the assessment battery for the Ontario study.

Unfortunately, leadership training in the Ontario region was not completed, and additional operational difficulties rendered adherence to the new study design impossible. Additionally, attrition rates at three months were again extremely high for both instructors and offenders, which further comprised the integrity of this research. Given these difficulties, it was not possible to conduct meaningful analyses with the data collected in the second study.

## DISCUSSION

This study yielded important information on the impact of leadership training for instructors. Although intended to increase the use of active leadership styles among instructors, the training did not effect change in offender perceptions of instructor's use of such leadership behaviours. Concomitantly, no change in offender-reported work attitudes was noted. Importantly, however, instructors endorsed more transformational items on the post-test, indicating, minimally, an increased awareness of factors that comprise transformational leadership.

It is important to note that although the study did not provide evidence of change in instructor leadership behaviours or offender work attitudes, this research replicated results from the pilot leadership project (Gillis, 1994), which found a relationship between instructor leadership styles and offender work attitudes. Thus, replication of these pilot findings contributes to enhancement of the correctional literature on staff attitudes and behaviour and their influence on offenders.

The Correctional Service of Canada's Mission Statement identifies staff as important role models in promoting change among offenders. This study provides additional insights into the various ways in which staff contribute to offender outcomes, particularly in terms of the types of attitudes staff are capable of influencing. Given this influence, and the expectation that staff serve as effective intervention agents, training for correctional staff should expand beyond leadership training in isolation to a more holistic approach that encompasses effective intervention techniques and methods of dealing with a correctional population. Such an approach recognizes the dual role of instructors as teacher and correctional agent and acknowledges that a systematic, integrated strategy is required to promote the enhancement of instructor leadership style and offender work attitudes.

Several explanations may be proposed to account for the lack of change on the offender-rated measures. First, perhaps the follow-up period in the first study may have been insufficient to allow for change in work attitudes among offenders or behavioural change among instructors. In the attempt to maximize the number of post-tests collected from offenders, the second set of questionnaires was administered only three months following the pre-test. One of the reasons for the apparent lack of change on the post

measures could be that in the attempt to limit attrition, the study did not allow sufficient time to evidence attitudinal change among offenders and behavioural change among instructors. Also, the attrition rate was extremely high (exceeding 80%) for both instructors and offenders. Use of a three-month pre-post data collection period still resulted in a small number of participants at the time of post-testing, contributing to limitations in the interpretations that can be drawn.

Furthermore, to truly assess the impact of instructor leadership training on offenders, it is preferable to include a control group of instructors who do not receive training, and include assessment of instructor leadership behaviours and offender work attitudes within this group.

The cross-sectional nature of the data in this research, although useful in identifying relationships between instructor leadership and offender work attitudes, makes it difficult to disentangle the direction of influence of instructor leadership and the enhancement of offender work attitudes. Future research on offender work attitudes should adopt a prospective approach, accounting for attitudes upon entry to CORCAN, and upon leaving the work location. Such a longitudinal approach will be possible with the advent of a new offender evaluation form, the *Offender Employability Evaluation* (Correctional Service of Canada), which will assist in tracking change in behavioural indicators of offender employability factors over time.

Additionally, the sample was comprised largely of offenders with stable educational backgrounds and employment history (as reported by offenders), which is not reflective of most federal offenders. It is important to consider such client characteristics when evaluating programs, as they may moderate the apparent impact of the intervention. For example, one would expect that offenders with a stable employment history would hold positive attitudes toward work. Thus, the type of leadership style used by the instructor may not have as much of an impact on this group as it would with offenders who have little employment experience and who therefore derive more benefits from a transformational approach. Future research should include a more comprehensive measure of employment history before incarceration, which would be useful in more detailed analyses of the impact of CORCAN programming on offenders.

Another issue that is important to consider in this type of evaluative research is offender program participation. Most offenders reported participating in numerous programs during incarceration (e.g., Cognitive Living Skills). It may be that program impacts are due to one specific program, or a combination of programs that address a variety of the offenders' criminogenic needs. Future research with CORCAN, as with any program evaluation, must consider the influence of offenders' participation in other correctional programs.

Finally, the work attitudes database constructed for this study provides the opportunity to explore important theoretical and applied questions. No research has yet systematically explored how offender work attitudes impact upon safe community reintegration. However, a recent study (Gillis, Motiuk, & Belcourt, 1998) demonstrated that among former CORCAN participants on conditional release, those who were employed during the first six months of release were less likely to recidivate than offenders who were unemployed. The work attitudes database created for the current project allows for follow-up of offenders in the community, thus extending our potential for an increased understanding of factors that contribute to offender employability and reintegration in the community.

## REFERENCES

- Andrews, D.A., Bonta, J., & Hoge, R. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, *17*, 19-52.
- Andrews, D. A., & Bonta, J. (1998). *The psychology of criminal conduct* (2<sup>nd</sup> ed.). Cincinnati: Anderson.
- Bass, B.M. (1985). Leadership: Good, better, best. *Organizational Dynamics*, *13*, 26-40.
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, *18*, 19-31.
- Bass, B. M., & Avolio, B. J. (1990). *The Multifactor Leadership Questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Brown, S. L. (1998). Dynamic factors and recidivism: What have we learned from the Case Needs Review Project? *Forum on Corrections Research*, *10* (3), 46-51.
- CORCAN. *Offender Employability Evaluation*. Available from CORCAN, Ottawa, Ontario, Canada.
- Correctional Service of Canada. (1994). *The Correctional Strategy*.
- Crookall, P. S. (1989). *Leadership in prison industry*. Unpublished doctoral dissertation, School of Business Administration, University of Western Ontario.
- Erez, E. (1987). Rehabilitation in justice: The prisoner's perspective. *Journal of Offender Counselling, Services and Rehabilitation*, *11*, 5-19.
- Fabiano, E., LaPlante, J., & Loza, A. (1996). Employability: From research to practice. *Forum on Corrections Research*, *8* (1), 25-28.
- Gendreau, P., Goggin, C., & Gray, G. (1998). Case need domain: "Employment". *Forum on Corrections Research*, *10* (3), 16-19.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology*, *34*, 575-607.
- Getkate, M. (1994). *The CORCAN work attitude survey: Final report*. Ottawa: CORCAN, Correctional Service Canada.
- Getkate, M., & Gillis, C. (1993). *The Credibility Rating Scale*. Unpublished scale, Research Branch, Correctional Service Canada, Ottawa, Ontario.

Gillis, C. A. (1994). *The influence of shop supervisor characteristics on employee-reported work attitudes in a prison industry setting*. Unpublished Master's thesis, Department of Psychology, Carleton University, Ottawa, Ontario.

Gillis, C., Robinson, D., & Porporino, F. (1996). Inmate employment: The increasingly influential role of generic work skills. *Forum on Corrections Research*, 8 (1), 18-20.

Gleason, S. (1986). Inmate attitudes toward vocational training: A case study of vocational training students in the State Prison of Southern Michigan. *Journal of Offender Counselling, Services and Rehabilitation*, 10, 49-60.

Grieser, R.C. (1996). Public and private sector partnerships in prison industries and offender employment. *Forum on Corrections Research*, 8 (3), 43-45.

Guynes, R., & Grieser, R. C. (1986). Contemporary prison industry goals. In American Correctional Association (Ed.), *A study of prison industry: History, components, and goals* (pp. 19-29). College Park, Maryland.

Hackman, J.R., & Oldham, G.R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60, 159-170.

Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology*, 67, 341-349.

Kouzes, J. M., & Posner, B. Z. (1989). *The leadership challenge: How to get extraordinary things done in organizations*. California: Jossey-Bass Inc., Publishers.

Kouzes, J. M., & Posner, B. Z. (1993). *Credibility: How leaders gain and lose it, why people demand it*. California: Jossey-Bass Inc., Publishers.

Maguire, K. (1996). Prison industry programs and inmate institutional behavior. *Forum on Corrections Research*, 8 (1), 39-42.

Miller, N., & Grieser, R.C. (1986). The evolution of prison industries. In American Correctional Association (Ed.). *A study of prison industry: History, components, and goals* (pp. 1-18). College Park: Maryland.

Motiuk, L. (1996). Targeting employment patterns to reduce offender risk and need. *Forum on Corrections Research*, 8 (1), 22-24.

Motiuk, L. (1997). Classification for correctional programming: The Offender Intake Assessment (OIA) process. *Forum on Corrections Research*, 9 (1), 18-22.

Mulgrew, P. (1996). Generic and employability skills for inmates. *Forum on Corrections Research*, 8 (1), 29-31.

SAS Institute Inc (1990). *SAS Version 6.11*. Cary, NC: SAS Institute Inc.

Saylor, W. G., & Gaes, G. G. (1995). Interim report long-term recidivism of U.S. Federal Prisoners: The effect of prison work experience, vocational and apprenticeship training. Washington: U.S. Federal Bureau of Prisons.

Saylor, W. G., & Gaes, G. G. (1996). The effect of prison employment and vocational/apprenticeship training on long-term recidivism. *Forum on Corrections Research*, 8 (1), 12-14.

Warr, P. B., Cook, J., & Wall, T. D. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, 52, 129-148.

**APPENDIX: Leadership Study Design: Study 2**

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